COUNTRY PRIVATE SECTOR DIAGNOSTIC

CREATING MARKETS IN MALAWI

The Road to Recovery: Turning Crisis into Economic Opportunity

June 2021

WORLD BANK GROUP
THE WORLD BANK IBRD • IDA
IFC International Finance Corporation

About IFC

IFC—a member of the World Bank Group—is the largest global development institution focused on the private sector in emerging markets. We work in more than 100 countries, using our capital, expertise, and influence to create markets and opportunities in developing countries. In fiscal year 2020, we invested $22 billion in private companies and financial institutions in developing countries, leveraging the power of the private sector to end extreme poverty and boost shared prosperity. For more information, visit www.ifc.org.

2121 Pennsylvania Avenue, N.W.
Washington, D.C. 20433
www.ifc.org

Cover photo: Adobe Stock

CONTENTS

ACKNOWLEDGMENTS

This Country Private Sector Diagnostic (CPSD) was prepared by a World Bank Group team led by Sudha Bala Krishnan, Miles McKenna, and Elena Gasol Ramos. The report was prepared under the guidance of World Bank Group management, including Mara Warwick, Jumoke Jagun-Dokunmu, Mona Haddad, Hugh Riddell, Greg Toulmin, Manuel Moses, Sebastien Dessus, Lisa Kaestner, Niraj Verma, and William Battaile. The team is especially grateful for the guidance, assistance, and input provided throughout the preparation of the report by Madalo Minofu, Patrick Hettinger, William Mwanza, and Markus Scheuermaier. In addition, the team would like to thank the following colleagues for sector-specific contributions: Chibulu Luo, Andrew Abduel Mnzava, Ankur Huria, Beza Woldegiorgis, Blessings Botha, Camilo Mondragon-Velez, Carlo Rossotto, Chijioke Gbolahan Egejuru, Chinatsu Aikyo, Christopher Brett, Christopher J. De Serio, Dan Croft, Deborah Isser, Dhruva Sahai, Efrem Chilima, Fatima Quraishi, Francisco Obreque, Fred Zake, Gerald Matthe, Haeyoung Lee, Hans Shrader, Ida Mboob, Innocent Mulindwa, Jakob Engel, Javier Zuleta, John Keyser, Kagaba Paul Mukiibi, Maria Paulina Mogollon, Mercy Chimpokosera-Mseu, Michael Anthony Roscitt, Neema Mwingu, Panos Vlahakis, Paul Mukasa, Pierre A. Pozzo di Borgo, Randa Akeel, Robert Mwanamanga, Samuel Dzotefe, Sandra Boumah, Santosh Ram Joshi, Shoghik Hovhannisyan, Soujanya Chodavarapu, Time Fatch, Wayde Flowerday, and Yosuke Kotsuji.

Our thanks also go to the peer reviewers who provided valuable input: Paul Brenton, Vengai Chigudu, Samuel Dzotefe, Aghassi Mkrtchyan, and Richard Record. Administrative support was provided by Jemima Harlley, Tamara Mwafongo, and Gebisa Chisanga. The team would like to thank Elizabeth Pontiff and Marcy Gessel of Publications Professionals LLC for editing, Camilo Salomon, and Christiane Wakim for design of the final report. Finally, the team is also grateful to numerous World Bank Group colleagues, government counterparts, private sector representatives, and development partners who generously shared their time and insights.

The CPSD makes extensive use of existing World Bank Group knowledge and publications, including the most recent Country Economic Memorandum[1] and Systematic Country Diagnostic[2]; the Malawi Economic Monitor Series; and numerous World Bank and IFC project documents.

ABBREVIATIONS AND ACRONYMS

ADDA	African Drone and Data Academy
ADMARC	Agricultural Development and Marketing Corporation
AfCFTA	African Continental Free Trade Agreement
AIP	Affordable Input Program
CEAR	Central East African Railways Ltd
CFTC	Competition and Fair Trading Commission
CIAT	International Center for Tropical Agriculture
COGA	Control of Goods Act
COMESA	Common Market for Eastern and Southern Africa
CPSD	Country Private Sector Diagnostic
CSA	climate-smart agriculture
CTMS	Corridor Trip Monitoring System
DAT	digital agriculture technology
EAC	Eastern Africa Community
EASSy	East Africa Submarine System
edtech	education technology
EGENCO	Electricity Generation Company, Malawi
ESCOM	Electricity Supply Corporation of Malawi
FAOSTAT	Food and Agriculture Organization of the United Nations statistics database
FDI	foreign direct investment
FISP	Farm Input Subsidy Programme
FY	fiscal year
GDP	gross domestic product
GVC	global value chain
ha	hectare
ICT	information and communication technology
IFPRI	International Food Policy Research Institute
IHS5	Malawi Fifth Integrated Household Survey 2019–20
IMF	International Monetary Fund
IPP	independent power producer
ITU	International Telecommunication Union
kg	kilogram
km	kilometer

MACRA	Malawi Communications Regulatory Authority
MERA	Malawi Energy Regulatory Agency
MK	Malawi kwacha
MNO	mobile network operator
MSME	micro, small, and medium enterprises
MTL	Malawi Telecoms Limited
NFRA	National Food Reserve Agency
NTM	nontariff measure
NTMP	National Transport Master Plan
OCL	Open Connect Limited
PML	Power Markets Ltd
PPA	power purchase agreement
PPP	public-private partnership
PV	photovoltaic
R&D	research and development
RBM	Reserve Bank of Malawi
REC	regional economic community
RFA	Roads Fund Administration
SADC	Southern Africa Development Community
SAPP	Southern Africa Power Pool
SCTP	Social Cash Transfer Programme
SGR	Strategic Grain Reserve
SOE	state-owned enterprise
Telecom	telecommunications
TFA	(WTO) Trade Facilitation Agreement
TNM	Telekom Networks Malawi
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
USAID	United States Agency for International Development
US$	US dollar
VAT	value added tax
WRS	Warehouse Receipt System
WTO	World Trade Organization

COUNTRY PRIVATE SECTOR DIAGNOSTIC

CREATING MARKETS IN **MALAWI**

WORLD BANK GROUP
THE WORLD BANK IBRD • IDA | IFC International Finance Corporation

Priority recommendations to support private sector development

CROSS-CUTTING (GOVERNANCE, INVESTMENT CLIMATE, ACCESS TO FINANCE)

Strengthen macrofiscal fundamentals and foundations for growth.

- Strengthen public financial and investment management through more realistic budget planning, stronger prioritization, and stricter fiscal discipline, in part to limit the need for domestic borrowing, avoid incurring arrears, reduce interest rates, and maintain available credit for the private sector.
- Transpose into national law the newly ratified New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, to increase private sector confidence in investment dispute resolution in Malawi.
- Promote the use of collateral registry systems and the National Switch among financial institutions to facilitate longer-term and more affordable financing to private sector borrowers.

ENERGY

Increase access to reliable power.

- Improve the management and performance of ESCOM and continue the phased increase in the national electricity tariffs to allow cost recovery, which will help the national utility become financially sustainable and thus a more reliable contractual partner with current and potential IPPs.
- Ensure adequate resource allocation to support the development and implementation of energy projects—most notably the Mpatamanga Hydropower Project—and the approval, tendering, contracting, construction, and completion of new solar and wind IPP projects.

CONNECTIVITY (TRANSPORT & LOGISTICS; DIGITAL INFRASTRUCTURE & SERVICES)

Improve access to markets.

- Leverage engagement in the Nacala Corridor Development Trilateral Committee and African Continental Free Trade Agreement negotiations to eliminate nontariff barriers to trade, harmonizing rules and regulations that will reduce the time and cost of trade for Malawi's traders.
- Reduce the cost of mobile phone ownership and mobile broadband data services by rationalizing trade, tax, and levy policies, and promote infrastructure sharing to encourage wider mobile penetration and broadband access to low-income and rural residents.

AGRIBUSINESS

Promote commercial agriculture.

- Create standard operating procedures for conducting reviews of trade restrictive measures under the COGA, including quarterly updates of the Food Balance Sheet and wider public-private consultations to mitigate the risk of new market distortions.
- Approve and gazette backlogged legislation—the Seed Bill and National Fertilizer Bill—and provide operational guidelines to support timely implementation.
- Improve resource allocation for productive investments in the agriculture sector, including by reviewing and adjusting the Affordable Inputs Program to improve the efficiency of distribution, target farmers most likely to benefit from the subsidy, and ensure fiscal sustainability.

EXECUTIVE SUMMARY

Malawi is at a turning point in its political, social, and economic trajectory. Lazarus Chakwera was sworn in as Malawi's sixth president in June 2020. This marked a historic moment: the first time in Africa that an opposition candidate won a presidential election following initial results being overturned. After widespread unrest prior to the election, Malawians, especially the youth, have been demanding greater accountability, an end to corruption, and tangible progress on eradicating persistent poverty levels that exceed 70 percent of the population. The average gross national income (GNI) of a Malawian is the third lowest in the world, just US$380 as of 2019. The Chakwera administration will need to find a way to unify the country's fractured political landscape and deliver on development promises.

On top of these challenges, the new administration must also navigate the ongoing and evolving economic shocks of the COVID-19 pandemic. Gross domestic product (GDP) growth expectations for 2020 have been lowered from 4.8 percent to 0.8 percent. Recent efforts to build fiscal and institutional resilience have helped but need to be strengthened. The pandemic's fallout has weakened the country's macroeconomic foundations, and the overall risk of debt distress is now high. Meanwhile, human capital gains are at risk. Poverty reduction is expected to stagnate, and overall poverty could potentially worsen. The pandemic will likely exacerbate existing inequalities in economic opportunities for women. Women-owned firms, for example, are primarily concentrated in informal agriculture and services, sectors that lack basic social protections to buffer against economic distress. Female farmers, for example, generally have lower access to productive inputs, information, and liquidity than male farmers—so in times of crisis, their farm productivity and food security can be hit harder.

For decades, Malawi has failed to deliver the inclusive growth necessary to lift more of its people out of poverty. Most remain trapped in subsistence farming. This is in part due to farmers' dependence on a single rainy season, vulnerability to weather-related shocks, lack of crop diversification due to policies that incentivize maize production, low soil fertility, high postharvest losses, and weak links to markets. People not working in agriculture are mostly employed in unproductive micro, small, and medium enterprises (MSMEs). Nearly 9 out of 10 jobs are informal.[3] Three-quarters of Malawi's firms consist of only the proprietor, with only 3.6 percent of all nonfarm enterprises having four employees of more.

Prior to the pandemic, employment numbers showed signs of modest structural transformation out of agriculture and into services jobs, but this trend has been reversed by the pandemic's economic fallout. Even in previous years, there were serious concerns that this shift was more of a "push" out of agriculture than a "pull" into new, productive economic opportunities. With the pandemic and the fall in economic activity making it harder for urban residents to find jobs, many have chosen to return to rural areas to farm as a matter of survival.

The COVID-19 crisis has demonstrated just how critical farming—and the broader agribusiness sector—is to Malawian livelihoods and the wider economy. Over 80 percent of households depend on agriculture for at least some of their income. A more prosperous future for all Malawians will require a more sustainable, resilient agrifood system. Today, most farming households are extremely vulnerable to climatic shocks. The Notre Dame Global Adaptation Initiative ranks Malawi 165th out of 181 countries in terms of both vulnerability to the impacts of climate change and overall readiness to adapt to it.[4] Bouts of severe drought and flooding are increasingly frequent, often leading to significant economic losses. These losses are likely to worsen unless urgent action is taken to strengthen economic, social, and climate resilience.

Now more than ever, Malawi needs new drivers of growth to jumpstart an economic recovery and help meet the jobs challenge of a rapidly growing, youthful population. The population is growing at roughly 3 percent a year, meaning that the already densely populated country will likely double its citizenry within a generation. Three-quarters of Malawians are younger than 35—over 40 percent are under age 14. An estimated 400,000 Malawians are entering the job force each year, and the economy is not growing at a pace to provide decent work.[5] Even for those who do find work, most are underemployed.[6] The latest government household survey (2020) found that 9 out of 10 respondents were engaged in at least some income-generating activity over the survey's preceding 12-month period. But most of these activities were in temporary, informal farming and fishing work. In urban areas, where farming is more limited, roughly one-quarter of all residents reported being unable to find work in the past 12 months. Only 1 in 10 Malawians over age 15 has a wage- or salary-paying job. Even those with a tertiary education struggle to find formal employment, with less than two-thirds finding a waged job. These numbers have only worsened since the onset of the pandemic. Estimates through August 2020 suggested 12 percent of the employed population lost jobs, with those in services and industries in urban areas most heavily affected.[7]

Creating more and better jobs for Malawians requires the infrastructure, enabling environment, and good governance to foster economic transformation. The new administration has put job creation at the center of its development agenda. Continuing a campaign promise, the president has pledged to create one million new jobs by June 2021. This is an ambitious target, and one that will be difficult to meet—especially considering the effect the pandemic has had on external market conditions and the government's fiscal space. The country already faces the challenge of being landlocked, with underdeveloped infrastructure to connect to regional and global markets, and a relatively small and poor domestic market. Economic activity is split between its two commercial hubs—the cities of Lilongwe and Blantyre—and with one of the least urbanized societies in the region, the country lacks the agglomeration effects that typically attract private investment.

Yet there is significant private investment potential in Malawi, with a few lead firms already actively transforming key areas of the economy. In the years prior to COVID-19, a small number of relatively large deals suggested that Malawi was becoming a more attractive location to invest—a promising sign for hopes of an infusion in productivity-enhancing technology, know-how, and capital goods. These deals include Ethiopia's investment in Malawi's national airline, China's continued interest in the real estate sector, and a joint venture with European partners to manufacture green building materials. The government also signed a major public-private partnership (PPP) with an Israeli firm to develop one of the region's largest

greenhouses for horticulture production. In the energy sector, a Swiss company won the country's first-ever competitive tender for a power purchase agreement (PPA) in 2019. This is now one of many PPAs approved and in the pipeline. All these deals suggest Malawi has the conditions in place to attract investment once markets recover from the COVID-19 crisis.

Major investments in ongoing energy and regional connectivity projects will transform Malawi's economic landscape in the next few years. No investment may be more important for the future of Malawi than the planned Mpatamanga Hydropower project. Just 18 percent of the population had access to electricity as of 2018, among the lowest rates in Africa. For the private sector, unreliable and unaffordable electricity has been a consistent constraint on growth. Mpatamanga would add 350 megawatts of energy to the country's current installed capacity of 482 megawatts—a legitimate game changer. The project is a flagship initiative to market test new policies and demonstrate that the government is creating opportunities for private sector participation in the market. Meanwhile, billions of dollars in public and private investment have gone into rehabilitating and building new rail, road, and port infrastructure along the Nacala Corridor, which runs from the Mozambican port city for which it is named across southern Malawi, north of Blantyre, and back into the Mozambican hinterland to the west. This has improved services and introduced more competition into the transport and logistics market, giving Malawi's importers and exporters another viable route to global markets. A World Bank Group–led US$380 million investment approved in May 2021 will continue to improve performance along the Nacala Corridor and others, which will help bring down production and transport costs across the entire Malawi market.

For Malawi to seize these opportunities and create new markets, the government will need to tackle long-standing governance and policy implementation weaknesses.

Weak governance underlies the country's persistent macroeconomic instability—a major concern for potential investors. Limited domestic resource mobilization and poor public financial management have often left the government reliant on domestic borrowing and donor financing to meet expenditure overruns. The government has accumulated significant domestic debt to meet large fiscal deficits, and further borrowing from the domestic market would limit available finance for the private sector. The government stated the stock of total public debt stood at 54 percent of GDP as of the end of December 2020, a significantly lower number than the 69.1 percent of GDP the IMF had reported just three months prior.[8] Yet, the overall risk of debt distress remains high.

At a time when the government may need to increase borrowing to support COVID-19 responses, maintaining fiscal disciple will be a tremendous challenge. Improvements over the last few years were already at risk of weakening before COVID-19, and responding to the virus has now elevated those risks. According to authorities, statutory expenditures account for 91 percent of the budget, implying less than 10 percent of domestic revenue is discretionary. Thus far, the government has been adjusting programming and working with donors to receive budget support. In the medium-term, government will need to demonstrate a strong commitment to careful prioritization and control of expenditures and ensuring COVID-19 relief is used for sustainable and resilience-building measures.

One of the most critical areas in need of improved governance and public financial management is the performance of Malawi's most important state-owned enterprises (SOEs). There are currently 67 commercially operating SOEs in Malawi, many of which play justifiable roles in the market and which have helped expand economic activity and services into rural areas. But in some key areas of the economy—like agriculture and energy—SOEs have been performing poorly. Most SOEs also have limited autonomy and operate with little transparency, opening the door for political interference and mismanagement. This situation is problematic, particularly in markets where SOEs compete with the private sector while receiving regulatory, financial, or de facto advantages over their competitors that may include soft budget constraints, preferential access to land, and tax concessions on acquisitions. The previous government had pledged to improve SOE performance by partnering with strategic private investors in some of these sectors and by redefining SOE mandates to level the playing field for private actors. But progress has been slow. The country's Competition and Fair Trading Commission is well placed to start tackling some of these challenges but will need to be empowered to do so. Existing rules for public financial management should be strengthened and more strictly adhered to.

The fundamental conditions to support market-based competition are not in place, particularly in the agriculture and energy sectors. The parastatal Agricultural Development and Marketing Corporation (ADMARC) has been historically characterized by poor corporate governance, financial mismanagement, and distortion of markets. A government bailout in 2018 cost roughly 1 percent of GDP.[9] In the energy sector, the Electricity Supply Corporation of Malawi Limited (ESCOM) is equally known for allegations of corporate and financial mismanagement. The parastatal's lack of transparency and financial instability have made it unreliable in the eyes of independent power producers (IPPs) that might be willing to invest in the country but would need to rely on ESCOM as an off-taker. Past governments have largely failed to address the weaknesses in these institutions, promising reforms but failing to fully implement them. The new administration replaced the boards on all parastatals in September 2020 and will need to continue to work with these boards to improve the management, performance, and transparency of the institutions.

Failure to implement reforms has been a blight on the country—whether stemming from a lack of capacity or simply from a lack of political will. Past governments have put in place many elements of a modern legal and policy framework to enable a rules-based system of economic governance. However, decisions still tend to be deal based and characterized by political patronage, a lack of transparency, and considerable uncertainty. Consistent misapplication of official policy and legal frameworks has colored the business environment with the perception of corruption. Pledging to crack down on corruption, the new administration launched several high-profile investigations in its first few months in power, but much more will need to be done to increase transparency and accountability across the whole of government.

Improving macroeconomic fundamentals and governance will need to be complemented by further efforts to improve the enabling environment if Malawi is to spur private sector development.

Infrastructure

The government is eager to attract more private finance into infrastructure projects, but it will need to carry out significant reforms to create bankable investment opportunities. Malawi needs tremendous amounts of investment to fill its infrastructure gaps. In the 20-year period through 2017, total public investment averaged just over 4 percent of GDP per year. Estimates suggest the country needs that much investment in the energy, water, and sanitation sectors alone. The government simply does not have the ability to finance all these needs, even less so with rising COVID-19 expenditures.

The private sector could play a larger role in infrastructure projects, through PPPs and other innovative market solutions—but most proposed projects are not yet commercially viable. Projects often cited as opportunities by the government have failed to attract the private sector's interest. Some projects are too small to attract foreign direct investment (FDI) or too large for domestic firms to deliver. Others are not viable in Malawi's small market, where affordability for the target consumer must be carefully considered. Across the board, underlying issues need to be addressed, including better data collection, better identification of blended finance opportunities and de-risking solutions, and more transparent and competitive public investment management processes.

Investor protection is a key area for policy makers' attention, both in contract enforcement and insolvency regimes. Resolving commercial disputes in Malawi takes almost two years because of the poor quality of judicial processes and frequent arbitrary injunctions. In a big step toward reducing risks for investors in the event of a dispute, Malawi ratified the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards in early 2021. Transposing the convention into national law will guarantee that awards granted in international arbitration would be enforceable by the country's local courts. This is critical for attracting investors into large, complex projects, such as the Mpatamanga Hydropower Project.

Finance

Malawi's domestic MSMEs struggle to grow in part because owners and management often lack awareness of the benefits of financial services, and those that are aware often cannot access finance at reasonable interest rates with sufficiently long tenors. Limited access to finance and few options for financial intermediation are a constraint in most countries in the region, but especially so in Malawi. An estimated 90 percent of loans are channeled to just a handful of large corporate borrowers. Relying on short-term deposits, Malawi's banks are risk averse, especially when lending to MSMEs. Most banks offer only short tenors—typically no more than 12 months—carrying high-risk premiums and requiring collateral that most MSMEs lack. Credit infrastructure, supported by the revised Credit Reference Bureau Act, is not yet fully used by banks and their clients. Greater uptake could reduce the cost of borrowing by employing more accurate credit risk assessments, especially for MSMEs that typically lack the means to signal their creditworthiness and the channels to provide transparent information about their activities. The Malawi Agricultural and Industry Investment Corporation, a public-private entity, was set up to help facilitate long-term financing, including risk capital and guarantees, but it has also struggled to find well-prepared investment proposals.

Land

Gaining access to land and securing uncontestable rights to the use of land are also major challenges for private sector development. Eighty percent of land in Malawi is customary land and has historically been informally managed.[10] The government enacted a package of land reforms in 2016 that marked a significant breakthrough. The Customary Land Act, part of the package, enabled smallholder farmers to convert their customary land rights to private land rights, granting them a registered title and establishing tenure security. But implementation has been slow and challenging. For most smallholder farmers, the perceived risk of losing one's land remains. Land tenure security is desperately needed to encourage investments in climate-smart agricultural technologies and practices that can help farmers become more productive, more profitable, and more resilient to climate-related shocks.

Addressing inefficient land allocation is also a major opportunity to attract investment. While most of Malawi's farmers work on small plots, the country also has large tracts of land in mostly private estates. Due to inefficiencies in publicly managing these estates, approximately 70 percent of titles have expired.[11] An estimated 20 percent of all estate land is unused or underused, equivalent to roughly half a million hectares of arable land. The government points to private and leasehold land lying idle for years as a top concern. The new administration has called for a review of the 2016 land laws and their implementation. Fully implementing these reforms in a culturally sensitive, fair, and transparent manner will help improve titling, create certainty in land transactions, and increase investor confidence.

Skills

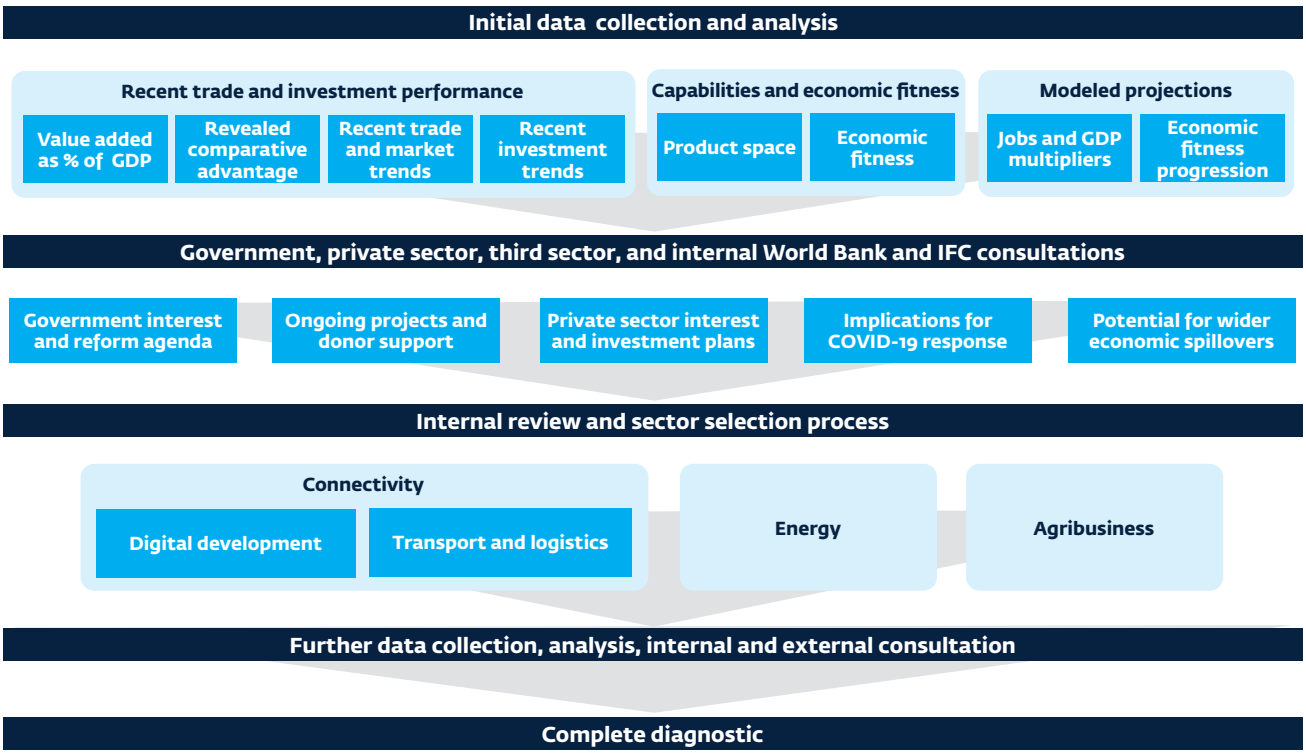
Malawi would benefit from new approaches to building knowledge and skills among its labor force. Most of Malawi's medium and large firms focus on low-complexity activities, requiring only modest skills. They rely on low-cost labor to arbitrage the higher costs of doing business in Malawi. Building the knowledge base for more complex industries will take many years, but empowering today's entrepreneurs, farmers, and youth with basic digital skills could provide more near-term opportunities to enhance productivity and create job opportunities in the market. Tackling gender inequalities, especially the extremely high attrition rate for girls in school, will be especially important for creating a larger, more skilled labor force and more inclusive jobs.

Malawi's labor force may be mostly low skilled, but it is also young and entrepreneurial. More than 40 percent of Malawi's MSMEs are owned by entrepreneurs under the age of 35. Roughly one-third of these are start-ups, having only been in business for three to five years. Roughly 6 in 10 were started by women. New opportunities are emerging, empowered by wider digital connectivity and the use of Facebook, WhatsApp, and other mobile-based apps. E-commerce is increasingly trusted and growing—despite tremendous challenges—across rural and urban communities and, surprisingly, across age groups, education levels, and genders. Supporting these entrepreneurs, by expanding digital connectivity and increasing digital literacy, could have an outsize impact on the economic empowerment of Malawi's women and youth.

This Country Private Sector Diagnostic examines opportunities and constraints in four sectors where targeted reforms could increase private investment, contribute to growth, and support job creation.

Recognizing the potential for Malawi's private sector landscape to change dramatically in the coming years, this report looks at four sectors where changes are already taking place and progress could be accelerated through further investment and more enabling policies. It begins by looking at the potential role of the private sector in the energy market, turns to broader issues of digital and physical connectivity, and concludes with an assessment of opportunities and constraints in agribusiness. This Country Private Sector Diagnostic (CPSD) does not include an exhaustive deep dive into all sectors of the economy but highlights these areas—energy, connectivity, and agribusiness—which are tightly interconnected and together are crucial for Malawi to meet the challenge of creating jobs and revitalizing economic transformation. Several criteria informed the selection of these sectors, which were further validated through extensive internal and external consultations (figure ES.1). Criteria included analysis of recent performance—including trends in trade, investment, and productivity indicators—and modeling of the country's current capabilities and economic fitness, including the potential of each sector to act as a jobs and GDP multiplier. Consultations provided additional insight into market dynamics, private sector interests and investment plans, and the potential for near-term action under the new administration. Finally, additional consideration was given to the sectors' role in the response to COVID-19, in economic recovery, and in laying the foundations for private sector development in the medium term.

FIGURE ES.1: SECTOR SELECTION PROCESS AND CRITERIA



Source: World Bank Group.
Note: GDP = gross domestic product.

SECTOR ASSESSMENTS

Energy

Malawi's energy sector is one of the most important areas where reforms of SOEs could create more viable opportunities for private sector participation. ESCOM and its related institutions should be at the center of the new administration's efforts to improve the performance of SOEs. Prior reform efforts were met with little interest by the leadership within these institutions, and mismanagement and corruption allegations have remained commonplace. The top priority should be to make ESCOM financially sustainable. For this to happen, national electricity tariffs need to be adjusted to become cost reflective. The Malawi Energy Regulatory Authority (MERA) approved a 31.8 percent increase in tariffs in 2018, to be phased in by 2022. This was less than what ESCOM had initially requested but an important step forward. A first increase of 20 percent was carried out, followed by a further increase of 10.6 percent effective March 30, 2021.

Higher tariffs will increase costs for the private sector in the near term, but the increases are necessary to allow for cost recovery and create commercially viable investment opportunities that will expand access to electricity. Implementing the National Electrification Strategy and National Energy Policy, following least-cost energy development pathways, are imperative for future economic development. Improving the management and efficiency of the sector's SOEs, and shoring up ESCOM's financial position, are critical first steps. The more cost-reflective tariff will help these utilities meet revenue requirements for operations and maintenance while also helping to attract investment from IPPs. With an estimated funding gap of US$1.8 billion in generation, transmission and distribution, and off-grid services, there could be strong interest from private firms if ESCOM becomes a more reliable off-taker.[12]

Ensuring that the Mpatamanga Hydropower Project becomes a reality should also be a top priority of the government. The project is one of the most ambitious in the entire region and would transform the country's economy. Partially funded by the World Bank, with IFC as codeveloper, the project will obtain remaining funding through government resources, commercial loans, and private equity. A competitive tendering process to determine a strategic sponsor is ongoing. Successful closure of this highly visible deal would send a powerful signal to the market and could catalyze wider investment and PPP opportunities.

In the more immediate future, connection to the Southern Africa Power Pool (SAPP) through the Zambia-Malawi and Mozambique-Malawi interconnectors will be a major milestone for the development of the sector. Completing the connections will give Malawi access to a reliable and cost-efficient supply of electricity. The ability to import energy will also allow the government to better manage the sector and mitigate risks, such as a prolonged drought sapping energy from its hydropower stations. Access to the SAPP will also reduce the need for ESCOM to contract costly and polluting diesel generation sets to stabilize power supply and meet gaps in demand. The government will need to continue to strengthen cooperation with Mozambican and Zambian counterparts to ensure that the completion of the projects are not delayed by COVID-19-related complications and that future participation in the SAPP achieves objectives.

Streamlining the regulatory environment to make it easier for private firms to develop off-grid energy systems and sign PPAs with the government could also generate significant market interest. Nine million Malawians live more than 5 kilometers (km) away from a national grid connection. Off-grid and minigrid renewable energy systems are a viable alternative to building out transmission and distribution infrastructure, and they are increasingly cost competitive. Solar minigrids are cost competitive with diesel-burning generator systems in all districts. Analysis suggests they could provide basic energy needs to 37 percent of the population, if institutional support and favorable regulatory policies were in place.[13] These systems could eliminate the need for expensive diesel-burning generators while providing additional socioeconomic gains, such as providing cheaper and more reliable power to health clinics and schools. The government can support these investments by better leveraging available international climate financing and exploring innovative solutions to de-risk commercially viable projects, including through blended concessional financing.

Transport and Logistics

Investment in transport and logistics infrastructure and services will be essential to reduce the cost of trade and boost the competitiveness of Malawi's private sector. Trade disruptions at the border and reduced market access during the COVID-19 crisis have been a stark reminder of the need for Malawi to deepen cooperation with neighbors and smooth regional integration. As a small, isolated market, Malawi's economy needs to continue to expand beyond its borders to access new markets and meet its development objectives. Malawi is a member of the Common Market for Eastern and Southern Africa (COMESA) and the Southern Africa Development Community (SADC), as well as a party to the Tripartite Free Trade Area agreement between COMESA, SADC, and the East African Community (EAC)—but the collective implementation of commitments to foster regional integration through these regional economic communities (RECs) has been slow and mostly incomplete. Preferential market access advantages have often been offset by nontariff measures that have restricted market access and plagued transport and logistics services.

Prior to the pandemic, the cost of exporting goods from Malawi had been falling and had become comparable to regional benchmarks for efficient transport services. Despite improvements, the cost of importing was nearly double that of exporting, largely due to the imbalance of trade. For costs to be further reduced, a combination of constraints must be addressed:

- **Border delays and fees**—Structural constraints, such as distance to ports and seasonal peaks in trade, are exacerbated by regulatory inefficiencies that lead to unnecessary delays. Malawi has been lagging its peers in the implementation of digital solutions to streamline and automate trade processes and customs clearance. Trade facilitation, including harmonizing regulations and processes with neighbors, is critical for improving efficiency at the border and reducing delays.
- **Lack of backhaul loads**—Because Malawi is a net importer, most trucks deliver goods without necessarily finding a load of freight to carry on their return—known as empty backhauls. Since truckers cannot make money on their return, importers tend to have to pay a premium. Within the country, low volumes of trade between rural locations and market centers have a similar effect. This is further compounded by the poor condition of feeder roads in rural areas, which causes frequent damage

to vehicles and results in higher charges to cover the cost of vehicle repair and maintenance. Increasingly affordable and mainstream technologies are powering a new wave of digital logistics solutions, platforms, and optimization services to overcome these challenges.

- **High fuel costs**—Fuel prices account for up to 50 percent of operating costs for transport firms.[14] Multiple levies and surcharges are imposed on the price of fuel by government agencies to fund various programs, but these have not been managed in a fully transparent manner. More analysis is needed on the potential trade-offs of reform, but a rationalization of the levies and duties on fuel could help reduce transport costs.
- **Inadequate infrastructure investment**—An underdeveloped, and often damaged, road network is another cause for high transport costs. Inaccessibility and unpredictable delays force transporters to build this extra time into their prices. Beyond the need for investment in expansion and in all-season roads, much of the problem is due to a lack of proper and periodic road maintenance. Like elsewhere in the region, oversight of road construction projects is weak, and the road construction industry is well known for collusive rent-sharing relationships. Modernizing contracting and procurement practices could revolutionize the system by increasing transparency, bringing down costs, and helping reduce fiscal constraints.

The revitalization and modernization of the Nacala Corridor will significantly reduce trade and transport costs. Several projects along the corridor are now coming online, most notably the multibillion-dollar investment by the Brazilian mining company Vale in rehabilitating and expanding the rail network connecting its mine in the west of Mozambique to the port city of Nacala, cutting across southern Malawi in the process. Rail usage had started to increase prior to the pandemic. If rail services become more reliable and operations more efficient, including at the port, the Nacala Corridor could become much more competitive with Malawi's other routes to market. Shifting from a reliance on road transport to more use of rail could be a cheaper, more efficient means of transport for Malawi's top exports—tobacco, tea, and sugar—as well as its major bulk imports of fertilizer, fuel, containerized consumer goods, and food products. The government should continue to work with development partners to support the rail concessionaire in Malawi, Central East African Railways Ltd. (CEAR), to enhance the efficiency of services across the network.

Improvements in transport and logistics will also be driven by the implementation of commitments under the World Trade Organization (WTO) Trade Facilitation Agreement (TFA) and, in time, the African Continental Free Trade Agreement (AfCFTA). Malawi ratified the AfCFTA in January 2021, but just how quickly continentwide negotiations lead to actual implementation of reforms is highly uncertain, especially while countries continue to battle the pandemic. Progress on the WTO TFA, on the other hand, will likely be more tangible in the coming years. The government ratified the WTO TFA in 2017 and has since requested assistance from the international community to meet its obligations and align with international best practices. Specific requests for assistance have been made to improve processes and procedures for advance rulings, authorized operator programs, and corridor management systems that will make it easier for private firms to trade. Progress has already been made to fully operationalize the ASYCUDA World computerized system for administering customs processes. The planned development of a national single window for trade would be a major step forward. The single window will integrate e-payments, preclearance of cargo, and other procedures. Meanwhile, investments in the physical infrastructure for one-stop border posts will also help reduce standing times and the associated costs of delays.

These developments should spur further regional integration, reducing the costs of imports while creating wider market opportunities for export-led growth. This effort will likely help consumers and export-oriented industries using imported inputs, but it will create challenges for firms focused on the domestic market that may have previously benefited from less competition. Addressing these trade-offs will require cooperating with regional peers to ensure a level playing field and sensible trade policy. Hopes are high that the AfCFTA can succeed where other RECs have not, becoming a much stronger driver of regional integration.

Digital Development

COVID-19 has highlighted the importance of digital connectivity, which has enabled the government to deliver critical public services, such as emergency social safety net cash transfers and important health alerts, to its citizens. The question now is this: How can the government build on the crisis response to further drive digital development and increase digital connectivity to markets? Plugging into the digital economy has the potential to dramatically reduce some of Malawi's inherent disadvantages as a landlocked country. But Malawi's internet use and mobile penetration are among the lowest in Africa. Despite 88 percent of the population living in areas covered by mobile broadband networks, only 41 percent of the population has a mobile phone, and less than one-fifth of Malawians use mobile internet services. Moreover, there is a 19 percent mobile ownership gender gap in Malawi.[15] Given that women have been disproportionately affected by the pandemic[16], actions to expand digital inclusion could help women access online markets, jobs, and educational opportunities during this crisis. These opportunities would put them in a better position to overcome the economic impacts of the pandemic, while at the same time creating economic opportunities as the country eventually moves toward recovery and growth.

Part of the reason more Malawians are not using digital services is that mobile data service is simply too expensive for the average citizen. In a positive sign of public-private cooperation, the Malawi Communications Regulatory Authority (MACRA) announced an agreement with Uganda's two mobile network operators (MNOs) to reduce the cost of internet data bundles by as much as 30 percent, effective April 2021. Prior to this, the cost per gigabyte of a basic package of mobile broadband data ranks in the top 10 most expensive in the world, equivalent to 22.8 percent of the average Malawian's gross monthly income.[17] The international benchmark is less than 2 percent.[18] Policy makers have decried a lack of competition in the mobile market and nontransparent pricing by the MNOs as reasons for the lack of affordability, but high costs are also due to the tax regime. There is a 17.5 percent value added tax (VAT) on mobile phones and services, 16.5 percent on internet services including mobile data, and a 10 percent excise duty on short message service (SMS) and mobile data services, plus regulatory fees and Universal Service Fund levies.[19] Creating affordable access to the internet has helped telecommunications (telecom) markets boom in countries like Kenya, where more than 85 percent of the population now uses at least 3G broadband services. Reviewing Malawi's policy framework for the sector, including the tax regime and foundations to promote competition, is essential to finding ways to continue to lower costs and to encourage higher usage of digital technologies by firms and consumers.

More innovation in digital services and investment in digital infrastructure are needed to lower costs for consumers and grow the market. The de facto duopoly in Malawi's mobile market has persisted for the past 15 years, despite the award of several additional licenses. In the fixed broadband market, a spin-off of the incumbent owns the most extensive and, in many areas the only, fixed network infrastructure. The incumbent and its spin-off had also held a monopoly on international connectivity to the East Africa Submarine System (EASSy) until recent regulatory reforms allowed for the market entry of new players, including ESCOM. ESCOM's investment in a national fiber backbone could play a major role in expanding internet access, improving service delivery, and developing Malawi's digital economy. Strengthening frameworks for infrastructure sharing and interconnection across the sector could facilitate the entry of new service providers to inject competition into the market.

Malawi's underserved market presents a huge opportunity to expand digital financial services, particularly as mobile money services have become more popular during the COVID-19 crisis. Malawi has been heavily reliant on cash for financial transactions, with a relatively slow take-up of mobile money and digital financial services. This can be partly explained by a lack of interoperability between service providers. The government has made progress in connecting banking and financial institutions and its two MNOs to the shared National Switch facility. But not all lenders have been connected to the network, including important intermediaries for MSMEs, such as microfinance institutions and financial cooperatives. If government reforms and new policy frameworks can help bring down the cost of owning a mobile phone and using mobile data, the market could quickly follow in the footsteps of other leaders in mobile money, like Kenya.

Agribusiness

Strong growth in agribusiness will be needed to facilitate the economic recovery from the COVID-19 crisis. Malawi has done well to become a major producer and exporter of high-demand commodities like tobacco, tea, and sugar. But these successes belie the tremendous poverty and vulnerability among farming households. Decades of interventions to boost productivity and diversification through government programs targeting smallholder farmers have largely failed to improve food security or create a more resilient, commercial agribusiness sector. Production remains reliant on rainfall, with concerns over basic food security keeping most farmers from diversifying away from maize production.

With the pandemic expected to reduce international investment flows, Malawi will need its incumbent lead firms to drive investment. Many have already been investing in diversification of tree crops, legumes, and groundnuts and the development of improved seed varieties. The most active in doing so are the tobacco firms—and, to a lesser extent, the tea and sugar companies. These firms are already demonstrating returns on investment in diversified crops, climate-smart agricultural practices, and new technologies. As large buyers and leaders in contract farming, they have tens of thousands of farmers in their supplier networks and the market power to drive behavior change throughout their supply chains. The government will need to support and help scale these initiatives by amplifying demonstration effects while also strengthening legal frameworks for contract farming that protect both buyer and seller.

The government can also help facilitate improved productivity and diversification by more effectively channeling public resources into the sector. The central pillar of agricultural development in Malawi had long been the Farm Input Subsidy Program (FISP), which, in its early years, helped increase productivity but later failed to substantially improve food security or drive diversification and commercialization. The new administration cancelled the FISP, creating a similar but much larger Affordable Input Program (AIP) to take its place. While the FISP had supported 900,000 smallholder farmers with coupons to subsidize the cost of fertilizer and various seeds, the AIP will scale up to cover 3.7 million smallholder farmers. The objectives remain the same: to increase farmer productivity, thereby improving food security and creating marketable surplus.

The rollout of the AIP and beneficial weather conditions have helped produce bumper harvests, but the longer-term effectiveness and financial implications of the AIP will need to be closely monitored. The budget allocation for the AIP is four times that of the FISP in its final year, absorbing nearly half of the overall agricultural budget. This crowds out productive investments in the sector that could promote commercialization and more sustainable farming practices. By widening incentives for maize production, the AIP also departs from years of effort to promote intercropping and diversification into other, more lucrative commercial crops, such as legumes. Reliance on a single crop weakens resilience to production and price shocks—unfortunately all-to-common occurrences for Malawi's farmers.

The government could also reduce fiscal burdens and reduce distortions in agricultural markets by following through on outstanding reforms to ADMARC. As is, ADMARC acts as both a major purchaser and seller of agricultural goods and services, often making it the largest customer of most farmers and private sector input suppliers. To remove conflicts of interest and increase efficiency, the previous government had announced it would split the parastatal's functions into ADMARC Social and ADMARC Commercial. The new government has also pledged to improve the performance of ADMARC and would like to see the institution strengthen its role in the market. What this may mean for plans to unbundle ADMARC's functions or how it plans to continue to operate in the market is unclear. ADMARC's programs and interventions—and those of the government's other institutions active in the market, such as the National Food Reserve Agency—should follow transparent rules that strengthen the market position of Malawian farmers, not weaken it.

Predictable and transparent trade policies for agricultural products would also help encourage investment in commercial agribusiness and export-oriented business models. The updated Control of Goods Act (COGA) was operationalized in July 2020 to add clarity to trade regulations. The COGA requires that certain thresholds be met to legally justify any import or export controls and for the government to carry out data-driven reviews prior to implementing, changing, or removing any such measures. The COGA was eagerly welcomed by the private sector, in part because it would require a review of the maize export ban that had been in place since 2017, despite evidence the ban was ineffective in supporting food security or farmers' livelihoods.[20] The review resulted in the ban's being lifted in March 2021. However, the government stopped issuing export licenses just one month later, reintroducing uncertainty in the market and calling into question whether the COGA was being implemented in the spirit of the law. Such uncertainty in the past had been a major deterrent to investment in agricultural production and exports. Dialogue with the private sector is a requirement under the revised act and, if carried out in good faith, should provide more transparency and reduce uncertainty when such decisions are made.

Recommendations

Malawi is facing formidable challenges: one of the poorest countries in the world, tasked with combating the COVID-19 pandemic while fortifying the foundations for inclusive, sustainable development. The country has thus far avoided major loss of life during the pandemic, and the situation was improving across the country at the time of writing. The government will need to act decisively and efficiently to mitigate the adverse effects of the pandemic on health, human capital, and the economy. Health and safety precautions, coordination with regional neighbors in critical areas such as trade and trade facilitation, and support for businesses and workers must continue to meet the challenge.

The campaign against corruption and moves to improve governance and accountability should help strengthen the necessary pillars for a postpandemic recovery. In this CPSD, we identify promising opportunities to build on these foundations and take action in areas that can attract more private investment to realize growth and fulfill the commitment to create 1 million new jobs. Some of the country's most pressing challenges, especially macrofiscal discipline and transparency, will require efforts to instill confidence among investors. The government will need to continue creating a more predictable policy environment, fostering greater regional cooperation and market integration, and finding innovative solutions to fill infrastructure gaps and support market development. More consistent and productive public-private dialogue will be needed to foster collaboration among government, the private sector, and development partners.

In this CPSD, we seek to support the government's development objectives and World Bank Group engagement in Malawi by providing an updated synthesis of private sector investment and growth opportunities along with recommended actions to help seize these opportunities. Naturally, these are only a subset of opportunities and needed actions, with an eye toward the interests of the private sector, that the government can consider as it charts a course for economic recovery. The full report elaborates on the analytical underpinnings for these recommendations and provides details on additional, complementary actions to facilitate the jobs and economic transformation agenda. Progress in any one of these areas is likely to have significant spillover effects, particularly when considering the interrelated systems of the sectors featured in this diagnostic. Some reforms and their sequencing may also entail trade-offs, which would need to be carefully explored and quantified with further analysis, especially in light of the current pandemic crisis. Table ES.1 summarizes 10 priority areas where policy makers can take action to support private sector growth and investment and create space for the private sector to play a greater role in meeting Malawi's development challenges.

TABLE ES.1 PRIORITY RECOMMENDATIONS TO SUPPORT PRIVATE SECTOR DEVELOPMENT

Cross-cutting	**Strengthen macrofiscal fundamentals and foundations for growth.** • Strengthen public financial and investment management through more realistic budget planning, stronger prioritization, and stricter fiscal discipline, in part to limit the need for domestic borrowing, avoid incurring arrears, reduce interest rates, and maintain available credit for the private sector. • Transpose into national law the newly ratified New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, to increase private sector confidence in investment dispute resolution in Malawi. • Promote the use of collateral registry systems and the National Switch among financial institutions to facilitate longer-term and more affordable financing to private sector borrowers.
Energy	**Increase access to reliable power.** • Improve the management and performance of ESCOM and continue the phased increase in the national electricity tariffs to allow cost recovery, which will help the national utility become financially sustainable and thus a more reliable contractual partner with current and potential IPPs. • Ensure adequate resource allocation to support the development and implementation of energy projects—most notably the Mpatamanga Hydropower Project—and the approval, tendering, contracting, construction, and completion of new solar and wind IPP projects.
Connectivity (transport and logistics; digital infrastructure and services)	**Improve access to markets.** • Leverage engagement in the Nacala Corridor Development Trilateral Committee and African Continental Free Trade Agreement negotiations to eliminate nontariff barriers to trade, harmonizing rules and regulations that will reduce the time and cost of trade for Malawi's traders. • Reduce the cost of mobile phone ownership and mobile broadband data services by rationalizing trade, tax, and levy policies, and promote infrastructure sharing to encourage wider mobile penetration and broadband access to low-income and rural residents.
Agribusiness	**Promote commercial agriculture.** • Create standard operating procedures for conducting reviews of trade restrictive measures under the COGA, including quarterly updates of the Food Balance Sheet and wider public-private consultations to mitigate the risk of new market distortions. • Approve and gazette backlogged legislation—the Seed Bill and National Fertilizer Bill—and provide operational guidelines to support timely implementation. • Improve resource allocation for productive investments in the agriculture sector, including by reviewing and adjusting the Affordable Inputs Program to improve the efficiency of distribution, target farmers most likely to benefit from the subsidy, and ensure fiscal sustainability.

Note: COGA = Control of Goods Act; ESCOM = Electricity Supply Corporation of Malawi; IPP = independent power producer.

01. COUNTRY CONTEXT

The new government of Malawi has the opportunity to chart a new political, economic, and social trajectory for the country. Years of weak governance, fiscal mismanagement, and political patronage came to a head in 2019, resulting in widespread antigovernment protests that roiled the nation for months. The results of the May 2019 presidential elections were eventually overturned by the country's courts. In the rerun, Lazarus Chakwera became the first opposition candidate ever to win a presidential election in Africa following initial results having been overturned. Chakwera was sworn in as Malawi's sixth president in June 2020. His new administration now faces the task of unifying the country amid a fractured political scene and delivering on development promises. And while protests have largely calmed, citizens' demands for more accountability from politicians and progress on development objectives remain.

In their small, landlocked country, Malawians are struggling to escape poverty. In 2019, the per capita gross domestic product (GDP) of Malawi was US$412, one of the lowest in the world. Over half the county's population, 51.5 percent, lives below the national poverty line. An even higher proportion, 70 percent, mostly residents of rural areas, live below the international poverty line of US$1.90 per day.[21] The pace of poverty reduction has been slower than the average rate across the region. Mozambique, Tanzania, and Rwanda all had higher poverty rates than Malawi in the early 2000s, but they surpassed Malawi in 2013 and now have significantly lower rates.[22]

With most Malawians trapped in subsistence farming, the country is simultaneously one of the world's most agriculture-dependent economies and one of its most vulnerable and least prepared to combat climate change. Over 80 percent of households depend on agriculture for at least some of their income.[23] Drought and severe flooding, often with significant social and economic costs, are frequent. The cumulative annual loss due to drought, flooding, and land degradation is estimated at roughly 7 percent of GDP.[24] These trends are intensifying, and the effects are likely to worsen as climate impacts are compounded by other factors, such as population growth. The Notre Dame Global Adaptation Initiative ranks Malawi the 23rd most vulnerable country in the world to climate change, with little readiness to adapt—whether that be within government, the private sector, or society at large.[25] To put Malawi on a path toward sustainable and inclusive growth, climate action is an integral part of the solution.

The new administration can plan a new course for the country but will have to do so while navigating the economic shockwaves of the COVID-19 pandemic. Malawi has been largely spared from the worst possible scenarios of COVID-19 cases and deaths, though without widespread testing, cases are likely underreported.[26] Yet economic impact is indisputably severe: growth expectations for 2020 have been lowered from 4.8 percent to 0.6 percent.[27] Much of the country's population lives in extreme poverty, and many more are vulnerable to falling back into poverty. Malawi needs to return to a medium-term target of 5.0 to 5.5 percent growth to support the level of job creation that would benefit more of its citizens.[28] Now more than ever, Malawi needs new drivers of growth and for the private sector to play a greater role in meeting the country's myriad development challenges.

Prior to the pandemic, Malawi's recent growth momentum supported a favorable outlook.

Relative macroeconomic stability since 2017 had put Malawi on a path toward more inclusive growth and poverty reduction. Real GDP growth averaged 4.15 percent (2010–19) with an upward trajectory prior to the COVID-19 outbreak.[29] Inflation had been declining since 2017, falling below 10 percent and then stabilizing. Poverty had ticked downward, declining modestly from 69.6 to 68.3 percent.[30] The economy had shown resilience following Cyclone Idai in 2019, with the recovery driven by increased agricultural output.[31] Since Malawi's manufacturing and services sectors rely heavily on agriculture inputs and market performance, they too saw growth.

Prior to the outbreak of COVID-19, the economy was expected to continue to grow based on continued strong agricultural output, improved electricity generation, and infrastructure investments for climate resilience. These measures, largely led by the public sector, were expected to result in 6 percent growth over the medium term. Improving access to finance and digital infrastructure was expected to raise productivity and performance among firms. Inflation was anticipated to converge toward 5 percent by 2025, benefiting from strengthened fiscal and monetary policy implementation and improved resilience to climate shocks.[32] The International Monetary Fund (IMF) projected improvements in competitiveness, export diversification, and fiscal consolidation to gradually narrow the country's current account deficit.

The pandemic has exposed and further amplified vulnerabilities in Malawi's economy.

Malawi's vulnerability to external and internal shocks, exacerbated by weak governance and institutions, is once again in the spotlight. The country has gone through repeated cycles of economic crises, corruption scandals, climate-related shocks, and food insecurity.[33] Malawi's heavy dependence on aid adds another dimension to these cycles.[34] Economic mismanagement and corruption scandals have resulted in donors suspending budget support to the government three times in the past two decades. In December, European Union representatives again declined the Malawi government's request for the resumption of direct budget support, citing concerns over poor and nontransparent public financial management. The pandemic is anticipated to widen the current account deficit, as the country increases COVID-19-related imports and export markets tighten. The real effective exchange rate has appreciated, which will amplify these trade trends. The government has received emergency support from development partners, but the situation could worsen if prudent macro-fiscal management measures are not put in place and further budget support is not forthcoming.

The government's consistent fiscal deficits leading into the pandemic have driven up borrowing, and the risk of debt distress is now high (box 1.1). Malawi has accumulated significant domestic and external debt. Recent World Bank analysis on the fiscal year 2020/21 draft budget found a deficit of 9.7 percent of GDP.[35] This would be a marginal decrease from the estimated deficit of 10.5 percent of GDP in the year prior—the highest rate in more than a decade. Three-quarters of the projected deficit is expected to be financed by high-cost domestic borrowing. This strain may affect the capacity of domestic financial institutions to also serve the private sector, a worrisome implication at a time when the private sector may need significant support to remain afloat. In addition to government borrowing, financial institutions have typically been risk averse in the domestic market and prefer to deal with specific clients. For instance, while the policy rate of the Central Bank has moved from above 20 percent to about 12 percent, this has not translated to reduced lending rates for financial institutions. Interest charges are expected to surge by 59 percent (in nominal kwacha terms), which would require 5.6 percent of GDP to service. These figures suggest the authorities would have very limited fiscal space to respond to the pandemic and deliver on its wider agenda. Reduced borrowing would both lessen the impact on interest rates and the debt burden.

BOX 1.1 DEBT DISTRESS RISK AND DEBT SERVICING BURDEN GROWTH DURING THE PANDEMIC

Malawi has accumulated significant domestic debt in line with its high fiscal deficits: the stock of total public debt remained at 69.1 percent of GDP with a moderate risk of external debt distress and high overall risk of debt distress based on the IMF's October 2020 update of the Debt Sustainability Analysis. Thus, the macroeconomic fundamentals that were improving were already at risk of weakening before the COVID-19 pandemic. The Debt Service Suspension Initiative was announced by G-20 leaders in response to calls by the World Bank and IMF to grant debt-service relief to the poorest countries for managing the impact of the COVID-19 pandemic (table B1.1.1). Multilateral banks' support, including development policy operations or general budget support, will need to indicate how Malawi is engaging with the initiative, including the mechanisms that have been set up to transparently report on use of the funds.

TABLE B1.1.1 BENEFITS TO MALAWI FROM DEBT SERVICE SUSPENSION INITIATIVE

Country	DSSI participation?	Risk of external debt distress	Risk of overall debt distress	Date of DSA publication	Potential DSSI savings (in % of 2019 GDP	Potential DSSI savings (in USD millions)
Malawi	Yes	Moderate	High	10/20	0.2	17.4

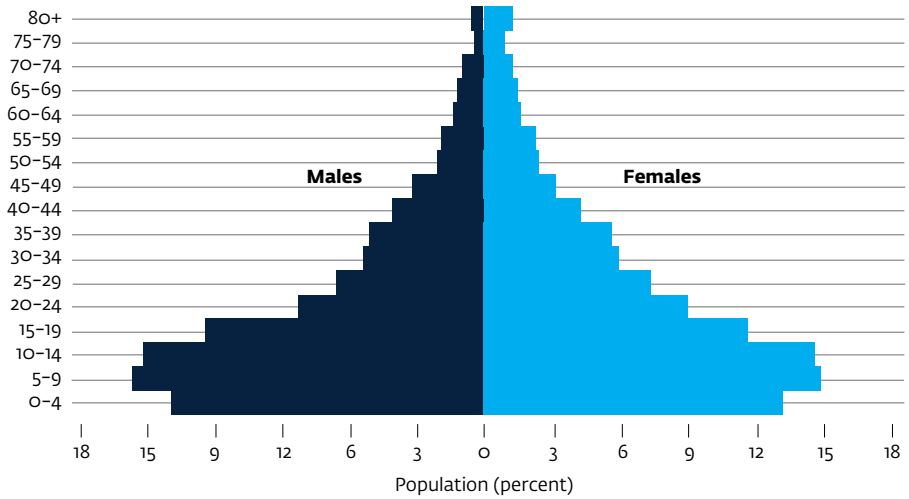
Source: World Bank (2021)[45]
Note: The estimates are current as of January 12, 2021. DSA = Debt Sustainability Analysis; DSSI = Debt Service Suspension Initiative; GDP = gross domestic product, IMF = International Monetary Fund; USD = U.S. dollars.

The new administration will need to position Malawi for economic recovery and job-led growth.

Despite the impact the pandemic is already having on Malawi's economy, the IMF and World Bank Group projections suggest it is better positioned to recover in the near term than many other countries in Sub-Saharan Africa.[36] Growth is expected to rebound to 2.2 percent in 2021 and to continue to climb in the coming years. The IMF forecasts a gradual economic recovery from 2022 through 2025, with growth averaging 6.4 percent. Strong agricultural output and a rebound in the services sector, which has been heavily hit by the pandemic, are projected to help the country bounce back.[37] In the medium-term outlook, large, potentially transformational projects are in the pipeline and could revolutionize critical sectors. However, this positive outlook could change quickly, as the pandemic continues to spread.

Limiting the impact of the pandemic is imperative, but the government should also keep trying to create the conditions for generating more and better jobs in the recovery. Home to an estimated 19.2 million people as of 2018, Malawi has one of the youngest and fastest growing populations in the world. Increasing by roughly 3 percent a year, the population could double by 2040.[38] Malawi is already extremely youthful, with three-quarters of the population under the age of 35, and over half younger than 20 (figure 1.1).[39] The economy was only creating jobs at a rate of around 1.5 percent per annum prior to the pandemic, according to International Labour Organization estimates.[40] It will need to more than double job creation moving forward, especially as more youth—with limited opportunities to pursue a high-quality education—enter the labor force.

FIGURE 1.1 DISTRIBUTION OF MALAWI'S POPULATION BY AGE, 2019–20



Source: Malawi Government. 2020. "The Fifth Integrated Household Survey (IHS5) 2020 Report." National Statistics Office.

Without the creation of better jobs for more people, the government will not be able to meet the needs of its rapidly growing population. The majority of Malawians rely on informal subsistence agriculture and services for their livelihoods. Finding a job is a near constant challenge for most. Even for those that do find work, most are underemployed.[41] The government's 2019–20 Integrated Household Survey found that 91 percent of respondents were engaged in at least some income-generating activity over the survey's preceding 12-month period. Most of these activities were temporary, informal farming and fishing jobs. In urban areas, roughly one-quarter of respondents reported they could not find work in the past year. Formal waged jobs are rare. Only 1 in 10 Malawians in the labor force has a waged or salaried job. Even those with a tertiary education struggle to find formal employment; less than two-thirds have found a waged job. These numbers have worsened since the onset of the pandemic. Estimates through August 2020 suggested 12 percent of the employed population lost jobs, with those in services and industries in urban areas most heavily affected.[42]

The new administration needs an economic recovery to help it deliver on its central campaign promise of creating 1 million new jobs. This is the core development challenge focused on in this report: creating better jobs for more Malawians by improving the enabling environment for firm growth, productivity in services, and commercialization of agriculture. In public comments, the president has admitted the government cannot achieve its jobs goal alone, and he has sought the help of the private sector in meeting shared objectives. In January 2021, the National Planning Commission released its Vision 2063 strategy, laying out the nation's ambitions to become an inclusively wealthy and self-reliant industrialized upper-middle-income country by the year 2063.[43] The success of the third Malawi Growth and Development Strategy, which covers the five-year period through 2022, still remains to be seen.[44] The administration's response to the pandemic and its ability to support private sector development in the next few years will be essential to lay the foundations for a more prosperous, inclusive Malawi.

This Country Private Sector Diagnostic (CPSD) seeks to support the government's development objectives and World Bank Group engagement in Malawi by providing an updated synthesis of private sector investment and growth opportunities along with recommended actions to help seize these opportunities. The first section of the diagnostic provides an overview of the state of Malawi's private sector. This is followed by a discussion of the challenges to private-sector development that cut across all sectors of the economy, as well as broad recommendations that could address these issues. The remainder of the report features the main opportunities and sector-specific constraints in four sectors: energy, digital infrastructure and services, transport and logistics, and agribusiness. Each sector assessment concludes with a table of targeted reforms that could increase private investment, contribute to growth, and support job creation in the near and medium term. This CPSD's findings have informed the World Bank Group's Country Partnership Framework fiscal year (FY)21–FY25 and IFC's Country Strategy FY21–FY25, both forthcoming, in line with Malawi's national development plan and strategy.

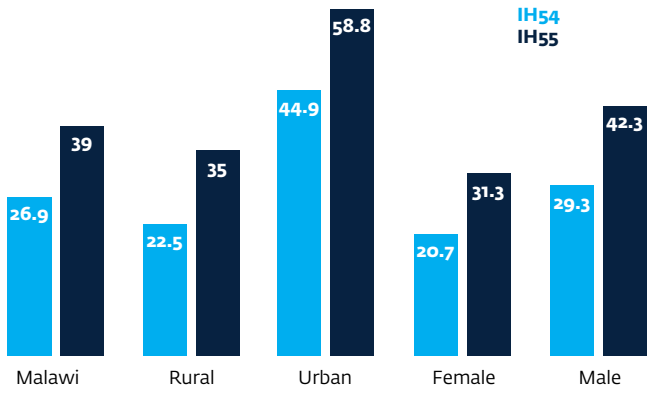
02. STATE OF THE PRIVATE SECTOR

2.1 COMPOSITION OF THE PRIVATE SECTOR

Understanding the structure of Malawi's private sector starts with understanding the central role agricultural production and agribusiness play in the economy. Malawi is one of the most agriculture-dependent economies in the world, with over 80 percent of households depending on the sector for at least some of their income.[46] Farming provides jobs for roughly two-thirds of the country's labor force, the majority of which are registered tobacco growers.[47] The entire sector accounts for 29 percent of the country's GDP and 80 percent of national export earnings.[48] Tobacco exports alone account for over 50 percent of total exports, yet there is a 28 percent gender gap between women and men in the fraction of land devoted to export crops.[49]

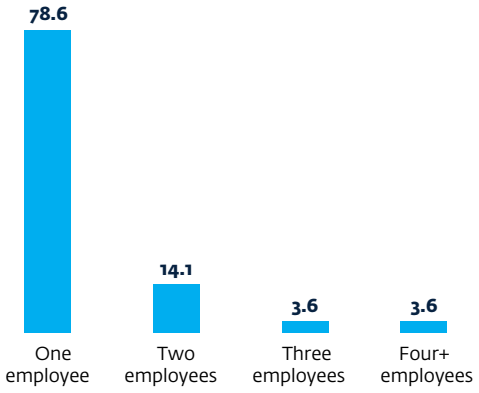
Prior to the pandemic, the structure of Malawi's economy was slowly shifting out of agriculture and into services. Nearly 40 percent of households reported owning or operating at least one nonfarm enterprise in 2019, a significant increase since 2016 (figure 2.1).[50] The majority of these, roughly two-thirds, are involved in wholesale and retail trade. Most are a one-person operation, with only 1 in 5 employing two or more people and only in 1 in 10 employing someone from outside the household (figure 2.2).[51]

FIGURE 2.1 PROPORTION OF HOUSEHOLDS OPERATING NONFARM ENTERPRISES



Source: Malawi Government, "The Fifth Integrated Household Survey (IHS5) 2020 Report" (National Statistics Office, November 2020).
Note: IHS4 = Fourth Integrated Household Survey, IHS5 = Fifth Integrated Household Survey.

FIGURE 2.2 EMPLOYMENT DISTRIBUTION AMONG NONFARM ENTERPRISES, 2019-2020



Source: Malawi Government, "The Fifth Integrated Household Survey (IHS5) 2020 Report" (National Statistics Office, November 2020).

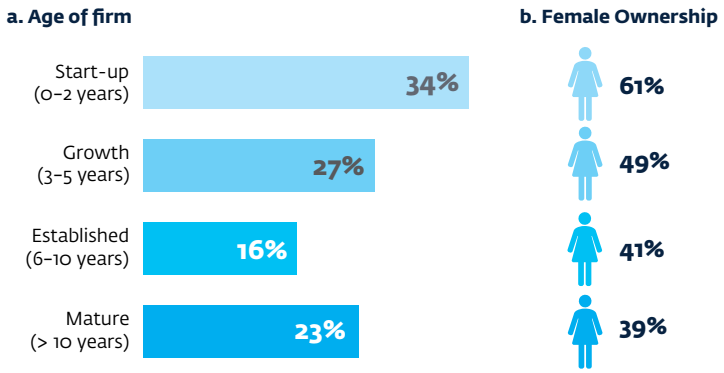
Manufacturing has remained relatively stagnant as a contributor to GDP, at around 10 percent. Employment growth in the sector has been minimal but is highest in less knowledge-intensive industries.[52] An overwhelming majority of the labor force in the manufacturing sector in Malawi is employed in low-skill jobs, in noncomplex activities. Four of these industries—food and beverages, textiles and apparel, wood and paper, and metal products—employ 88 percent of the manufacturing labor force.

Malawi's informal private sector has limited opportunities and few incentives to formalize and scale.

Malawi's private sector is mostly informal, with only a few large firms capturing economic opportunities in most sectors.[53] There are an estimated 1.1 million micro, small, and medium enterprises (MSMEs[54]) in Malawi.[55] Roughly 90 percent of these are unregistered and operate informally, mostly in what could be considered subsistence-level wholesale and retail trade or various agriculture-related services.[56] Still, these businesses contributed an estimated US$3.2 billion in value to the economy in 2019. Most MSME owners claim they operate informally because the cost of registration is prohibitive. Many do not see the value of formalization, noting the potential benefits, such as being able to open a business account or obtain a loan, are often difficult to access without clear value to the business itself.

Despite being mostly single-employee businesses, MSMEs are an important source of off-farm employment. According to a World Bank–funded 2019 survey of MSMEs, these businesses employ nearly a quarter of the country's labor force and provide a livelihood for an estimated 21 percent of Malawian adults. These opportunities are especially important for women and youth. An estimated two-thirds of MSMEs are women-owned or led, and among microenterprises, that number spikes to over 80 percent (figure 2.3). At the same time, two out of every five MSMEs are started by an entrepreneur under the age of 35. But these jobs a fraught with risk and instability. Four out of five entrepreneurs use their personal savings to start their business, and fewer than 40 percent of such firms survive for six years or more.

FIGURE 2.3 MSMEs BY BUSINESS MATURITY AND FEMALE OWNERSHIP



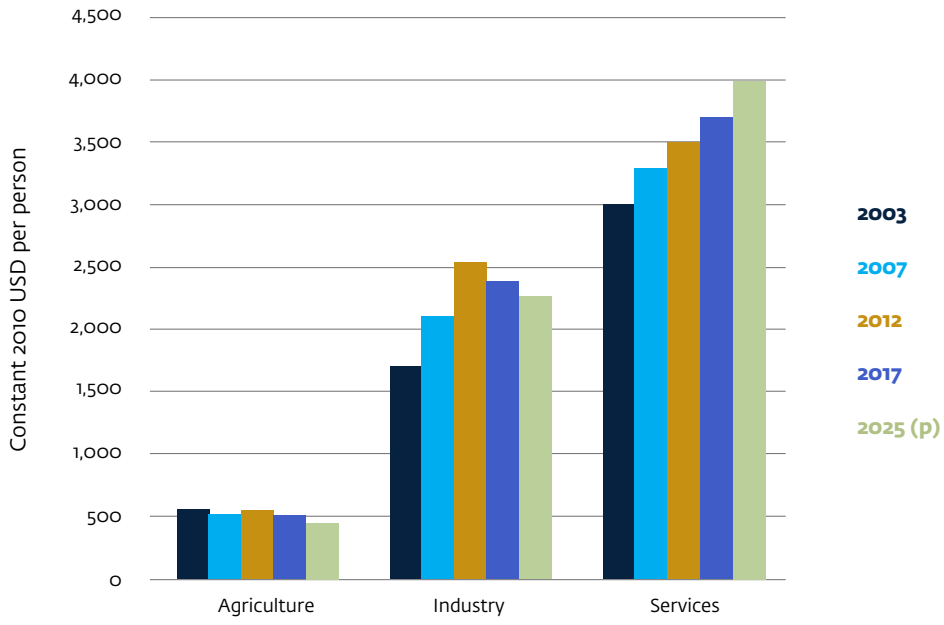
Source: FinScope MSME Malawi, 2019
Note: MSME = micro, small, and medium enterprises

Gender gaps are also pronounced across the private sector, with the pandemic exacerbating inequalities in economic opportunities for women. Women-owned firms are primarily concentrated in informal sectors, many of which have been hard hit by the economic downturn.[57] Even before the pandemic, there was a 31 percent profit gap between women-owned and men-owned firms, largely due to the fact that women face a number of socioeconomic barriers that result in women-owned firms having markedly lower levels of capital and labor.[58] Only 3.6 percent of large firms (>100 employees) had a woman in a top management position, according to the 2014 Enterprise Survey. Even in small and medium firms, there was a large disparity in the percentage of women in management roles, worse than the average low-income and Sub-Saharan African country.[59] Women are less likely to find better jobs in part due to their relative underenrollment in secondary and tertiary education. As a result, most are stuck in less productive, informal MSMEs. At the farm level, women farmers generally have lower access to productive inputs, information, and liquidity than men—so in times of crisis, their productivity falls, and food security becomes a major concern.[60]

Structural transformation has been slow, in part due to low productivity in agriculture and little innovation.

Prior to the pandemic, labor productivity had been edging upward (figure 2.4).[61] This had been driven by a more productive services sector (42 percent of GDP in 2019), where value added per worker has been rising steadily from a low base in 2002. These trends are likely to have been set back substantially by the pandemic. Initial survey data found one in five urban households had reverted back to agriculture, providing a buffer to overcome food security and the loss of jobs in the pandemic's economic fallout.[62] How these responses affect structural transformation and urbanization trends in the next few years remains uncertain.

FIGURE 2.4 VALUE ADDED PER WORKER BY SECTOR



Source: World Bank JobStructure Tool

Meanwhile, productivity in agriculture has been stagnating since the late 1990s.[63] This is due to a confluence of factors—including farmers' dependence on a single rainy season, vulnerability to weather-related shocks, lack of diversification due to policies that incentivize maize production, low soil fertility, significant postharvest losses, and weak links to markets.[64] These issues are explored further in section 4.3.

Malawians are highly entrepreneurial, but innovation at scale is relatively absent in Malawi's private sector.[65] The lack of re-investable capital and a scarcity of highly skilled labor make research and development (R&D) a luxury. In fact, state-owned enterprises (SOEs) in the agriculture, education, and health sectors spend more on R&D than local private sector players.[66] Malawi ranked 111th of 129 countries on the Global Innovation Index—but this ranking belies promising signals for the future. Malawi is actually the third-highest ranked low-income country, trailing only Tanzania (88th) and Rwanda (91st). Of the 80 indicator components to the index, Malawi's low scores in tertiary education enrollment, poor access to and low use of information and communication technology (ICT), low gross capital formation, lack of domestic credit to the private sector, and small domestic market were identified as the biggest barriers to innovation.[67]

State-owned enterprises and a handful of large firms shape Malawi's economy.

State involvement remains prevalent in many sectors of the Malawian economy. Malawi has 67 fully government-owned SOEs, playing significant roles in agriculture and agribusiness, education, construction, energy, finance, health, information and communication, media, public utilities, aviation, and services.[68] Direct state participation can be justified in these sectors due to market failures and poor regulatory frameworks. Many of these SOEs have benefited from soft budget constraints, preferential access to land, and tax concessions on acquisitions. To increase private sector participation in new areas of the economy, more transparency in SOEs' operations and accounting of their finances will be necessary to understand where private firms could compete if the playing field were even. The previous government had pledged to attract strategic private investors to form public-private partnerships (PPPs) in some of these sectors. Nevertheless, progress on privatization and competition has been slow.[69]

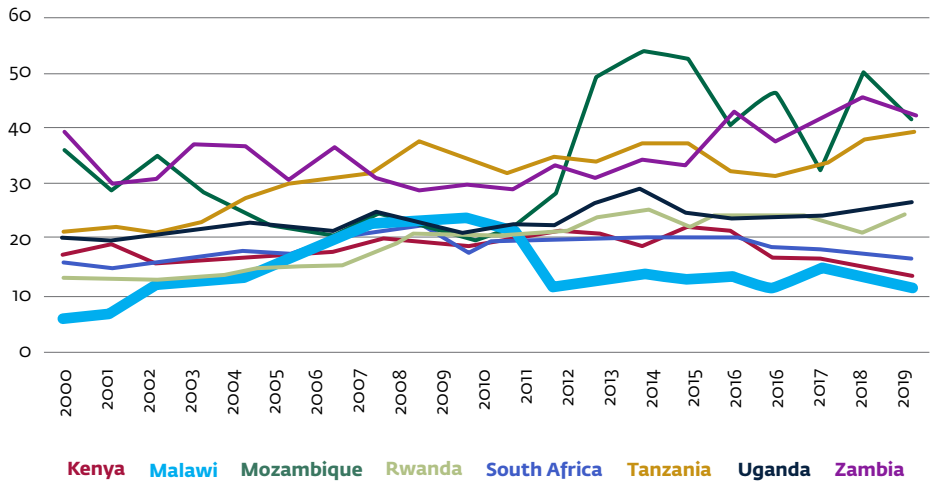
2.2 FOREIGN INVESTMENT

Malawi has tended to struggle to attract private investment, with its small market and challenging business climate deterring potential foreign investors.

Malawi has one of the lowest investment rates in the region, in part due to exogenous factors, and thus does not benefit as much from increases in productive capacity or capital stock replacement. Malawi's landlocked status, small population, and minimal purchasing power make attracting foreign investment a challenge. Investment rates averaged 15.3 percent of GDP from 2000 to 2019, while neighboring Zambia (35.4 percent) and Tanzania (32 percent) have both averaged significantly more investment (figure 2.5). Foreign direct investment (FDI) net inflows as a percent of GDP have been volatile in recent years, in part because of the country's relatively small economy and its success in attracting the occasional large investment. Overall, however, Malawi's inward stock of FDI remains low compared with its peers, and inflows have decreased since a peak in 2014, according to IMF and United Nations Conference on Trade and Development (UNCTAD) data (figure 2.6).

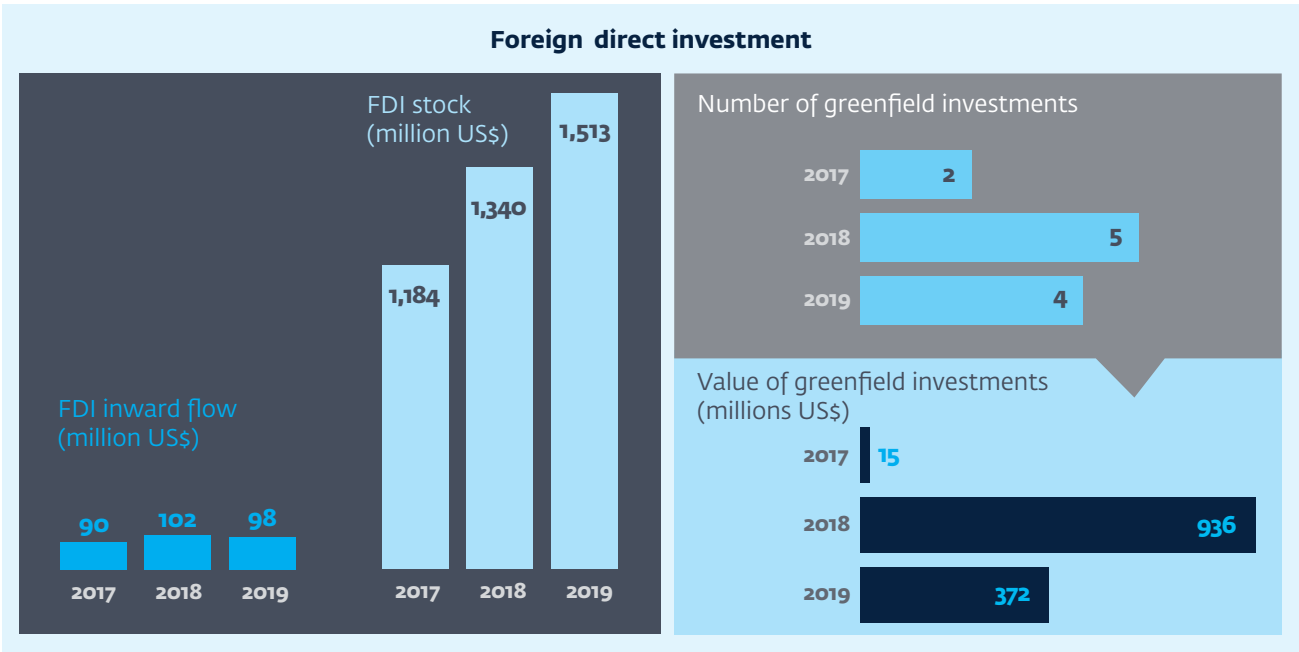
While the entire African region has thus far weathered the global decline in FDI, Malawi needs new and replacement capital goods to continue to boost productivity across sectors. Inward FDI accounted for 13.5 percent of gross capital formation in 2018, another area that lags peers.[70]

FIGURE 2.5 TOTAL INVESTMENT, MALAWI AND SELECT COUNTRIES, 2000–19



Source IMF World Economic Outlook.
Note: GDP = gross domestic product.

FIGURE 2.6 FDI DATA FOR MALAWI, 2017–19



Source: UNCTAD, latest available data.
Note: FDI = foreign direct investment, US$ = US dollars.

An uptick in FDI announcements prior to the COVID-19 crisis was a promising sign of confidence in Malawi's investment climate, but concluding these and new deals in the wake of COVID-19 will be difficult.

In the few years before COVID-19, a small number of fairly large deals seemed to suggest Malawi was becoming a more attractive location to invest—a promising sign for an infusion in productivity-enhancing technology, know-how, and capital goods. According to data from the Financial Times' fDiMarkets database, in the few years prior to COVID-19, a small number of relatively large deals suggested that Malawi was becoming a more attractive location to invest. These include Ethiopia's investment in the national airline, China's continued interest in the real estate sector, and a joint venture with European partners for green building and manufacturing. FDI in large-scale agriculture largely has been a missing piece, though there are notable exceptions. The government also signed a major PPP with an Israeli firm to invest in one of the region's largest greenhouses for horticulture production. In addition, a leading tea, coffee, and macadamia producer from Kenya has expanded into Malawi for macadamia and coffee production with over 3,000 smallholders. In the energy sector, a Swiss company won the country's first-ever competitive tender for a power purchase agreement (PPA) in 2019. This is now one of many PPAs approved and in the pipeline, suggesting Malawi could begin to close the gap in investment with its neighbors as markets recover from the COVID-19 crisis.

2.3 MARKET ORIENTATION

Firms tend to focus on the domestic market and are not well integrated into regional and global value chains.

Export-oriented growth is a central driver of rapid structural transformation and poverty reduction, but few of Malawi's domestic firms export. Most of Malawi's private enterprises provide goods and services sold directly to final consumers on the domestic market (figure 2.7). Roughly one in six of Malawi's firms were exporting in 2014, the latest year of the Enterprise Survey, and roughly one-third of the country's largest firms.[71] Research shows exporting firms tend to be more productive and innovative.[72] Domestic firms that become suppliers to multinational corporations tend to become more productive and profitable. Multinational corporations have higher, international standards that suppliers must meet, providing an incentive for prospective suppliers to invest in the necessary capital improvements and innovation to meet these standards. Indeed, recent analysis suggests that once a domestic firm starts supplying a multinational corporation, productivity among these firms can increase by up to 9 percent, sales by as much as 33 percent, and the number of jobs by roughly 26 percent.[73]

FIGURE 2.7 MARKETS FOR PRODUCTS OR SERVICES OF MALAWI'S NON-FARM ENTERPRISES, 2019-2020

Source: Malawi Government (2020)[74]

The inward-looking nature of Malawi's private sector is reflected in its lack of integration into global value chains (GVCs), which limits access to the knowledge and technologies that could help boost productivity and innovation. Of the firms exporting in 2014, two-thirds exported less than US$50,000 per year.[75] This suggests these exporters had found niche markets for their goods but had not integrated into larger GVCs, which rely on complex networks where high volumes of both imports and exports move across multiple borders to produce a final good or service. This could be expected. Geography—proximity to the hubs in global trade networks—plays a major role in how likely a country is to integrate into GVCs. Malawi is more than 30,000 kilometers (km) from the three major global hubs in GVC networks—the United States, Western Europe, and China—but also far from Kenya, Nigeria, and South Africa, the region's major trade hubs. For most sectors of the economy, global integration will remain a challenge. Where Malawi has succeeded in integrating into these GVCs is in agribusiness, where multinational corporations operating out of the country and large commodity traders are well connected to the global market.

Despite the efforts to diversify its exports, Malawi continues to have a narrow export base.

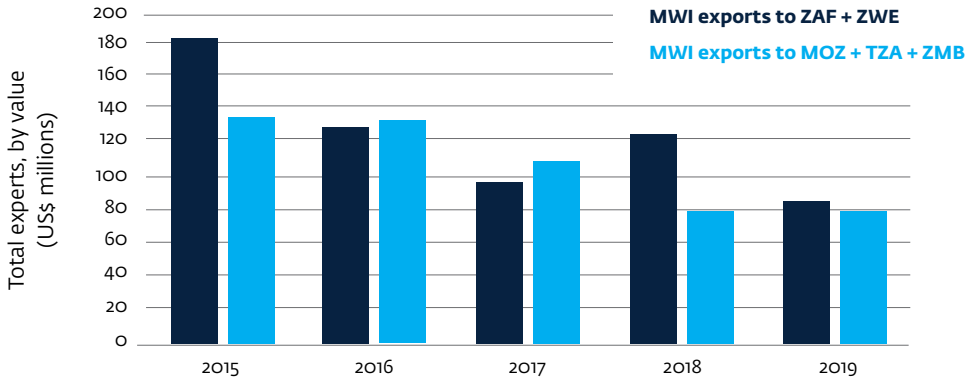
Tobacco remains the country's most important export, accounting for more than half of all exports over the past decade. The country is the world's seventh-largest exporter of unmanufactured tobacco, earning it over US$498 million in 2019. However, demand has been falling for Malawi's tobacco, with its global market share shrinking 2 percent per annum since 2015. There has been a marked decrease in the exports of some of Malawi's other traditional exports as well, especially sugar and cotton. Reported goods exports totaled over US$912 million in 2019—with an estimated US$179 million in services exports.[76] Imports reached US$2.9 billion, a continued rise from 2016, resulting in a trade deficit of US$2.0 billion.[77] This has been accompanied by strong growth in imports, creating an overall trade imbalance.

As the largest and closest regional hub, South Africa is Malawi's most important trade partner, in terms of both origin of imports and destination for exports. For export revenue, Malawi relies heavily on Belgium, and to some extent the United States and a few other European countries, as the primary buyers of its tobacco. Exports to Kenya and Rwanda are also growing relatively rapidly. Interestingly, Malawi exports roughly as much to South Africa and Zimbabwe as it does to its direct neighbors: Mozambique, Tanzania, and Zambia, highlighting the lack of complementary production and weaker value chains shared across these countries (figure 2.8). Notably, as Malawi's trade deficit has grown, and the country continues to seek relatively simple products to diversify into, imports from China have grown steadily, jumping 40 percent from 2018 to 2019 to overtake South Africa as Malawi's largest source of goods.

The impact of COVID-19 on Malawi's trade balances has been mixed but mostly negative since March 2020, according to government data.[78] Malawi is one of the most open economies in the region, meaning it is more exposed to the risk of trade-related external shocks (figure 2.9). Monthly trade in Malawi is characterized by seasonal fluctuations, based on harvesting seasons, but overall export performance was hurt by a significant drop in tobacco sales (see section 4.3). As the first major wave of the pandemic

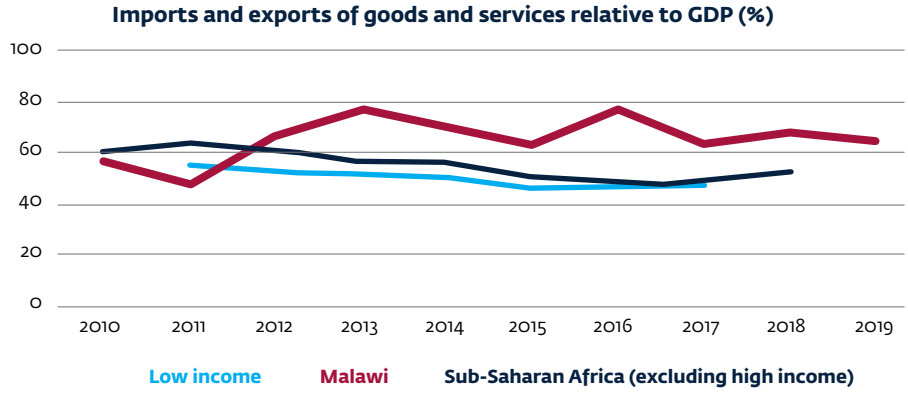
intensified globally during Malawi's winter months, exports fluctuated before dipping consistently from July onward (figure 2.10). Transport disruptions at Malawi's borders and in neighboring ports, lockdowns in major trading partners including South Africa, and the general downturn in global demand resulted in fewer of Malawi's products reaching fewer markets. Year-on-year exports were down 11.6 percent, according to the Malawi Revenue Authority. Imports also fell sharply in April, due to decreased consumer demand and dampened confidence in the private sector, before normalizing toward the end of the year. With a second wave of COVID-19 intensifying at the start of 2021, Malawi's trade prospects will continue to face strong headwinds.

FIGURE 2.8 MALAWI'S EXPORTS TO REGIONAL AND NEIGHBORING MARKETS



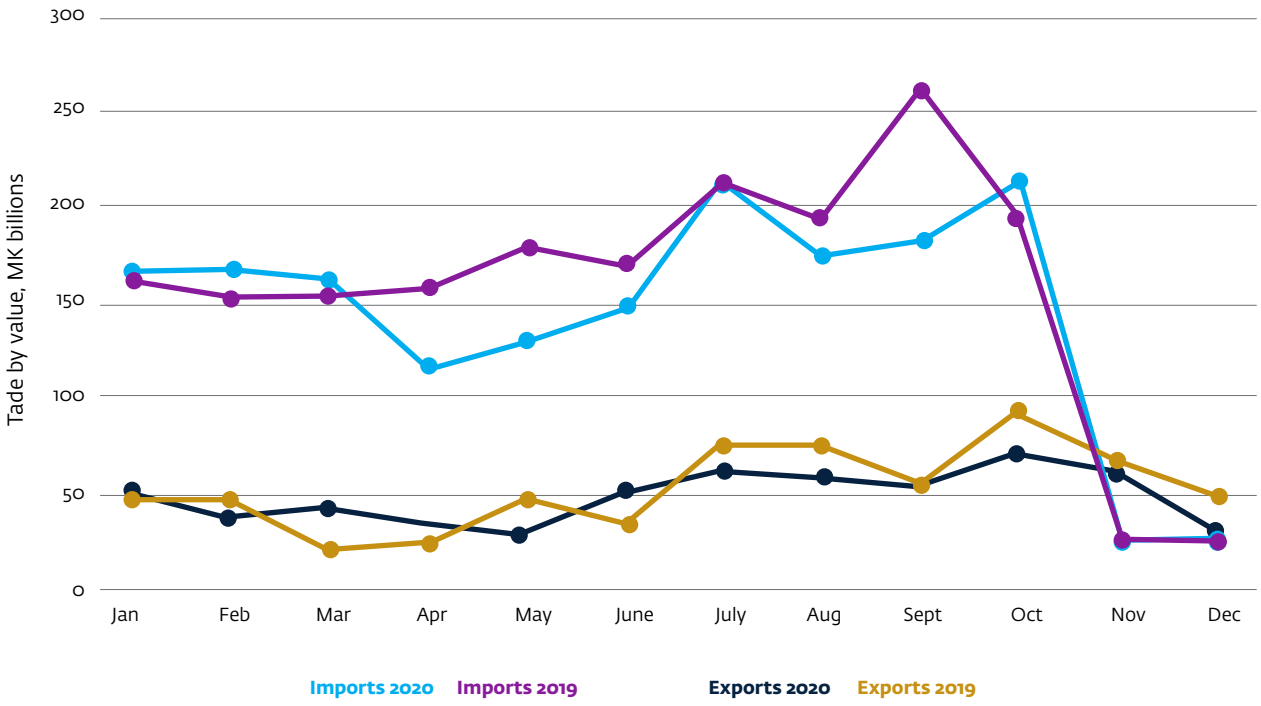
Source: Based on World Development Indicators database.
Note: MOZ = Mozambique, MWI = Malawi, TZA = Tanzania, ZAF = South Africa, ZMB = Zambia, ZWE = Zimbabwe.

FIGURE 2.9 TRADE OPENNESS, 2010–19



Source: Original calculations for this publication, based on World Development Indicators database.
Note: GDP = gross domestic product.

FIGURE 2.10 MALAWI TRADE PERFORMANCE, IMPORTS AND EXPORTS, 2020 VS. 2019, IN BILLIONS OF MK



Source: Malawi Revenue Authority.
Note: MK = Malawi kwacha.

03. CROSS-CUTTING CONSTRAINTS ON PRIVATE SECTOR DEVELOPMENT

3.1 WEAK GOVERNANCE AND A NONCONDUCIVE BUSINESS ENVIRONMENT

Macroeconomic Instability and Poor Fiscal Management

Bolstering macroeconomic stability and seriously addressing fiscal policy and management will be the top challenges for the government, as it seeks to mitigate the impacts of the COVID-19 crisis while also putting in place a foundation for a recovery led by the private sector. The COVID-19 shock has reinforced the importance of having fiscal buffers to handle unexpected spending. Malawi's preexisting stock of high-cost domestic debt has challenged the government's ability to finance response measures. Improving public financial management will reduce the risk of future budget overruns and the need for the government to turn to the domestic commercial finance sector for capital. As discussed in section 1, past reforms to improve macrofiscal conditions, while successful in some areas, have generally been insufficient and not fully implemented.

The new administration can start by producing credible revenue projections and expenditure targets. Part of this process could include a comprehensive review of where public subsidies are currently being directed, how effective and financially sustainable these programs are, and how resources may be better allocated through social safety net programs.

The government has a set of policy and performance Action commitments under the Sustainable Development Financing Policy.[79] Maintaining zero new nonconcessional borrowing on contracting new external public and publicly guaranteed debt or guarantees is critical to achieve and maintain fiscal and external debt sustainability and to avoid increasing external borrowing risks. In addition, to support prudent domestic debt management, the cabinet will approve and publish a revised borrowing plan for the fiscal year 2021 budget that is anchored in a public debt management strategy that includes a domestic debt target and aims to minimize domestic debt vulnerabilities. Finally, the government will improve the transparency of debt obligations and reduce fiscal risks by publishing a biannual public debt report including coverage of debt, guarantees, and contingent liabilities for extrabudgetary units and public corporations,

including SOEs. The World Bank has been working with the government on a series of public expenditure reviews to support this potentially daunting undertaking. The first module, "Putting Fiscal Policy on a Sustainable Path," analyzed recent macrofiscal trends, fiscal risks and sustainability, and the policies required to manage risks and maintain sustainability.

Political Patronage and Anticompetitive Behavior

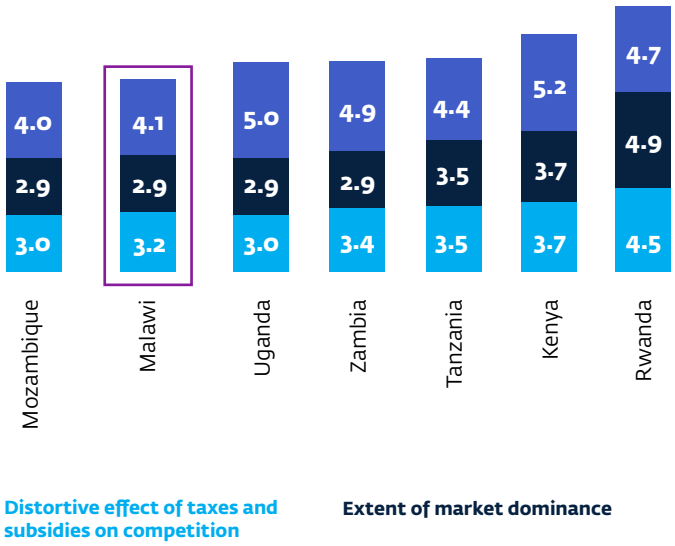
Creating a regulatory environment conducive to private sector growth will require disentangling political rents and business interests. Political patronage is modus operandi in Malawi, undercutting the development of state capacity and efforts to address market failures.[80] Policymaking has long been driven by insider relationships and biased toward the interests of larger, established firms. Vested interests and cronyism are commonly cited as constraints on creating more competitive markets (figure 3.1).[81] The government's large share of demand for goods and services can make these relationships very lucrative, especially in domestic markets, such as those for farm inputs and construction.[82] The focus on maintaining rents in these sectors has drawn government resources away from supporting private sector growth in more complex and export-oriented industries.[83] If the new government leadership can strengthen accountability and transparency, as well as public procurement processes, there is an opportunity to wean many domestic firms off of their dependency on government connections and support more competition across key markets.

FIGURE 3.1 OPERATIONAL BUSINESS RISK RELATED TO WEAK COMPETITION POLICIES BY COMPONENT, MALAWI AND COMPARATOR COUNTRIES, 2018 SCORES

Source: Economist Intelligence Unit
Note: Higher score is worse. Highest risk per area = 4. Maximum total level of risk = 16.

More competition across the economy could help drive down prices for consumers, encourage productive investments, and kickstart innovation. Competition is already cutthroat among most micro and small enterprises, but most larger players hold dominant market shares in their area of interest or tend to be part of strong oligopolies. This is reflected in surveys on the perception of skewed market dominance and the lack of effective anti-monopoly policies to ensure fair competition, where Malawi scores poorly among its peers (figure 3.2).[84] Table 3.1 summarizes a sample of key competition restrictions, both de jure and de facto, that have been identified in various sectors in recent years and which are detrimental to the private sector's ability to enter, expand and compete in these markets.

FIGURE 3.2 COMPETITION PERCEPTION INDICATORS FOR MALAWI AND COMPARATOR COUNTRIES, 2019 SCORES



Source: World Economic Forum, Executive Opinion Survey 2017–18.
Note: Lower score is worse. Responses to the survey questions "In your country, how effective are anti-monopoly policies at ensuring fair competition? [1 = not effective at all; 7 = extremely effective]"; "In your country, how do you characterize corporate activity? [1 = dominated by a few business groups; 7 = spread among many firms];" and "In your country, how intense is competition in the local markets? [1 = not intense at all; 7 = extremely intense]."

TABLE 3.1 SOME GOVERNMENT INTERVENTIONS AFFECTING COMPETITION, BY SECTOR

Sector	Subsector	Government interventions that restrict competition
Agriculture	General	• Ad hoc export restrictions discourage investment in the agricultural sector.
	Agro-processing	• To access incentives in agro-processing, minimum investment requirements are up to 10 times higher for foreign investors compared to domestic investors.
	Fertilizer	• Broad interpretation and stringent application of packaging standards by the Malawi Bureau of Standards has blocked entry of fertilizers at the border and disincentivizes repackaging into formats that are more appealing to smallholder farmers. • A new fertilizer company was given a contract with ADMARC for the supply of urea without going through a competitive process.
	Sugar	• A ban on sugar imports supports a quasi-monopoly in the market.[a]
ICT	Telecoms	• Lack of enforceable regulatory mechanisms for number portability, infrastructure sharing, and network interconnection hinder the entry and expansion of smaller MNOs.[b]
Transport	Shipping/Ports	• Concessions of shipping services and ports have been granted to firms owned by a single shareholder, creating the risk that this could lead to a port management company using its control of key infrastructure to exclude other providers of shipping services.
	Freight transport	• Foreign cabotage restrictions remain in bilateral agreements due to pressure from transporters associations, which restrict entry of foreign competitors.
	Passenger transport	• National Bus, which is linked to the former state-owned operator, is said to be leveraging its control over access to bus terminals and depots to disadvantage rival operators.[c]
	Air transport	• Concession agreements for airport services are granted to SOEs Lilongwe Handling Company and Air Cargo Limited and effectively are always extended, often without advertising for alternative providers to bid.[d] • A potential entrant in air transport was not permitted to land at Blantyre's Chileka International Airport despite other carriers being granted such permission
Financial Services	Banking	• Restrictions on foreign currency denominated accounts limit the choice of agricultural producers to sell produce and convert foreign exchange at a convenient time, thus reducing their bargaining power in the exchange rate they receive.[e]
	Financial markets	• Restrictions on foreign ownership regarding participation on the Malawi Stock Exchange restrict competition and deter investments by foreign investors.

Sources: Various sources and discussions held with government and private sector by the World Bank Markets and Competition Policy Team of the Investment Climate Unit.

Note: ADMARC = Agricultural Development and Marketing Corporation, ICT = information and communication technology, MNO = mobile network operator, SOE = state-owned enterprise. a. A new company, Salima Sugar, was recently established, but Illovo still holds the largest market share. b. World Bank Group, Malawi Systematic Country Diagnostic: Breaking the Cycle of Low Growth and Slow Poverty Reduction (Washington, DC: World Bank, 2018), https://openknowledge.worldbank.org/handle/10986/31131. According to interviews with bus companies in 2015, see P. Ncube, S. Roberts, and T. Vilakazi, "Study of Competition in the Road Freight Sector in the SADC Region: Case Study of Fertilizer Transport and Trading in Zambia, Tanzania and Malawi" (CCRED 2015/3, University of Johannesburg, 2015). c. See Ncube, Roberts, and Vilakazi 2015. d. Mia Thom et al., Demand, Supply, Policy and Regulation Malawi Country Diagnostic Report (Cape Town: Centre for Financial Regulation and Inclusion, 2015).

Poor Performance and Distortionary Interventions of State-Owned Enterprises

Improving governance, public financial management, and competition in markets will depend on the government's ability to improve the performance of Malawi's state-owned enterprises. There are currently 67 commercially operating SOEs in Malawi,[85] many of which play justifiable roles. But social and commercial functions are not always clear, and past boards of directors have operated with practical impunity despite poor performance.[86] Most SOEs have limited independence and operate with little transparency, opening the door for political interference. This is problematic, particularly in markets where SOEs compete with the private sector while receiving regulatory, financial, or de facto advantages over their competitors, such as soft budget constraints, preferential access to land, and tax concessions on acquisitions (box 3.1).[87] This becomes even more problematic when mismanagement results in the need for government bailouts, as has occurred in recent years. Section 4.1 looks at this issue in relation to SOEs in the energy sector, and section 4.3 provides more detail on the role of SOEs in agribusiness.

BOX 3.1 COMPETITIVE NEUTRALITY

State-owned enterprise (SOE) performance could be improved by adopting core principles of competitive neutrality, including the following:

- The separation of commercial versus noncommercial activities of SOEs, especially in situations where the SOE is also the market regulator.
- The definition of a market-consistent rate of return to justify long-term retention of assets.
- Regulatory neutrality such that SOEs are subject to similar legal rules and market discipline as their competitors.
- Taxation neutrality such that SOEs are subject to tax liability and do not receive advantages or preferential treatment that is not available to their competitors.
- Debt neutrality, which requires that government businesses are subject to similar borrowing costs as private businesses and honor their debt arrangements under prudent investment decisions.
- Access to state aid is not granted to SOEs in preferential terms.
- Transparent procurement mechanisms to allow private companies to participate in bids on equal terms as SOEs.

Sources: World Bank (2019)[90] ; UNCTAD (2014)[91] ; OECD (2012)[92]

Malawi's SOEs need to become more financially sustainable and creditworthy if they are to finance the improvements and investments needed for expanded services. Very few of these SOEs are creditworthy enough to borrow from foreign markets. Most SOEs have largely depended on concessionary loans through the state and fiscal transfers to finance projects, turning to the domestic commercial market when they have overrun budgets. Yet, these SOEs are tasked with developing critical enabling infrastructure—energy networks, water and sanitation systems, and road networks, among others. SOEs' strategies and sector development plans indicate annual investment needs of nearly US$1 billion per year from now until 2030, at a total price tag of US$9.6 billion.[88] Most projects lack preidentified sources of financing and have been stuck at the concept stage.

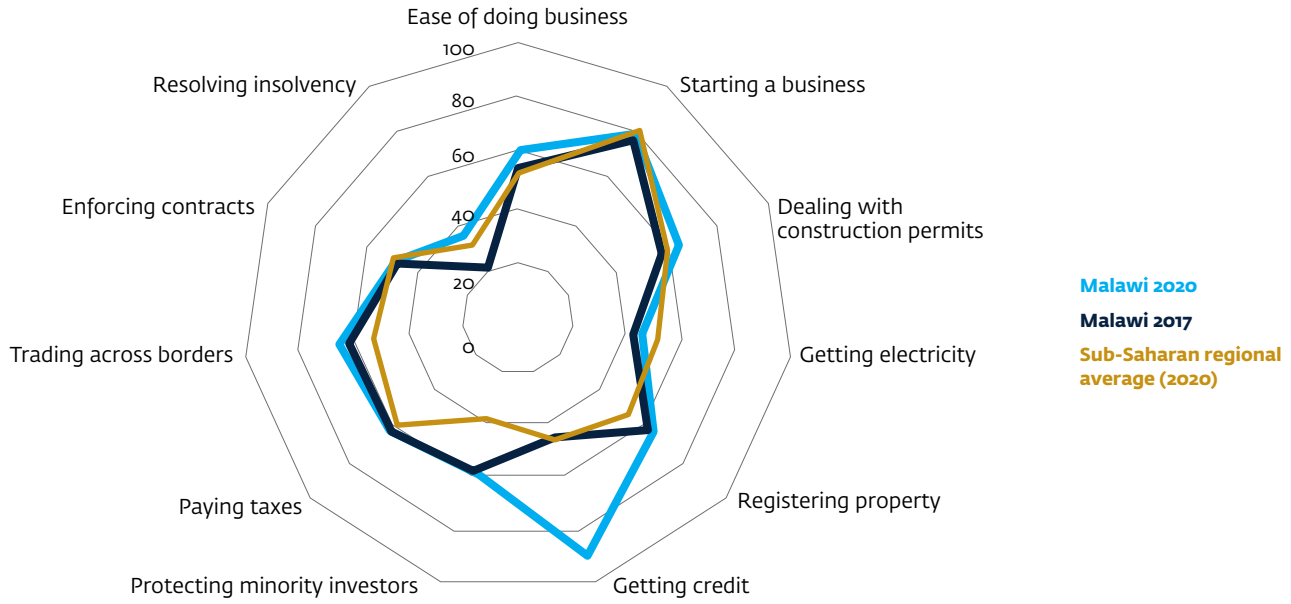
The government will need better identify commercially viable projects and be creative with project finance structures. Even if Malawi's SOEs were to all improve their creditworthiness over the next few years, they would not be able to absorb the level of debt required to finance the capital programs on their balance sheets. Blending commercial and concessionary finance could help, as well as exploring options to attract private capital, such as through PPPs.[89] In the last 15 years, Malawi has been able to attract roughly US$1.26 billion of foreign private capital into various infrastructure assets, mainly for the railway but also for energy and telecommunications. The establishment of a project preparation facility could help fund the necessary feasibility studies and other assessments to develop more viable projects.

Legal and Regulatory Gaps in Business Environment and Investment Climate

Despite poor governance, doing business is becoming easier in Malawi. Malawi still scores lower than nearly three-quarters of the 190 economies in the 2020 Doing Business index, making progress in some areas while lagging in others. The country's overall score has climbed since 2017, largely attributed to the introduction of modern legal frameworks for collateral registry and credit referencing that helped Malawi climb the ranks in the access to finance indicators. However, these legal rights have yet to translate into tangible improvements in financial access and greater inclusion. Further progress can be made by streamlining government processes and procedures. Figure 3.3 shows how the access to credit score has belied marginal improvements in most areas, with the country continuing to trail regional averages in starting a business, getting electricity, and enforcing contracts.

Investor protection is another area the government can address to create a stronger investment climate. Contract enforcement has been a challenge for investors. It takes almost two years to resolve commercial disputes due to inefficient, slow judicial processes often obstructed by arbitrary injunctions. Once resolved, purely local disputes need to be enforced by the local courts, suffering from the same slow processes. Disputes involving a foreign party face additional challenges. However, Malawi has taken big steps in the right direction, and ratified at the beginning of 2021 the New York Convention on Recognition and Enforcement of Foreign Arbitral Awards.[93] Ensuring now that the Convention is transposed into national law would greatly help reduce risk for investors. They currently do not have any guarantee that, in the event of a dispute, arbitral awards granted in international arbitration would be enforceable by the country's local courts. Reform of the arbitration process is needed for bankability of projects that rely on revenue from commercial undertakings by the state or state-owned entities, though a longer process given that two-thirds majority vote is needed in Parliament.

FIGURE 3.3 EASE OF DOING BUSINESS IN MALAWI VERSUS REGIONAL AVERAGE



Source: World Bank, Doing Business, 2015 and 2020.
Note: Score range is 0 to 100; best = 100. DB = Doing Business; SSA = Sub-Saharan Africa.

Overall, while past governments have made progress in establishing a modern legal framework for a rule-based system of governance, in practice, it tends to be deal-based with a lack of transparency. Informal misapplication of official policy and legal frameworks, whether due to weak institutional capacity for enforcement or rent-seeking for personal gain or as proxy for the government's fiscal interests, has colored the business environment with the perception of corruption. Malawi was perceived to be the 123rd most corrupt country (out of 180) by Transparency International in 2019, having regressed considerably since 2012.[94]

3.2 LIMITED MARKET ACCESS

Weak Commitment to Regional Integration

For Malawi's economy to grow at the rate it needs to reduce poverty, the private sector will need to access larger markets—making regional integration essential for the future. Malawi is a founding member of the Common Market for Eastern and Southern Africa (COMESA), whose free trade area came into force in 2000, and a member of Southern Africa Development Community (SADC), which established its free trade area in 2008. Efforts to establish the even larger Tripartite Free Trade Area consisting of COMESA, SADC, and the East Africa Community (EAC) have been ongoing since 2015. However, the implementation of commitments within these regional economic communities (RECs) has been slow and mostly incomplete. Cooperation among members has been weakened by national self-interests. The new administration has made initial efforts to develop goodwill with neighbors through high-level diplomatic visits in its first few months in power and will need to continue to strengthen relationships if substantial progress on regional integration is to be made.

Removing barriers to trade and expanding regional integration will provide more profitable access to larger markets and create trade opportunities that will facilitate private sector-led diversification. Malawi is a member of multiple regional economic communities (for example, SADC, COMESA) but regional integration is hampered by the incoherence and unpredictability of Malawi's trade policy. The production and trade structure are also significantly affected by infrastructure gaps. High transport costs that reduce competitiveness are driven by low volumes of freight (by international standards) and the imbalance between imports and exports, exacerbated by Malawi's narrow basket of products, whose availability is highly subject to seasonal fluctuations. Authorities are also yet to implement ICT solutions at scale, which could help automate procedures, improve information flows, and reduce trade costs. In addition, electricity availability in Malawi is among the lowest in Africa, with the high incidence of outages cited as among the biggest barriers to private sector development. To attract more private participation in the generation sector to increase access, particularly in renewables, the government will need to continue to reform tariffs to more accurately reflect cost, to allow for its national utility to become a financially viable off-taker, and to address foreign exchange controls and transferability.

Attention has turned to the African Continental Free Trade Agreement (AfCFTA) as a new driver of regional integration, but just how quickly negotiations lead to actual implementation of reforms—as well as the potential benefit for Malawi—is highly uncertain. The pandemic has created serious uncertainty on the timeline of AfCFTA negotiations, which were intended to be completed by July 1, 2020. At the time of writing, the government of Malawi had yet to ratify the agreement. The AfCFTA is intended to boost intra-African trade, reducing import tariffs and other nontariff measures (NTMs). However, in the case of Malawi, duties on imports are a substantial source of government revenue, and there are legitimate concerns over fiscal revenue losses.[95] The government will need to negotiate carefully to ensure that the benefits of implementing the agreement outweigh the costs and that the gains are not overly concentrated in Africa's main trading hubs.

Tariff and Nontariff Barriers to Trade

Malawi already has preferential market access to most of its key trade partners, but more could be done to lower tariffs. Outside of regional markets, exporters benefit from trading arrangements with the European Union, under the Cotonou Agreement and Everything but Arms initiative; the United States, under the African Growth and Opportunity Act; and China, India, and Japan with various schemes. All Malawi's exports to the European Union—its main export destination—enter duty free.[96] However, only about 70 percent of the value of exports to the United States enters duty free. And across all major export destinations, Malawi faces an applied weighted tariff of over 5 percent on its products, whereas its peers—Mozambique, Tanzania, and Zambia, for example—have rates closer to zero.[97] This suggests the country could benefit from negotiating new and deeper trade agreements.

From the private sector perspective, the competitive benefits of removing NTMs and improving trade facilitation would likely far outweigh reducing traditional tariffs. Regional integration has been stalled by the proliferation of NTMs across the region, as governments have sought to maintain protection of their own domestic firms after reducing tariffs as part of REC commitments. So while most of Malawi's exports to fellow REC member states enter duty-free, NTMs continue to restrict access to these

markets and stall the development of regional value chains.[98] Trading across borders is made even more difficult by inefficient processes at the border.[99] Unnecessarily slow, costly, complex, and unpredictable processes by border control agencies are cited as some of the biggest problems for Malawi's traders.

The government has taken several measures to support trade and attract investment, but the institutions it has created and empowered have limited capacity. The government created the Malawi Investment and Trade Centre to be the centralized agency for trade and inward investment promotion; set up the Export Development Fund as a special purpose vehicle to focus on trade finance; and recently partnered with the private sector and international investors to launch the Malawi Agricultural and Industrial Investment Corporation. But budgets are limited, reducing the ability of these institutions to meet their mandates. Favorable investment and tax incentives (table 3.2) are in place, but not always well managed.

TABLE 3.2 GENERAL AND SPECIFIC TAX INCENTIVES FOR THE PRIVATE SECTOR IN MALAWI

General domestic tax incentives	Specific tax incentives		
	Manufacturing	Export	Agriculture
0% corporate income tax rate for a period of up to 10 years, as well as duty exemptions on imports of capital goods and building materials, for private firms providing electricity generation, transmission and/or distribution[a]	Capital allowances on various capital items covering investment and initial and annual allowances	Exports zero-rated for purposes of VAT	0% corporate income tax rate for a period of up to 10 years, as well as duty exemptions on imports of capital goods and building materials, for agro-processors[a]
Losses incurred by a business carried forward up to 6 years from the year in which they were incurred	Up to 18 months allowable prebusiness expenses (expenses incurred prior to commencement of trade)	25% export allowance for nontraditional exports	Claims allowable on capital expenditures in relation to the construction of dams, dykes and land preparation
Initial and annual allowances at various rates besides the depreciation (annual) allowances	Losses carried forward for 6 years to encourage investment in profitable business ventures	25% international transport allowances for nontraditional exports	Treatment of some capital expenses as acceptable expenses
2% annual allowance for commercial buildings with a construction costs above MK100 million			All incentives available to a manufacturer claimable by growers of coffee, tea, sugar, or other such crops

Source: Malawi Government (2018)[100]
Note: MK = Malawi kwacha, VAT = value added tax. a. Firms must have been incorporated after July 1, 2013. See National African Growth and Opportunity Act (AGOA) Response Strategy and Action Plan for Malawi, https://agoa.info/images/documents/15624/agoa-country-strategy-malawi.pdf, and World Trade Organization, Trade Policy Review.

3.3 INFRASTRUCTURE GAPS

Underdeveloped Trade and Transport Infrastructure

The development of trade and transport infrastructure is a critical need for Malawi. The quality of the country's roads, rail, and ICT systems scored the lowest across all indicators in the most recent World Bank *Logistics Performance Index*.[101] Landlocked, Malawi has few routes to market—with three primary trade corridors and almost all freight transported by truck. Investing in the infrastructure along these and other corridors and putting in place policies to support the competitiveness of other modes of transport are foundational to future growth. Those foundations will need to be built on stronger and lasting cooperation with neighbors—without which Malawi can accomplish little in terms of regional integration.

The lack of modern trade and transport infrastructure is one of the main drivers of Malawi's high trade costs, which rank among the highest in the region. Geographical distance to market and international ports for overseas trade will always factor into higher costs for transportation and logistics services in Malawi, but much can be done to bring down these costs. This includes modernizing infrastructure at border posts to improve the efficiency of customs clearance. Delays in clearing cargo at border crossing points and at ports in neighboring Mozambique and Tanzania are a frequent complaint of Malawi's traders and were a priority concern raised during President Chakwera's visits to both countries in October 2020.

The connectivity assessment in section 4.2 provides more detail on these issues and other constraints before looking at how ongoing and future investment in transport and logistics infrastructure could create new opportunities for Malawi's private sector. Public-Private Partnerships can be leveraged to meet infrastructure gaps (see box 3.2). Improving the performance along trade corridors will help ease access to regional and global markets and bring down transport and logistics costs through efficiency gains and increased competition. Specific recommendations are provided to maximize these opportunities.

Limited and Unreliable Access to Energy

Malawi has one of the lowest electricity access rates in the world, with stark disparities across regions and between social classes. As of 2018, fewer than one in five citizens had access to electricity.[103] The disparity widens between urban and rural areas. Just over half of city dwellers have access to electricity, compared to only one in ten citizens in rural communities. Compared to other countries in the region, Malawi's access levels are considerably lower (figure 3.4).

Demand for energy is going to skyrocket as Malawi's population continues to boom—especially if the economy is to keep pace. The already densely populated country is on pace to double the size of its population in just over a generation. Lilongwe and Blantyre are among Sub-Saharan Africa's fastest growing cities, expected to see a 4 percent to 5 percent annual change in population between 2020 and 2035 (figure 3.5). Demand already far outstrips supply, with an installed capacity of 482 megawatts trying to meet an estimated demand of 720 megawatts.[104] Without reliable energy, operational costs are higher; productivity is lower; and ultimately sales, incomes, and investment prospects are reduced.[105] COVID-19 is already presenting additional challenges. Lower demand and consumers' inability to pay for services could have acute consequences for the revenues and financial health of Malawi's utilities and independent power producer (IPPs).

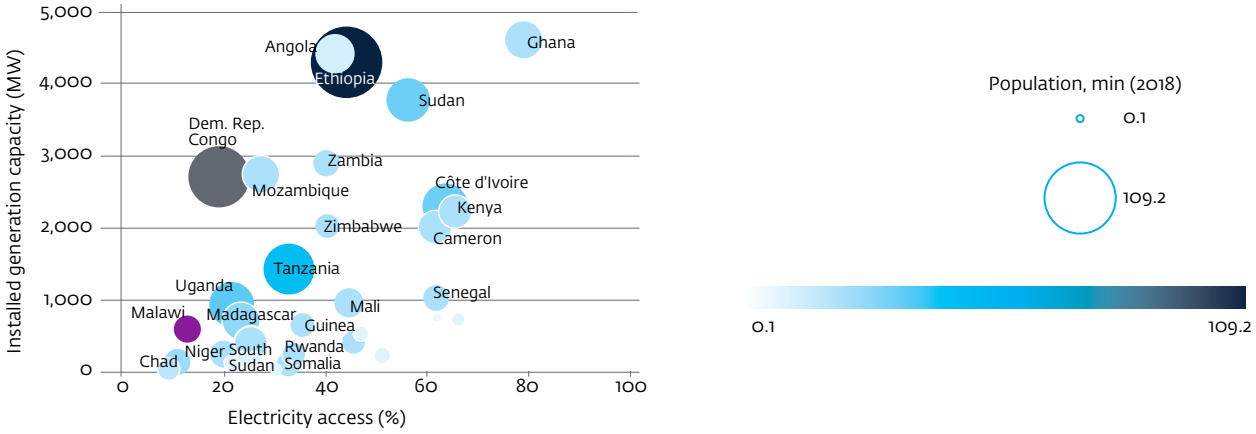
BOX 3.2 PUBLIC-PRIVATE PARTNERSHIPS ROLE IN MEETING OUTSTANDING INFRASTRUCTURE GAPS

Malawi has had a decent legal and regulatory framework for public-private partnerships (PPPs) in place since 2011 and has begun to improve its track record of partnerships. Despite being a small, landlocked, low-income country, past governments have been able to attract approximately US$1.2 billion of investment through multiple deals over the last decade—although nearly all of this came through a single deal to develop the country's rail network along the Nacala Corridor. The Public-Private Partnership Commission, established through the 2011 PPP Act, has been continually pursuing opportunities despite very limited capacity. The Commission was instrumental in concluding a novel 30-year build-operate transfer concession in 2019 to develop university student housing in Lilongwe in partnership with Old Mutual Pension (the largest institutional investor in Malawi) and M&M (a South Africa–based property management firm). When the project reaches financial close, expected at the end of 2020, it will become Malawi's first social infrastructure PPP and is expected to attract between US$150–200 million of private capital.

The Chakwera administration appointed a new cabinet committee on PPPs and private sector growth in July 2020 and has given it the difficult task of developing viable projects in the wake of COVID-19. The government is unlikely to have the fiscal space or be able to demonstrate the necessary stability as a partner until it can recover from the shock of the crisis. Public investment management was already weak before the pandemic, with inefficient and nontransparent budgeting and procurement processes. Only 25 percent of tenders went through an open and competitive process. The government can focus on improving these areas in the meantime. Looking ahead, there is also no centralized project-development fund or support mechanism for project preparation. A project preparation facility could help if the government were able to negotiate budget support and advisory services to improve technical capacity, especially to ensure authorities would be able to accurately estimate upfront the fiscal implications and risks related to any potential PPP during an economic recovery.

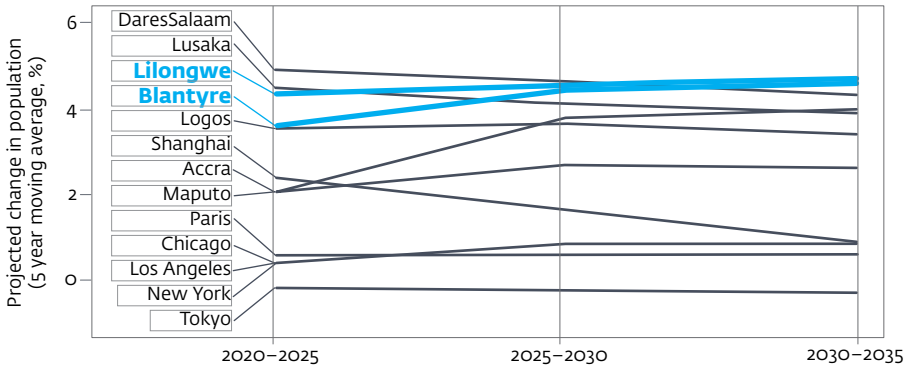
Source: World Bank (2020)[102]

FIGURE 3.4 CORRELATION BETWEEN INSTALLED GENERATION CAPACITY AND ELECTRICITY ACCESS LEVELS IN MALAWI AND SELECTED SUB-SAHARAN AFRICA COUNTRIES



Sources: Graph was compiled by the CPSD team using World Bank and United Nations energy and population data.[106]
Note: MW = megawatts

FIGURE 3.5 PROJECTED CHANGE IN CITY POPULATIONS BETWEEN 2020 AND 2035 (FIVE-YEAR MOVING AVERAGES)



Sources: Graph was compiled by the authors using United Nations population data.[107]

The energy sector assessment presented in section 4.1 details these challenges and other top constraints on improved performance in the sector, outlining opportunities to attract greater private sector participation and investment. To this end, it focuses on actions to strengthen operational and financial management of the sector's SOEs, to improve government oversight, and to achieve fiscal sustainability. Developing more reliable, climate resilient energy will also require connecting to the Southern Africa Power Pool (SAPP), strengthening competitive procurement of new generation, facilitating investment in domestic renewable sources, and opening up opportunities in transmission and distribution to ensure that least-cost energy can be delivered to end consumers, among other actions.

Lack of Digital Development

Malawi significantly lags its peers in the development of ICT infrastructure and digital services, and this is preventing it from achieving wider productivity and growth spillovers in the economy. The United Nations ranked Malawi 165th out of 193 countries in 2020 in terms of telecommunication infrastructure, the scope and quality of online services, and the human capital to leverage digital development.[108] Despite vast improvements in expanding network coverage in recent years, prohibitively high prices relative to low levels of income prevent market growth and stunt digital literacy.

Affordability could be improved by the government lowering taxes and fees on mobile phones and services while continuing to strengthen policies that enable competition across the sector. The importance of digital technology and connectivity during the response to COVID-19 presents the perfect opportunity for the government to reassess the cost-benefit of high taxes and fees on these phones and their services. The crisis's spotlight on the market has also called into question why Malawi's mobile network market has effectively been a duopoly for the past 15 years, despite the award of several additional licenses. Opportunities exist to attract new entrants and encourage investment in developing the market, especially for digital financial services.

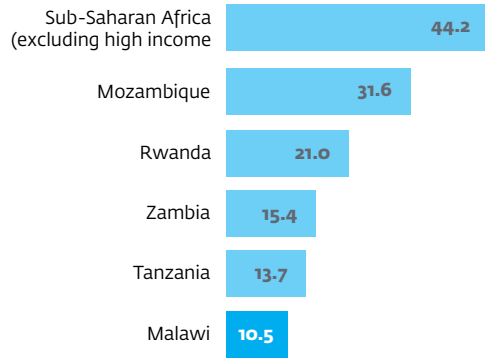
The digital infrastructure and services assessment presented in section 4.2 focuses on the most important constraints on the digital development in Malawi and suggests areas where the private sector can play a bigger role in overcoming market challenges. The assessment focuses on actions for the government to take to lower costs for consumers in an effort to speed up market penetration. The section also looks at what can be done to expand broadband coverage and improve service delivery, potentially leveraging COVID-19 response measures to accelerate transformation in the market.

3.4 WEAK INPUT MARKETS

High Interest Rates, Short Tenors, and Underdeveloped Capital Markets

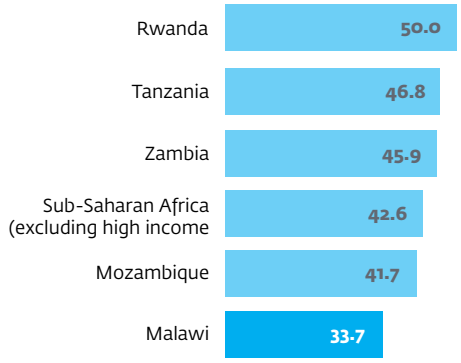
The percentage of firms reporting access to finance as a constraint on growth has progressively declined in recent years. Interest rates remain high, and the country's major commercial financial institutions lend relatively little to the private sector. Domestic credit to the private sector credit (as a percentage of GDP, figure 3.6) is very low compared to peers (less than 10 percent compared to an average of 28.4 percent for the Sub-Saharan Africa region in 2016), and so is account ownership at a financial institution or with a mobile service provider (figure 3.7). Private sector credit growth fell to 5.2 percent year-on-year in July 2020, the lowest since 2018, in line with limited demand in part due to political uncertainty and the pandemic.[109] The bulk of credit, an estimated 90 percent of all loans by value, is extended to large firms, traditionally believed to be more creditworthy. These firms have little problem accessing finance, although interest rates remain high. For instance, while the policy rate of the Central Bank has moved from above 20 percent to about 12 percent, this has not translated to reduced lending rates for financial institutions.

FIGURE 3.6 DOMESTIC CREDIT TO PRIVATE SECTOR, 2016



Source: World Bank World Development Indicators database, data through 2017.Note: GDP = gross domestic product.

FIGURE 3.7 ACCOUNT OWNERSHIP AT A FINANCIAL INSTITUTION OR WITH A MOBILE-MONEY SERVICE PROVIDER, 2017



Source: World Bank World Development Indicators Database, data through 2017.

For MSMEs, lack of access to finance is not necessarily due to the cost of obtaining a loan or high collateral requirements. Most Malawian households have never applied for a loan simply because they do not have the need, prefer not to take on debt, or believe the process to be too cumbersome compared to the expected benefits (table 3.3).[110] When households do borrow, roughly half do so for start-up capital for a nonfarm activity. These borrowers tend to take loans from village savings and loans programs, family and friends, and informal money lenders.

Only 1.5 percent of nonfarm enterprises seek capital from a commercial bank or other financial institution (table 3.4). This is in line with the 2019 FinScope MSME survey findings, which, including farming, found only 3 percent of microenterprises, 5 percent of small enterprises, and 10 percent of medium enterprises had borrowed from a commercial bank. These results actually represented a doubling of such borrowers since a similar FinScope survey in 2012, jumping from an average of 2 percent of respondents to 4 percent. Meanwhile, those accessing finance from informal lenders had ballooned from 3 percent of respondents to 18 percent, suggesting there is indeed a growing appetite for finance and opportunities to expand financial services.[111]

Lending to the private sector has been risky and less profitable for commercial banks, keeping banking penetration and intermediation low. Commercial banks' resource envelope for financing credit consists mostly of funds deposited by the private sector, the Reserve Bank of Malawi (RBM), the central government and statutory corporations (official sector deposits), and the bank's own capital accounts. An analysis of banks' income and cost structures across different business lines demonstrates limited profit margins in the deposit and lending business, but extremely high profit margins in nonlending, especially in foreign exchange business.[114] Because foreign currency turnover is high compared to the depth of the banking system, the large trading band contributes disproportionately to banks' profits.

TABLE 3.3 REASONS FOR NOT OBTAINING A LOAN, BY % OF HOUSEHOLD SURVEY RESPONDENTS (2019–20)

		Reasons for not obtaining a loan							
Background characteristics	Proportion that never applied for a loan	No need	Too much trouble for what it's worth	Do not like to be in debt	Believed would be refused	Too expensive	Inadequate collateral	Do not know any lender	Other
Malawi	76.9	25.1	21.8	16.9	12.2	8.5	7.7	7.3	0.5
Place of residence									
Rural	75.8	21.7	22.2	17.4	12.9	9.2	8.3	7.7	0.5
Urban	82.7	41.3	19.8	14.2	9.3	4.8	4.9	5.2	0.4

Source: Malawi Government (2020)[112]

TABLE 3.4 SOURCE OF FINANCE, BY % OF HOUSEHOLD SURVEY RESPONDENTS (2019–20)

Background characteristics	Village bank	Relative	Neighbor	Money lender (Katapila)	NGO	SACCO	MFRC	Bank	Employer	Grocery/ Local merchant	Religious institutions	Mardef	Other
Malawi	42.1	15.1	13.7	9.0	6.1	1.8	1.7	1.5	1.0	0.7	0.7	0.4	6.1
Place of residence													
Rural	42.9	16.3	12.5	9.6	6.0	1.5	1.4	1.0	0.7	0.8	0.7	0.2	6.2
Urban	37.9	8.9	19.8	5.8	6.4	3.7	3.1	3.7	2.8	0.2	0.8	1.3	5.6

Source: Malawi Government (2020)[113]
Note: Mardef = Malawi Rural Development Fund; MRFC = Malawi Rural Finance Company; NGO = nongovernmental organization; SACCO = Savings and Credit Cooperatives.

Wider utilization of nascent credit and collateral systems is needed to reduce the cost of finance and facilitate the provision of long-term finance. Banks' reliance on short-term deposits for liquidity and difficulty assessing the creditworthiness of borrowers generates a risk-averse approach to private sector lending with high interest rates, short tenors, and steep collateral demands. The average loan needs to be paid back in 12 months or less, meaning borrowers can do little more than finance short-term working capital. Reforms have been made to improve collateral registries and support Malawi's credit infrastructure, including through a revised Credit Reference Bureau Act in 2016. But these systems are not yet fully utilized by banks and their clients. Improving the credit referencing system, to produce more accurate credit risk assessments, and increasing the use of the collateral registry will eventually help reduce the cost of borrowing and increase the availability of long-term finance for productive investments.[115]

In the near term, access to finance is likely to become increasingly challenging as markets begin to absorb the effects of the pandemic. Malawi's financial sector is relatively stable, profitable, and adequately capitalized—but this could change. An increase in government borrowing or an uptick in nonperforming loans could lead to a liquidity crunch. The latest data available, from June 2020, showed only a modest increase in the nonperforming loans ratio, rising from 6.3 percent in December 2019 to 6.6 percent. Demand may also shift as firms face new challenges, increasing the need for new and improved financial services, such as more short-term trade finance to de-risk transactions. The government could use this moment as an opportunity to facilitate the interoperability of digital financial transaction platforms and accelerate development of digital financial services. This will require connecting more financial institutions, including the new Micro Finance Institutions Hub, to mobile network operators (MNOs) through the National Switch. This is the first step in what could be a broader distribution of financial products, by matching prospective borrowers and lenders through a digital marketplace platform, which could help scale moveable asset–based lending and digital finance.

Land Tenure Insecurity and Limited Access to Land

A major package of land reforms in 2016 provided a leap forward for the country, but implementation has been slow, and more progress needs to be made to secure uncontestable rights to the use of land.[116] To address this, the new administration has called for a review of the 2016 land laws and their implementation to date. Land title and secure tenure are essential for the country to attract the large-scale private investment it needs to speed up economic transformation. Less than 15 percent of land in Malawi is privately owned.[117] Most Malawians still lack documented land rights. In urban areas, inefficient land administration leads to disputes and informal settlement creation. In rural areas, home to mostly smallholder farmers, the lack of land rights reduces the incentive to invest in productive improvements and increases the risk of unsustainable practices. Eighty percent of all land in Malawi is now degraded.[118] Meanwhile, the government continues to lose the opportunity to increase revenue collection through property taxes and ground rent collection. The president has called for a review of progress on implementation of the new land laws when Parliament meets in February 2021 for its midyear budget review.

The government could leverage new technologies and available digital innovations to speed up land titling and registration, especially considering the need to reduce interpersonal contact during the pandemic. As of early 2021, the institutions responsible for carrying out general land administration functions have very limited capacity. The new administration needs to prioritize and scale up activities. It could start by allocating more resources to customary estate registration and deciding how to address the legal uncertainty of rights on its estates, where most leases have long ago expired. The government should also put in place a plan to develop a modern land information management system, and should explore the opportunity to leverage the country's emerging capabilities in drone technology and spatial data analysis.[119] Taking decisive action in these areas would help protect vulnerable groups' land rights and livelihoods, while also improving investor confidence in the longer-term (box 3.3).

BOX 3.3 MORE ENGAGEMENT NEEDED TO AVOID LAND TENURE DISPUTES

Community engagement through consultations on land transactions, particularly for private investors navigating murky land administration processes, has become increasingly important to avoiding disputes. Land disputes have caused delays in the planning stages and in some cases resulted in the abandonment of, projects or shutdown of activities.

A 2019 assessment of the tenure-related risks for investors in Chikwawa district, assessed the impact of tenure disputes on the net present value of sugarcane production. The results show that the average financial losses due to tenure-related delays could be between US$35–110 million, representing 38 to 110 percent of the net present value.[a]

Source: World Bank, "Land Policy Dialogue ASA: Implementation Status of the Malawi National Land Policy and Land Laws," Forthcoming. a. Anna Locke et al., "Assessing the Costs of Tenure Risks to Agribusinesses" (Overseas Development Institute, London, 2019).

Human Capital Gaps

Malawi would benefit from new approaches to build knowledge and skills among its labor force. The average educational attainment for Malawi's working age population is less than a completed primary education, which raises longer-term concerns about economic growth and global competitiveness. Roughly 70 percent of the population over 15 years old do not have any educational qualification.[120] Less than 2 percent have a tertiary qualification. Unsurprisingly, most of Malawi's medium and large firms focus on low complexity activities, requiring only modest skills. Most jobs are informal: less than 10 percent of the Malawian labor force held wage employment before the pandemic. Low-cost labor can reduce the need for capital investments and allow firms to arbitrage the higher costs—for finance, energy, and transportation—of doing business in Malawi.[121]

The government will need to continue to invest in human capital to put in place the foundations for long-term economic growth. A child born in Malawi today will be only 41 percent as productive as they would be if they enjoyed complete education and full health, according to the Human Capital Index.[122] Malawians need to be empowered with basic skills and digital literacy. Gender inequalities in educational opportunities need to be rectified. Entrepreneurs need support. And there are promising advances. An emerging, albeit small, innovation ecosystem of business acceleration hubs and cosharing spaces is developing. Women-led hubs are helping close the funding and skills gaps for women entrepreneurs and recent secondary and tertiary school graduates.

3.5 RECOMMENDATIONS TO ADDRESS CROSS-CUTTING CONSTRAINTS ON PRIVATE SECTOR DEVELOPMENT

Malawi's new leadership can introduce bold structural reforms. The administration needs to continue to act decisively and allocate resources efficiently to limit the impacts of the COVID-19 pandemic**.** The campaign against corruption and moves to improve governance and accountability should help in both the near- and medium-term. Delivering on the commitment to create 1 million jobs will also require simultaneous effort to create a more predictable policy environment, foster greater regional cooperation and market integration, and develop innovative solutions to fill infrastructure gaps and support market development. Table 3.5 provides recommendations to help meet these objectives, focusing on short-term actions that could be taken over the next few months and more complex medium-term actions that could be taken over the next few years. More granular sector-specific recommendations follow in section 4.

TABLE 3.5 RECOMMENDATIONS TO ADDRESS CROSS-CUTTING CONSTRAINTS

Short-term priorities
Maintain macroeconomic stability and avoid debt distress. • Commit to careful, transparent prioritization of expenditures, and avoid worsening debt distress in line with agreed upon policy and performance action commitments under the Sustainable Development Financing Policy, in part to limit the need for domestic borrowing, maintain available credit for the private sector, reduce interest rates, and avoid incurring arrears. • Commit to transparency of fiscal management by releasing public data on budget expenditure deviations.
Strengthen legal frameworks to increase private investor confidence. • Transpose into national law the newly ratified New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards and finalize the Arbitration and Mediation Bill that domesticates key provisions of the convention.
Implement financial solutions to weather the impacts of COVID-19. • Mobilize the RBM's Emergency Liquidity Assistance Facility to enable more commercial banks to provide financing to SMEs impacted by the pandemic. • Facilitate provision of trade finance through support to local banks and use of available international special facilities, such as the World Bank COVID-19 Facility and the IFC Global Trade Finance Program. • Provide advisory services to businesses seeking help with financial restructuring and debt relief.

Medium-term restructuring and recovery recommendations

Allocate more resources for project preparation.

- Strengthen PIM architecture to create a pipeline of bankable projects and facilitate/attract potential private financing of infrastructure (for example, through integration with the PPP program).
- Leverage IDA guarantees to de-risk investments and help mobilize private capital.

Improve the performance of SOEs and follow through on proposed reforms to enhance credit worthiness.

- Improve financial performance of SOEs through stronger human resource and management capacity, including through competitive recruitment and hiring of management positions rather than appointments.
- Improve corporate governance practices (for competitive neutrality) in SOEs and incentivize operational efficiency and market discipline to enhance credit worthiness, including through performance-based financing.
- Strengthen financial oversight and transparency of SOEs to reduce fiscal risks and improve service delivery, including by redesigning reporting lines among market regulators to empower the Competition and Fair Trading Commission.

Support the expansion of financial services with potential to kick-start economic recovery.

- Mobilize financial service providers to support the expansion of digital financial services by connecting to the National Switch.
- Accelerate the use of the recently developed credit infrastructure among financial institutions and banks to improve lending decisions and help de-risk lending to new private sector borrowers.
- Explore the potential for the RBM to create a comprehensive partial credit guarantee scheme to assist MSMEs.

Continue to implement land reforms to address land tenure security.

- Clarify the legal framework for the hierarchy of evidence among competing claims and procedures to deal with unused estate land.
- Invest in wider communication and awareness campaigns to strengthen public-private dialogue on land reform processes, especially on land titling and consolidation, in light of COVID-19 restrictions on in-person outreach and events.
- Support land agglomeration and efficient land rental markets by rationalizing land lease rates for renewal and signing new leases.
- Invest in a digitized land information management system, digitally mapping existing estates and boundaries, including by leveraging the country's emerging skills in unmanned aerial vehicle (drone) technologies.

Deepen regional cooperation and integration.

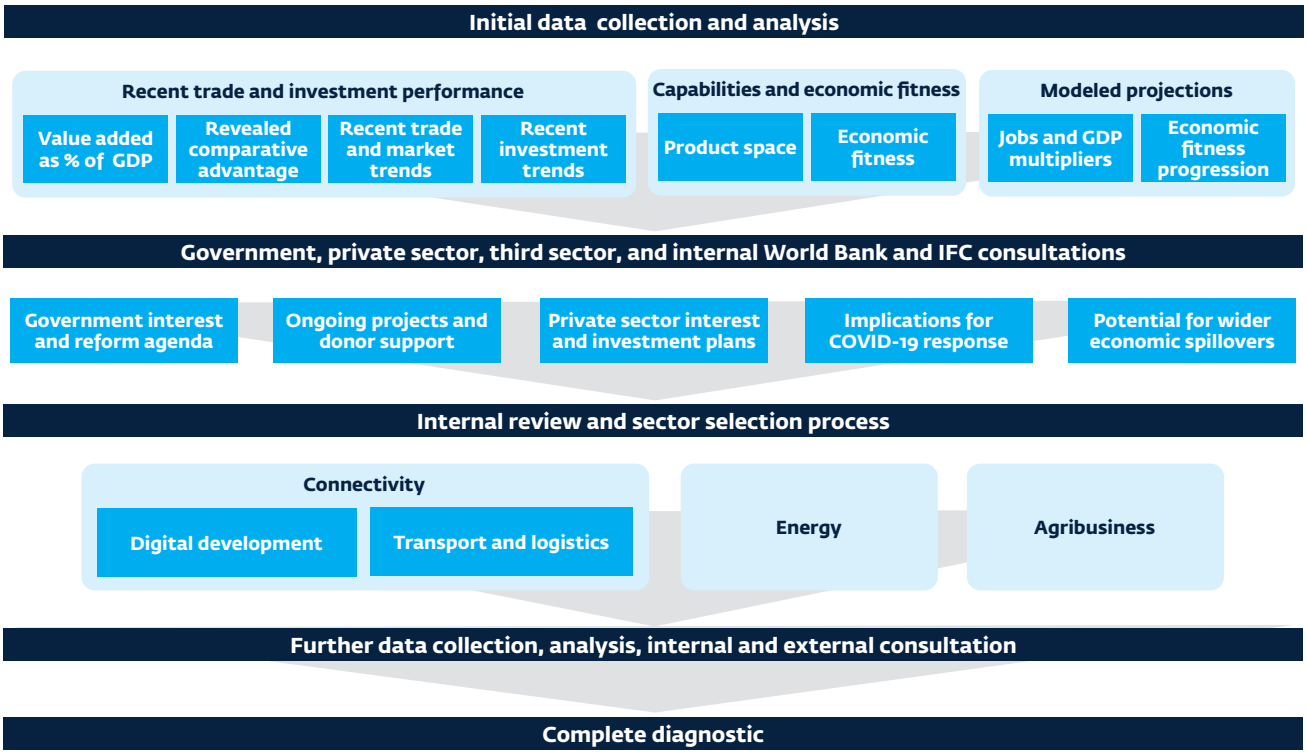
- Conduct a complete tariff and nontariff reform impact simulation to identify potential areas where trade policy adjustments could be growth enhancing with minimal impact to revenue.
- Play an active role in AfCFTA negotiations to ensure fair treatment and a level playing field for Malawian firms.

Note: AfCFTA = African Continental Free Trade Agreement; IDA = International Development Association; MSME = micro, small, and medium enterprise; PIM = public investment management; PPP = public-private partnership; RBM = Reserve Bank of Malawi; SME = small and medium enterprise; SOE = state-owned enterprise.

04. SECTOR ASSESSMENTS

This section assesses the main opportunities and constraints in select sectors where targeted reforms could increase private investment, contribute to growth, and support job creation in the near and medium term. It begins by looking at the potential role of the private sector in the energy market, before turning to broader issues of market connectivity, and concluding with an assessment of opportunities and constraints in agribusiness. Several criteria determined the selection of sectors in this CPSD (figure 4.1), which were then further refined and discussed through extensive internal and external consultations. Criteria included analysis of recent performance, including trends in trade, investment, and productivity indicators; analysis and modeling of the country's current capabilities and economic fitness, as well as the potential of each sector to contribute to jobs and economic transformation.[123] Consultations provided additional insight on market dynamics, private sector interests and investment

FIGURE 4.1 SECTOR SELECTION PROCESS AND CRITERIA



Source: World Bank Group.
Note: GDP = gross domestic product.

plans, and the potential for near-term action under the new administration. Finally, additional consideration was given to the sectors' ability to play a role in the response to COVID-19, in economic recovery, and in laying the foundations for private sector development in the medium term. Each sector assessment summarizes the current state of the sector, the structure of the private sector, and the role of public entities. This is followed by a brief discussion of key constraints to firm growth and recommendations to help the private sector play a larger role in meeting Malawi's main development challenges over the next five years.

One of Malawi's most pressing development challenges is to create more and better jobs for its growing youth bulge. Malawi's rapid population growth means 400,000 young people are estimated to be joining the working-age population each year.[124] This diagnostic focuses on this challenge. As a heavily agrarian economy, the pathway to more and better jobs for its citizens will be through investment in more productive, profitable farming and related agribusiness activities along these value chains, as well as investment in economywide enabling sectors, such as energy, telecommunications, and transport that can help to boost competitiveness and connectivity across markets. The following section discusses each of these areas of the economy in greater detail—recognizing that each is heavily reliant on the others.

4.1 ENERGY

Malawi has one of the world's lowest electrification rates and needs an estimated US$2.5 billion in capital investments to scale-up energy generation, transmission, and distribution in the coming years.[125] Government alone will be unable to address these needs. Private investment can help to fill these gaps. Current installed capacity lags most countries in the region, including neighboring Mozambique, Tanzania, and Zambia (figures 4.2 and 4.3). Of Malawi's 482 megawatts of installed capacity, hydropower contributes roughly 75 percent and "emergency" diesel accounts for the remaining share.

FIGURE 4.2 ACCESS TO ELECTRICITY, RURAL, SELECTED COUNTRIES, 2018

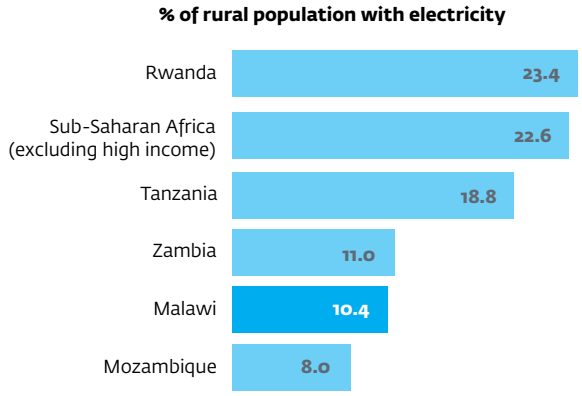
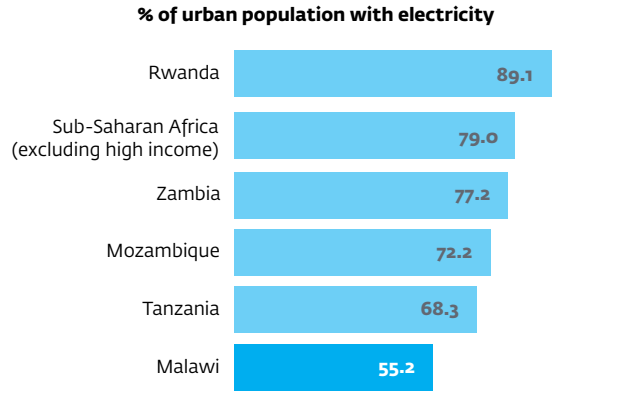


FIGURE 4.3 ACCESS TO ELECTRICITY, URBAN, SELECTED COUNTRIES, 2018



Source: World Bank, World Development Indicators.
Note: Sub-Saharan Africa (excluding high income) data is for 2017.

All major power stations are in the southern region, along the Shire river. In the north, only one small hydro station operates, the 4.5 megawatt Wovwe plant. Zambia has an almost equivalent population of 17.3 million but nearly six times more installed capacity and a greater percentage of the population is connected to the national grid—75 percent of citizens in urban areas and 14 percent in rural areas.

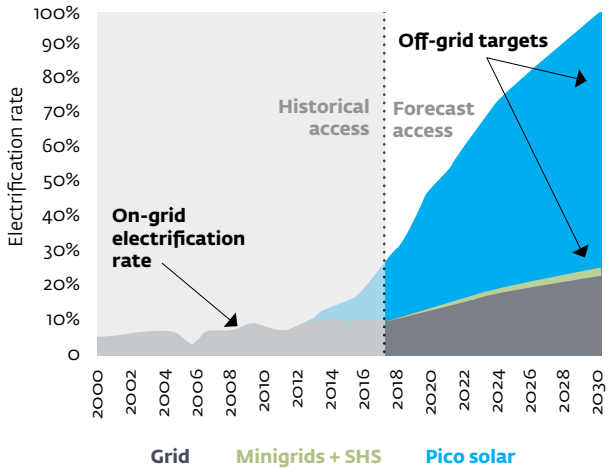
Without investment in the energy sector in coming years, Malawi's private sector will not be able to grow, and existing divides in energy access could widen, worsening socioeconomic conditions for poor and remote communities. Citizens do not have access to enough electricity to improve their lives. Average annual per capita electricity consumption is estimated to be only a meager 111 kilowatt hours per capita,[127] equivalent to one-fifth of the International Energy Agency recommended minimum to sustain a livelihood in the Sub-Saharan Africa region—or enough to power four light bulbs, a mobile phone charger, a fan, and a television.[128] To put this in perspective, the average U.S. citizen uses more power in one hour than the average citizen in Malawi has access to in an entire day.

Industrial use accounts for less than 15 percent of total energy consumption, far below the regional average of roughly 40 percent, and this amount will increase with growth.[129] Increasing agricultural productivity and supporting the commercialization of farming, two of the government's top priorities, cannot be achieved without improved access to energy. At this point, most energy demand comes from households, where Malawians rely heavily on biomass (that is, firewood and charcoal), even in urban areas. This has caused disastrous deforestation and has further negative health effects due to indoor air pollution.[130]

However, Malawi has made notable progress on infrastructure expansion and electricity service delivery in recent years. Total access across the country jumped nearly 50 percent between 2017 and 2018.[131] The number of connections increased almost 12 percent per year over the past 5 years through 2019, and more rural areas have been gaining access to power.[132] More than 830 district administration and trading centers in rural areas have been connected to electricity supply through recent donor-funded programs. Upstream, significant progress has been made in strengthening and expanding the transmission network and reducing system losses. And downstream, automated metering infrastructure for all industrial customers, which represent roughly half of all annual revenue for the state utility, and the migration from postpaid meters to prepaid meters for domestic consumers have helped to dramatically improve bill collection.

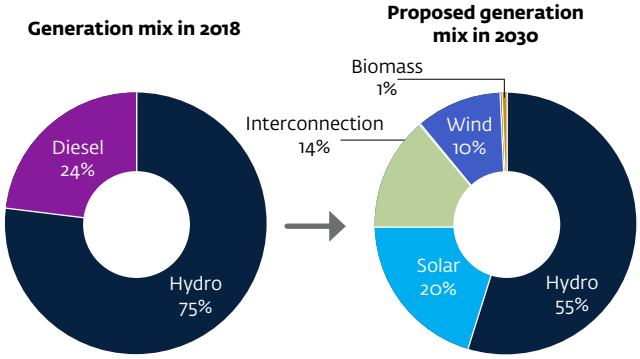
The government has an ambitious and transformative policy agenda, and has introduced legislation and initiatives to encourage private sector participation in the energy sector (figures 4.4 and 4.5). This includes the introduction of a viable framework for IPPs. To attract more investment, the government will need to help de-risk investment in commercially viable projects and support economically viable projects that lack commercial returns.

FIGURE 4.4 HISTORIC ELECTRIFICATION RATES AND SUSTAINABLE ENERGY FOR ALL TARGETS



Source: Targets from 2017 SEforAll Action Agenda, https://www.se4all-africa.org/seforall-in-africa/country-data/malawi/.
Note: SHS = solar home systems.

FIGURE 4.5 TARGETS FOR RENEWABLE ENERGY GENERATION



Source: Edward Borgstein, Scarlett Santana, Becky Li, Kester Wade, and Eric Wanless. "Sustainable Energy Investment Study." Rocky Mountain Institute for Malawi Ministry of Natural Resources, Energy and Mining, 2019. https://www.un.org/en/unpdf/assets/pdf/PDF-SDG-2017-05%20Malawi.pdf.

State of the Private Sector in Energy

The private sector has begun to play a greater, albeit still small, role in Malawi's energy sector over the last few years. In 2018, the private sector accounted for only 16 percent of generation. However, prior to the pandemic, investments had been trending upward. Eight private investments have been announced in solar and hydro generation, totaling about 257 megawatts, which would increase current installed capacity by nearly half.[133]

No investment is likely more important to the future of Malawi right now than the proposed PPP to develop the 350 megawatt Mpatamanga Hydropower Project. With IFC and the government as codevelopers, the tender for a private concessionaire was initiated in the end of 2019. Construction will be a massive undertaking. So while the project is not a short-term solution for Malawi's increasingly urgent need to boost energy access, by nearly doubling current installed capacity, it holds truly transformative potential in the medium term.

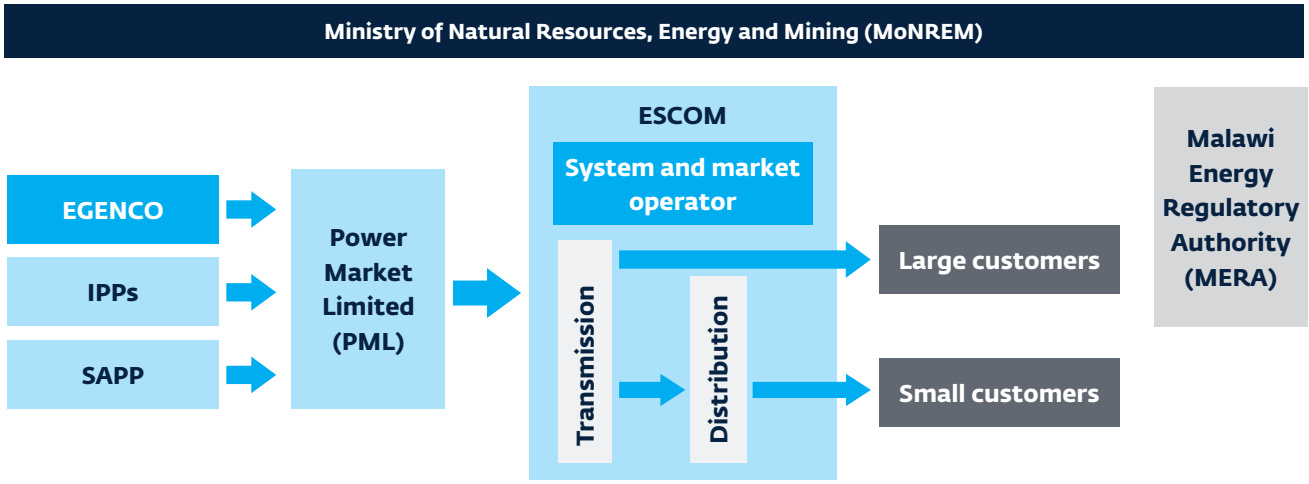
Private solar energy developers have also begun to explore market potential and invest in the country, indicating marked improvements in the investment climate. The government approved two PPAs with IPPs, a 60 megawatt solar photovoltaic (PV) plant in Salima and a 46 megawatt plant in Nkhotakota, in 2019 and 2020. Construction is ongoing. These facilities are the first of their kind in Malawi, and could come online within the next two years, pending potential delays related to the COVID-19 crisis. Other solar IPP projects, either approved or in the pipeline, are expected to deliver up to an additional 136 megawatts of capacity to the national grid through PPAs with Electricity Supply Corporation of Malawi (ESCOM).[134] However, even prior to the pandemic, several IPPs with approved PPAs had made little to no progress on their projects for various reasons, leading the government to threaten to cancel their agreements if no action is taken in the coming months.[135]

Recent investment in solar power is a promising indication that the private sector sees bankable opportunities in Malawi. The Salima and Nkhotakota projects brought in US$126 million in private money, with additional PPAs approved and in the pipeline. This suggests Malawi could begin to close the gap in investment with its neighbors in coming years, when global markets hopefully recover from the COVID-19 crisis. From 2015 to 2019, Mozambique and Zambia realized US$712 million and US$2.7 billion, respectively, in investment in electrification.[136]

Role of the state

Private sector engagement in the energy sector will be largely determined by how effectively the government manages the role of SOEs and parastatals. The government carried out a major reform of the national power utility in 2017, unbundling ESCOM's generation assets and functions into the newly created Electricity Generation Company, Malawi (EGENCO). The system and market operator functions of ESCOM were then unbundled in 2019, with the creation of a new single buyer of energy, Power Markets Ltd. (PML). PML started operations in 2020 and is mandated to source power from generators such as EGENCO and other IPPs (figure 4.6). ESCOM has initiated the process of transferring all PPAs to PML, though there are several legal issues and clarifications in relation to transfer conditions that need to be in place. Clarity is still needed on how each of these institutions will become financially sustainable.

FIGURE 4.6 POWER SECTOR LANDSCAPE



Note: EGENCO = Electricity Generation Company, Malawi; ESCOM = Electricity Supply Corporation of Malawi; IPP = independent power producer; MERA = Malawi Energy Regulatory Agency; SAPP = Southern Africa Power Pool.

The government has developed a turn-around strategy for both ESCOM and EGENCO, although progress has been slow. New boards have been appointed for both parastatals to carry out internal reforms and increase accountability. Top priorities include improving the PPA between ESCOM and EGENCO, adjusting the payment model, addressing arrears owed to EGENCO, and clarifying asset ownership. The objective of the reforms was to strengthen the regulatory framework, improve the financial performance and sustainability of ESCOM, and to create opportunities for private sector participation, particularly in energy generation.

The government is also leading the project to connect Malawi to the Southern Africa Power Pool (SAPP). The SAPP is a market platform for power utilities within the SADC region to trade electricity and manage surpluses and deficits. It is the first and most advanced power pool on the continent. To participate, national grids need to be connected. Of the 17 utilities that signed up to the marketplace in 1995, only those in Angola, Malawi, and Tanzania have yet to be physically connected to the SAPP grid. Connecting to the regional grid is key to the future development of the country's power sector and will mark a significant achievement in regional integration.

Sector-Specific Constraints to Growth and Investment in Energy

Implications of the COVID-19 outbreak

The COVID-19 crisis has placed additional pressure on Malawi's energy sector. Reduced industrial and commercial activity has caused a decline in demand for electricity, drying up important revenue streams for ESCOM. At the same time, the government has instituted emergency measures allowing delays in payment, straining liquidity. Over the medium term, a possible increase in residential consumer nonpayment (due to job losses), and possible nonpayment from government agencies could lead to further deterioration of ESCOM's financial position and result in potential bankruptcy of the utility.

The effects of the crisis have delayed construction on important energy projects and may make it harder for Malawi to attract investment in the sector in the near-term. Construction on IPP projects stalled with the onset of the pandemic, due to complications such as delays in the transit of necessary equipment.[137] Completion timelines have been extended, and further delays could still occur as the end of the pandemic is not yet in sight. In a worst-case scenario, funding partners could invoke force majeure clauses in already signed contracts. The financial pressures imposed by the pandemic may also constrain ESCOM's ability to reach financial close on recently approved IPP contracts.

Weak financial position of the national utility

During the past couple of years ESCOM has made substantial progress in cleaning up its balance sheet, but it continues to operate at significant loss. ESCOM is currently unable to pass on costs to end users to support cost recovery for financial sustainability. ESCOM is estimated to have incurred a net revenue loss of over 21 percent in fiscal year 2018 as it adjusted to the unbundling.[138] Performance improved in 2019, but operational losses were still approximately 13 percent larger than revenue.[139] These losses stem from multiple factors and inefficiencies unresolved, and in some cases introduced, by the unbundling. These include the lack of a cost-reflective tariff structure, low collection rates from public entities, high payment arrears to power suppliers, high technical and nontechnical losses in the system, and working capital loans with high interest rates taken to ease financing woes but leading to a further increase in liabilities.

The PPA between ESCOM and EGENCO needs to be reexamined. An audit by Deloitte found that ESCOM owed EGENCO MK40 billion (approx. US$52.8 million) in arrears in 2019, which continued to grow to a reported MK53 billion (approx. US$75 million).[140] This has been driven in part by the structure of the PPA, which requires ESCOM to pay EGENCO per its installed capacity and not the actual electricity generated and delivered. Under normal circumstances, EGENCO would be paid for energy generated and delivered, since its plants are fully depreciated without capital expenditures to be recovered, and it is only managing operating expenses. An agreement was reached in August 2020, with ESCOM agreeing to pay a portion of the arrears to EGENCO by the end of the calendar year, and eventually paying back 60 percent of the total before January 2022.[142]

Lack of cost-reflective tariff

The inability to recover costs undermines the financial sustainability of Malawi's power sector SOEs and discourages private sector participation. For many years, the national electricity tariff has been insufficient to cover capital expenditure and operational costs, even though the Malawi Energy Regulatory Authority (MERA) approved a 31.8 percent increase in the tariff to be phased in, from 2018 through 2022. The first increase was implemented, but a second increase of 7 percent planned for 2019 was never carried out. ESCOM had not met key objectives agreed to with the regulators, and further plans were eventually stalled by the election crisis and the onset of the COVID-19 pandemic. Most recently, MERA increased the tariff by 10.6 percent effective March 30, 2021 arguing that the upward adjustment was long overdue, based on an approved tariff trajectory (2018-2022). ESCOM then implemented the new tariff, which has been adjusted from K94.43 to K104.46 kilowatts per hour. Parliament through the Parliamentary Committee on Natural Resources is in dialogue with MERA and ESCOM to understand how tariffs are determined.

If electricity tariffs remain below the cost of power supply and network maintenance, ESCOM will continue to post losses. Without the capacity to undertake regular operation and maintenance, equipment is aging and less efficient, transmission lines are heavily loaded and poorly maintained, and power disruptions are commonplace. Technical and nontechnical losses in the transmission and distribution system are considerable, at over 20 percent in 2019, and rising.**142** To attract more private participation in generation, the government will need to continue to reform tariffs to more accurately reflect cost, to allow for its national utility to become a financially viable and creditworthy off-taker.

Hydrologic variability and climate change

Overreliance on hydropower makes the sector highly vulnerable to climate shocks. Malawi experiences particularly severe power supply constraints because of the low availability of hydropower during the dry season.[143] Without a connection to the SAPP, the country has no alternative power supply market to tap. In the past two years, severe droughts caused reduced water levels in Lake Malawi and reduced flow in the Shire River. During these periods, ESCOM has been forced to load shed. The situation has abated somewhat through ESCOM's use of diesel generation. However, this is a costly solution. For firms that turn to their own emergency diesel generation, the cost of electricity can effectively triple.[144]

Hydrologic variability and severe droughts are expected to intensify with climate change.[145] Malawi will need to diversify its energy portfolio. The SAPP will help, but if the government wants to build a clean, sustainable energy sector, more solar and wind energy, as well as battery systems, will be needed to complement hydro.

Low capacity and limited, unreliable access

Connecting to Malawi's national grid takes months and is costly. According to the 2020 Doing Business Report, getting electricity in Malawi is more difficult than elsewhere in the region, on average.[146] Connecting to the grid took an average of 127 days, according to respondents, and cost more than 12 times the average citizen's annual income.

Unreliable electricity supply increases firms' operational costs and lowers productivity, sapping competitiveness across all sectors. On a scale of 0–8, Malawi scored a zero on the reliability of electricity supply and the transparency of tariffs in the Doing Business report. Supply shortages have led to periods of prolonged load shedding, sometimes lasting up to 16 hours per day, forcing firms to turn to more costly diesel generator power and dragging down productivity. Operating backup generating facilities can triple the marginal cost of electricity supply and are only feasible for firms with margins sufficient to absorb such incremental costs. Lost annual sales can also be traced to outages, up to a 7 percent loss according to the most recent Enterprise Surveys.[147] Larger manufacturers tend to be hurt the most.

Underdeveloped off-grid market

Private investment in micro- and minigrids has been limited to date, partly driven by the poor performance of pilot projects that suffered from a lack of economies of scale and a dearth of skilled technicians to maintain the systems. Most installed solar PV installations in Malawi are no longer operational due to poor installation, lack of proper maintenance, or inability to acquire new batteries. Equipment costs are a major problem. Solar powered minigrids in Malawi are nearly twice as expensive as similar projects in the region. Capacity development is required at all levels. Business models are yet to demonstrate cost recovery among Malawi's low-income consumer base of mostly subsistence farmers, in part because of the limited penetration of mobile money. Still, successful models in countries like Kenya and Rwanda offer tremendous potential. An estimated 59 million people in the region are using off-grid solar energy, such as solar lamps and solar electric systems, to power residential energy needs.[148]

Drivers of Change

Mpatamanga Hydropower Project

The proposed Mpatamanga Hydropower Project will transform the energy sector and could boost economic growth by up to 7 percentage points in the medium term, according to the IMF.[149] The additional 350 megawatts of energy will be a 71 percent leap in the country's installed capacity. The project will leverage recent investment in the national electric grid, including more than US$350 million provided by the U.S. government's Millennium Challenge Corporation, and will be a central piece in future development strategies and projects, including future participation in the SAPP.

The project will also act as a flagship initiative to market-test new policies and strategies for attracting private sector participation and hopefully further solidify the country's track record on PPPs. The project will cost an estimated US$1.07 billion, part of which is being funded by the World Bank Group.[150] The remaining funding will be provided through government resources, commercial loans, and private equity. Private sector concessionaires are being considered through a competitive tendering process already underway, managed by Malawi's Public-Private Partnership Commission. This will be followed by a second tender process to select one or more engineering, procurement, and construction contractors.

Regional interconnections and the Southern Africa Power Pool

The ability to trade power will also be a breakthrough for Malawi. The Zambia-Malawi and Mozambique-Malawi interconnectors are high priority projects that can help the government meet short-term power needs without capital investment in new generation projects. The latter will link Malawi's grid into Matambo, a major substation in the SAPP system and one that is central to Mozambique's future power system plans. Completing the projects will allow Malawi to gain access to more reliable and cost-efficient supply and create a means to mitigate risks, such as supply interruptions due to drought. If and when the Mpatamanga Hydropower Project is completed, trade on the SAPP could also become a source of revenue for Malawi. The government will need to continue to strengthen cooperation with Mozambican and Zambian counterparts to ensure the projects are completed and future participation in the SAPP achieves objectives.

The ability to import energy will also create opportunities for the government to better manage the sector. The government will need to deepen regional cooperation and strengthen its own planning capacities, as well as optimizing trade along existing, committed, and candidate interconnections. Access to the regional power pool will reduce the need for ESCOM to contract costly and polluting diesel generation sets to stabilize power supply and meet gaps in demand. Redundancy from the regional grid will also allow Malawi to shut down parts of its national network to refurbish existing generation plants. In addition to allowing for bilateral and regional power trade in the SAPP, the projects will also supply an additional 100 megawatts of imported power to Malawian households once they come online.

Power sector reform

The new government's initial efforts to crack down on corruption and improve the performance of SOEs could have a major effect on ESCOM and its related institutions. For the Mpatamanga Hydropower Project to proceed to completion, power sector SOEs must become more creditworthy and transparent, providing a major incentive for finally following through on planned reforms and improvements. Prior reform efforts were met with little interest. Recommendations went largely ignored, and corruption allegations remained commonplace.[151] A demonstrated commitment to implementing reforms to improve financial and operational management across the board and executive leadership of each institution is a start. Increasing the capacity of MERA to provide effective and efficient regulatory oversight would help to improve the financial viability of ESCOM, as well as to enable electricity trade with SAPP countries. An effort to strengthen planning functions, coupled with regularly updating the Shire River Basin plans and generation, transmission, and distribution master plans, will also be necessary given the growing size of the grid and the plan to connect to and trade with the SAPP.

National electrification plan

The government's National Electrification Strategy calls for catalyzing private investment in the energy sector to help achieve the goal of 80 percent of the population having access to electricity by 2035. The National Energy Policy envisions an ambitious rollout of on-grid connections and an expansion of reach through complementary off-grid connections, such as stand-alone solar electric systems and minigrids. Implementation is to be led by ESCOM and the long-standing Malawi Rural Electrification Program. A World Bank electrification project launched in 2019 aims to help the government increase grid connections in rural areas and those with high levels of agricultural production and related energy demand, as well as support attracting the private sector into the off-grid market. Electrification will also help Malawi meet international climate commitments to reduce the use of biomass as fuel.

Potential Opportunities

Renewable energy

Malawi has ample renewable energy potential and will need an estimated US$1.4 billion in investment by 2030 to meet growing demand while delivering on its international climate commitments.[152] The lowest cost option for energy generation is through hydropower, but the country should diversify its energy portfolio and be cautious of overreliance and overexploitation of hydro. The government has already set an unconditional target of 20,000 new solar PV systems deployed by 2030, with the potential to scale the program to 50,000 systems, as part of its international commitments to combat climate change under the Paris Agreement. Indeed, solar projects, including off-grid and those with integrated storage, could play a significant role in a resilient recovery and have large potential for job creation. Malawi's average of 3,000 hours of sunshine per year is among the highest in the Sub-Saharan Africa region.[153]

The two advanced solar IPP projects have the potential to demonstrate the viability of private investment in generation in Malawi. The Salima Solar Project represents the first IPP in Malawi whose generated electricity will be sold into the national grid, adding an additional 12 percent of installed capacity to the network. Costs for solar generation are also rapidly falling. The PPAs signed in 2018 already priced production at the same level as coal-fired generation, and costs will continue to fall with the maturation of the market and lower hardware costs. A proposed wind farm in Mzimba will provide similar opportunities to demonstrate technological efficiency and price competitiveness.[154] Business models that provide modular, small-scale renewable energy solutions could also help diversify the portfolio.

Off-grid and minigrid solutions

Off-grid and minigrid energy solutions are increasingly cost competitive solutions for those unable to rely on power generation from the national grid. Expansion of minigrids and off-grid energy solutions will create new market opportunities across sectors, such as direct solar pumping irrigation systems in agribusiness. Regulatory reforms to make it easier for private firms to develop their own captive energy systems and to incentivize PPAs with the government could create significant market interest. Investments in off-grid electrification could reduce or eliminate the need for "emergency" diesel power and spur additional socioeconomic gains. This is especially relevant considering the need for energy in the nation's health system, highlighted during the pandemic. In Nigeria, for example, the government's Rural Electrification Agency and private firms partnered to build solar minigrids at hospitals treating COVID-19 patients, taking just two weeks to construct.

Given that over half of Malawians live more than 5 km away from the national grid in peri-urban and rural areas, providing energy access to these 9 million people will most likely be more affordable and expeditious via off-grid electrification systems. Recent analysis assessing the market potential for solar PV microgrids finds that that solar microgrids are cost competitive with diesel microgrids in all locations in Malawi and could serve 37 percent of the population, if institutional support and favorable regulatory policies were in place.[155] The World Bank–supported off-grid market assessment suggests up to 3.7 million households could require off-grid solar solutions by 2030. That would require an average of 310,000 units deployed per year, which translates to a potential market of US$22 million a year.[156]

In Malawi, women account for only 10.2 percent of the labor force and even less in the male-dominated energy sector.[157] In addition, Malawians rely heavily on biomass. Research has shown that women and children disproportionally bear the negative health effects of using kerosene and biomass. [158] Furthermore, women and young girls are also tasked with looking for these energy sources. In Malawi, rural women spend 9.1 hours a week collecting firewood and water compared to men's 1.1 hours.[159] Women in Malawi can play a vital role in the renewable energy sector by forming part of solar value chains as suppliers and distributors,[160] employees, and leaders in the energy sector and stakeholders in the community.[161]

Leverage available finance programs

With limited fiscal space, the government should focus on identifying available external finance programs and working with the private sector to prepare viable project proposals to leverage these resources. For example, the World Bank's Regional Infrastructure Financing Facility project has developed a US$425 million fund for infrastructure development in the energy sector. The fund is the first of its kind in Africa and will offer a credit line to provide long-term finance for projects that meet certain development impact criteria. Resources will be disbursed through COMESA's Trade and Development Bank, which has been empowered to help foster commercial bankability. The government can also work with investors to prepare projects that could be supported through available climate finance schemes, such as the Climate Investment Funds and Green Climate Fund, resources yet to be tapped by Malawi. These investments could be an important component of an economic recovery package, creating employment while providing the energy needed to drive economic recovery.

Energy efficiency

Energy efficiency solutions offer potential cost savings and scalable business models for Malawi's private sector. Energy efficiency is a key piece of the puzzle and should not be overlooked. In addition, reliance on unsustainable charcoal production leads to deforestation and land degradation, making it critical to move to sustainable biofuels for cooking. Analysis by the United Nations, the Rocky Mountain Institute, and the government found that implementing energy efficiency solutions would cost less than investing in new generating electricity, while delivering the energy savings back into the national grid—making energy efficiency a top priority for investment in the energy sector. To that end, private sector firms have been developing metering-as-a-service business models and introducing other "smart" technologies that can better monitor and manage demand and reduce overall losses in the system, by, for example, detecting fraud. Market opportunities for energy-efficient electric appliances are also being explored, including innovative financing and repayment plans for low-income and rural customers. The government has committed to disseminating 400,000 energy efficient cookstoves to households by 2030, for example, with conditional plans to scale the program to 2 million homes.

Recommendations

As the government works to combat the COVID-19 crisis and put in place a strategy for economic recovery, actions to support and further develop the energy sector could help to reinvigorate private sector–led growth. This includes prioritizing power sector reforms, improving corporate governance and the financial sustainability of the sector's SOEs, and streamlining the regulatory framework for private investment in off-grid solutions. The previous section of this report provided recommendations to address cross-cutting constraints on the private sector, many of which would also help unlock investment in the energy sector. Table 4.1 provides additional sector-specific recommendations to support the sector through the ongoing crisis, as well as medium-term actions that will help the sector restructure, recover, and accelerate growth in the coming years.

TABLE 4.1 RECOMMENDATIONS TO SUPPORT THE ENERGY SECTOR

Short-term priorities

Strengthen resilience and response strategies.

- Continue to update emergency response strategies for the rapid deployment of emergency off-grid electrification to critical care facilities and residential areas.

Maintain business continuity and support project pipeline.

- Ensure that approval, tendering, contracting, construction, and completion of critical access-enhancing projects remain on track.

Medium-term restructuring and recovery recommendations

Improve operational and financial performance of SOEs.

- Phase in electricity tariffs adjustments to allow cost recovery, and ESCOM to become financially sustainable, while ensuring adjustment mechanisms are in place to protect low-income consumers.
- Strengthen operational and financial management in ESCOM to improve efficiency and quality of service, to improve creditworthiness, and to facilitate more private sector participation.
- Introduce competition into selection of executive management and board positions to ensure professionalism and competency of state parastatals.
- Introduce initiatives for liquidity enhancements, revenue protection measures, loss-reduction initiatives, and advance metering infrastructure.

Strengthen planning functions and project pipeline.

- Assess the impact of the COVID-19 crisis on larger consumers and estimate future revenue projections, taking into account economic growth estimates.
- Strengthen MERA to support cross-border trade by adopting rules stipulating electricity trading as a licensed activity, transmission guidelines, and grid codes.
- Following the completed debt sustainability analysis for Mpatamanga, examine if an updated supply-demand analysis is necessary to determine the need for new generation and if any excess power could be exported to neighboring countries.

Enable expansion of electrification projects, particularly in rural areas.

- Conduct feasibility studies to determine additional sites for on-grid solar PV and solar PV minigrids.
- Develop a cross-sectoral map to determine market opportunities for additional private sector engagement, including PPPs in transmission infrastructure, especially last-mile infrastructure such as the transmission backbone.
- Develop quality assurance frameworks with specifications and demand analysis to ensure consistent quality and performance of minigrids to improve customer perception and willingness to pay.

Note: ESCOM = Electricity Supply Corporation of Malawi; MERA = Malawi Energy Regulatory Agency; PPP = public-private partnership, PV = photovoltaic.

4.2 CONNECTIVITY

Malawi is poised to benefit from improved connectivity in the next few years as major infrastructure projects are completed. Improved digital and physical connectivity can foster private sector activity and greater regional integration. The government will need to ensure the necessary enabling conditions are in place to effectively help its private sector leverage improved market access and digital capabilities to boost competitiveness and growth. The following section details recent investments and trends in connectivity in Malawi and neighboring markets, focused on transport and logistics and on digital infrastructure and services.

TRANSPORT AND LOGISTICS

For Malawi's private sector to become more competitive and to grow, transport and logistics infrastructure and services must become more competitive. Landlocked status is a permanent development challenge, with greater distance to and from markets and a dependency on intermediary countries' transport and logistics networks. These challenges can be partially overcome through regional integration. This section outlines some of the most critical issues for Malawi's transport and logistics sector to improve overall competitiveness, including what role the private sector can play to that end.

The government has laid out multiple plans and strategies to develop a sustainable multimodal transport system that will reduce trade costs for producers and consumers and improve connectivity between national and international economic centers. The 2015 National Transport Policy set out an ambitious agenda for both regulatory and institutional reforms, addressing cross-cutting issues that hinder multimodal integration. Transport is also one of the five key priority areas in the 2017–2022 Malawi Growth and Development Strategy III, which focuses explicitly on expansion of infrastructure to cut transit times for imports and exports. These objectives carried into the 20-year National Transport Master Plan (NTMP) released in 2017.[162]

Malawi's National Transport Policy[163] highlights the gender gap in the transport system, including inadequate attention to women's transportation needs, insufficient participation of women in infrastructure planning, and poor rural transport. The policy aims to increase women's participation in infrastructure, planning, and development. Another key aim is to ensure women's rural and urban transportation needs are met. This includes ensuring their safety and increased accessibility for pregnant women. The "Women, Business and the Law 2020" report details a lack of safe and affordable transport as one reason women are unable to participate equally in economies.[164] Malawi has an incredibly low score of 50 out of 100 with regards to mobility.[165] This means that women are significantly constricted with regards to decisions such as applying for a passport, which then further restricts their access to transport.[166] Women have a higher chance than men of experiencing violence and sexual harassment on public transport; this then affects their ability to travel, work, go to school,[167] and trade.

Delivering on key objectives of the NTMP will be difficult in the next few years, as the sector has been severely impacted by the COVID-19 crisis. With more than 90 percent of imports and exports traveling by road, Malawi's transport and logistics performance depends heavily on what happens at border crossings with Mozambique and Tanzania, and to some extent South Africa. The implementation of COVID-19-related pandemic monitoring and protection measures has resulted in the closure of border posts, funneling more trade to fewer crossings, resulting in delays, disputes among drivers and authorities, and reports of smaller traders having to resort to informal channels. Lower overall trade volumes have forced transport and logistics service providers to adjust scheduling and service routes, with reports that fewer traders have been traveling to remote areas and that transport costs have risen.[168]

Modes of Transport

Road

The majority of Malawi's freight, containerized or otherwise, moves by road in trucks. Roads currently carry 99 percent of all passenger transport and over 90 percent of international freight.[169] Rail accounts for the majority of the rest of international freight, with a very small percentage of goods being transported by air freight services and by water across Lake Malawi.

Most international freight is transported on one of the three main corridors, each carrying roughly a third of total volume. These three main corridors—Beira, North-South, and Dar es Salaam[170] —are still preferred over the Nacala Corridor, as transport costs per commodity are generally lower due to better logistics infrastructure, less congestion, and more efficiency at the ports.

In the domestic market, the inaccessibility and poor conditions of paved, and especially unpaved roads, are major detriments to inclusive growth. Lack of connectivity has a direct impact on the livelihoods of most Malawians—making it more difficult and more expensive to trade and transport goods and services, especially for the large number of households that rely on agriculture. Similarly, poor road conditions also result in higher costs to deliver government programs and services that require traveling and transportation, making it more costly for the government to help those that may need it the most.

Previous roads condition surveys suggest the road network is prematurely deteriorating due to inadequate maintenance. According to data from the Roads Authority, roughly 30 percent of Malawi's road network is paved—above the regional average of 20 percent—but this number cannot be confirmed.[171] The government last released a roads condition survey in 2014 and has yet to release the findings of the 2019 update. Significant deterioration between the 2011 to 2014 surveys indicated inadequate maintenance—despite the road network having received nearly all government expenditure on transport infrastructure since 2010.[172] In addition, roads are frequently damaged and made impassable by extreme weather events and natural disasters.[173]

There is an imbalance between the Roads Fund Administration (RFA) revenue collection and the expenditure needed to improve the quality of the network's assets. Bonds were recently issued in the private placement market to mobilize private capital for road construction,[174] a step that many other countries have not yet taken and which should help the RFA offset some of the imbalance. There is some movement toward introducing tollways to increase revenue sources for the RFA. RFA is the most creditworthy SOE in Malawi and sets an example of market access for other SOEs in the infrastructure sector. However, the need for an improvement in operational and financial performance would still require expanding its access to commercial markets to address investment and maintenance requirements in this subsector.

Government road construction and maintenance projects were continuing in 2020 (as of time of writing), despite the effects of the pandemic. Whether or not these projects will be uninterrupted by the pandemic and delivered on time and on budget, and how the new administration plans to allocate such resources in the future, remains uncertain.

Rail

Rail transport has become more competitive with trucking in the last few years. The rail network connects Malawi's central and southern regions with neighboring Mozambique's Beira and Nacala ports. With recent investments in port and rail infrastructure, and programs to improve trade facilitation, rail has become more efficient and reliable (table 4.2). Still, rail services account for a very modest share of the market.[175]

TABLE 4.2 CHANGES IN KEY METRICS ON THE BEIRA AND NACALA CORRIDORS (ROAD AND RAIL)

To/from Blantyre	Beira Corridor			Nacala Corridor		
	2016	2018	% change	2016	2018	% change
Imports—transit times (days)	9	8	**–11%**	15	5	**–67%**
Imports—costs per TEU (US$)	2,476	2,409	**–3%**	1,940	2,409	**24%**
Total transit volumes (tons)	812,000	1,337,000	**65%**	241,000	468,000	**94%**
• Total transit imports (tons)	611,000	1,109,000	**82%**	186,000	436,000	**134%**
• Total transit exports (tons)	201,000	228,000	**13%**	55,000	32,000	**–42%**

Source: AFREXIMBANK (2020)[176]
Note: TEU = twenty-foot equivalent unit.

Private sector participation has helped improve infrastructure and services along the rail corridors. Central East African Railways Ltd (CEAR) signed a concession agreement to manage all containerized, bagged, wet, and bulk rail freight. This includes Malawi's most important exports—tobacco, tea, and sugar—as well as its major bulk imports of fertilizer, fuel, containerized consumer goods, and food products. The increase in usage of the rail line can primarily be attributed to the Brazilian mining company Vale, which invested no less than US$5 billion in rehabilitating and constructing new rail, and upgrading port facilities, connecting a mine in the west of Mozambique to the port city of Nacala. The railway cuts across Malawi's southern region. CEAR was to fund further upgrades on the railway line from Nkaya to the Mchinji border. However, construction has stalled due to the pandemic.

The government's partnerships with CEAR and Vale have demonstrated the benefits of private sector participation and shared infrastructure. The concession eased the burden on Malawi's national budget by reducing annual expenditure on rail subsidies.[177] If it had not been for the mining dimension of the corridor, the rail concession likely would have collapsed.

Inland water transport

Lake Malawi and the Shire River offer an enticing alternative for road transport, but inland water transport faces myriad complex challenges. The government of Malawi had made attempts to encourage inland waterway transport in the past, but political differences with Mozambique and the poor state of existing infrastructure led to a lack of interest from investors.[178] Lake Malawi's four ports are all in poor condition. Low water levels at one port and the collapse of a gantry crane at another have left two of the four nonoperational for many years. Demand for cargo transport remains very low, and service providers are unable to meet the quality and reliability requirements of major traders. Recent announcements by the new government signal a shift in position, deprioritizing investment in waterways.

Airlines

Malawi's air connectivity is relatively limited, despite investment from Ethiopian Airlines that connected the country to Ethiopia's international flight network. Malawi Airlines Limited was created in a partnership with Ethiopian Airlines (49 percent) in 2013 and had been operating two domestic and six international routes prior to the pandemic. Six years since launching, the airline is still unprofitable on passenger services. Malawi's Public-Private Partnership Commission stated in 2016 that the government would be willing to offload its 51 percent share once profit was achieved. Low-cost operators, such as Fastjet, have also been unsuccessful after entering the market, primarily due to high fuel prices.

International air cargo services account for less than 1 percent of trade volume in Malawi. Demand for these services—typically only financially viable for exports of perishable and high-value products requiring rapid delivery times—is very low. More than 90 percent of utilized air cargo in 2019 was for imported goods. Most cargo is transported in the bellyhold of passenger flights from Kamuzu International Airport in Lilongwe, where handling capacity is around 6,000 tons per year.[179] To put that in perspective, Ethiopian Airline's second cargo terminal in Addis Ababa has the capacity to handle 600,000 tons of cargo per year.[180] Chileka International Airport in Blantyre has even simpler facilities, with only a small fraction of Kamuzu's handling capacity.

Malawi's airline industry is also reeling from the effects of the pandemic. Industry losses are difficult to estimate, but the industry was completely shut down from April to August 2020 with no cash inflows. Across the continent, passenger traffic has effectively collapsed since the onset of the crisis, with less than 10 percent of seats filled on flights, according to the International Air Transport Association. Only one in five flights was still flying in the region, compared to precrisis levels.[181] The government of Malawi has already acknowledged widespread layoffs among travel agencies and air service providers, including requests for government relief from firms operating out of the airports.[182]

State of the Private Sector in Transport and Logistics

Like many of its neighbors, Malawi's commercial transport and logistics services sector is comprised of a few large multinational freight forwarders who organize most cross-border freight and a large number of informal and small-size local trucking companies that focus primarily on the domestic market. The largest freight forwarders are mostly based in Mozambique and operate across the region, with facilities and personnel at multiple borders and ports. They own fleets upward of 1,000 trucks of various sizes and specializations and generally operate according to international standards. This gives them the capacity, reputation, and reliability that allow them to develop strong relationships and secure most contracts with Malawi's large importers and exporters.

A second tier of smaller but well-established local forwarders is competitive in the cross-border market. In the few years prior to the pandemic, as many as 10 Malawian-owned firms were operating large, cross-border dry cargo transport services.[183] These firms operated around 100 or fewer trucks, had signed large contracts, and delivered for large clients. Only four reputable trucking companies offered temperature-controlled services. Most of the larger domestic operators prefer to capture rents in the domestic market rather than becoming competitive regionally, relying in part on close relationships with politicians to maintain contracts. As market conditions have become more competitive, some of these firms have shifted operations to other, less competitive cross-border routes, more domestic haulage, or wet cargo transportation.[184]

Beyond these main players, Malawi has a large informal trucking industry that serves local markets and low-volume routes. These are often for-hire trucking companies, with roughly one-third only owning a single truck and nearly two-thirds owning less than four.[185] Many of these truckers are profitable by charging higher rates to serve remote and hard-to-reach locations. These areas often cannot be reached by large trucks, and thus domestic and international routes are highly segmented between small businesses with smaller trucks and the international trucking companies with mostly larger vehicles.

The domestic market can generally be characterized by a mixture of collusive relationships and cut-throat competition—especially in trucking, but also in storage and other related activities. The few large multinational firms tend to operate in accordance with international norms, but have a strong lobbying presence through the Clearing and Forwarding Agents Association of Malawi. Many of the larger local firms are known to have close individual relationships with policy makers, but are also organized within the Road Transporters Association of Malawi and the Transporters Association of Malawi. Certain segments of the market, such as transport of tobacco, domestic sugar distribution, and domestic fertilizer distribution, are reportedly rife with collusive practices.[186] But while past assessments, including the NTMP,[187] have perceived the sector to be largely dominated by cartels, their influence appears to be waning.

Recent analysis suggests the market is largely oversupplied and, in the case of export freight, highly competitive.[188] Stronger competition in the market has been a function of a few factors, including sustained and increased participation of foreign transporters on Malawian routes. Barriers to entry are not prohibitively high, evidenced by firms entering the market over the past decade when profit margins were higher.[189] Recent reforms to crackdown on price-fixing have been relatively successful, whereas demand is shrinking as the economy has slowed. Competition has thus become stronger and margins thinner, both on domestic and cross-border routes.

Sector-Specific Constraints to Growth and Investment in Transport and Logistics

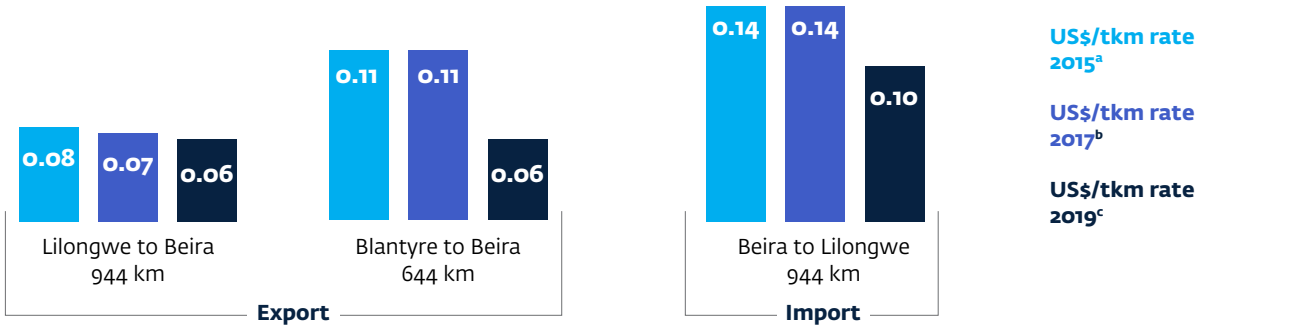
Lack of data collection and corridor monitoring

For the government and the private sector to make more informed decisions in the transport and logistics sector, more and better data is critical. Currently, data on Malawi's transport network is scarce, mostly outdated, and often estimated. The government will not be able to effectively assess budgeting and financing needs without more frequent, ideally real-time, data collection. Policy makers and regulators need this data to establish baselines and to measure and monitor traffic volumes and infrastructure conditions, which are critical to prioritize allocations for maintenance and investment into new projects—and, by extension, areas where the private sector could play a larger role in meeting gaps. Data is an increasingly valuable commodity, central to many innovative business models, and thus there should be opportunities for the government to collaborate with the private sector to address these data gaps.

High transport costs

High transport and logistics costs are frequently cited as a top constraint on Malawi's overall competitiveness, but rates decreased substantially in the five years prior to the pandemic (figure 4.7).[190] In early 2020, the cost of exporting was comparable to regional benchmarks for efficient transport services and even slightly lower than those found in Central and West Africa. However, the cost of importing remains nearly double that of exporting, largely due to the imbalance of trade. For costs to be further reduced, a combination of structural and man-made constraints need to be addressed: (a) border delays and fees, (b) lack of backhaul loads, (c) high fuel, wages, and fleet operation costs, and (d) inadequate infrastructure.[191]

FIGURE 4.7 CROSS-BORDER TRANSPORT RATES OVER TIME, US$/TKM



Sources: (a) Rates were stated as a range but reflected as averages in the table. Competition and Fair Trading Commission (2016)[192]; (b) T. Vilakazi and A. Paelo (2017)[193]; (c) G. Nsomba, E. Jangale, and T. Vilakazi (2020)[194]
Note: km = kilometer; tkm = tonne-kilometer

Border delays and fees

Customs clearance and inspection procedures for exports require over three days on average at the border.[195] Ensuring compliance with documentary requirements and processing requires another three days. The cost of documentary compliance is among the highest in the world, with only nine countries out of 181 measured by Doing Business 2020 requiring more. These delays and fees affect competitiveness. According to the most recent World Bank Logistics Performance Index, timeliness of shipments reaching destinations within scheduled or expected delivery times is the biggest logistics challenge.[196] Structural constraints, such as distance to ports and seasonal peaks in trade, are exacerbated by these regulatory inefficiencies. Malawi has been lagging its peers in the implementation of digital solutions to streamline and automate trade processes and customs clearance, although recent investment has been made to modernize some border infrastructure. Trade facilitation, including harmonizing regulations and processes with neighbors, is critical for improving efficiency at the border and reducing delays.

Lack of backhaul opportunities

Because Malawi is a net importer, optimizing logistics is a challenge and can result in higher costs. Trucks carrying imports into Malawi often struggle to find a load of freight to carry upon their return. These empty backhauls increase costs for Malawi's importers, as truckers charge a premium to offset the cost of the nonprofitable return trip. Within the country, low volumes of trade between rural locations and market centers, compounded by the poor condition of road networks that damage vehicles, has a similar effect, resulting in high transport charges to cover fixed costs and markups.

Malawi's narrow basket of export products, mostly consisting of agricultural commodities, also causes large seasonal fluctuations in demand for transport and logistics services that can result in price spikes. While the country's largest exporters can rely on higher-cost international logistics service providers and modern supply chain optimization technologies, smaller, less sophisticated exporters and transport and logistics companies can struggle. Even when trade is more balanced, the actual transport equipment may still be imbalanced. For example, fuel imports enter on tankers, while agricultural exports exit in containers. In other cases, the market is further segmented where transporters and logistics service providers have preferred corridors.

High fuel costs

Fuel prices in Malawi have decreased since 2015, but remain relatively high within the region and typically account for 40 to 50 percent of operating costs.[197] Despite lower fuel costs in recent years, margins on some routes remain high compared to regional benchmarks, especially for temperature-controlled logistics services. Multiple levies, duties, and surcharges are imposed on the price of fuel providing important sources of revenue for public programs such as rural electrification, the road fund, and the fuel price stabilization fund. Yet, the collection and use of these resources has not been fully transparent. A rationalization of the levies and taxes on fuel and more efficient, transparent use of these resources to fund needed infrastructure improvements could reduce transport costs and improve trade competitiveness.

Poor road network conditions and lack of infrastructure

The underdeveloped and often damaged road network is another cause for high transport costs. Inaccessibility and unpredictable delays force transporters to build extra time into their prices. The damage to vehicles incurred on bad roads and the price of repairs must also be factored into vehicle operating costs. Beyond the need for investment in expansion, much of the problem is due to a lack of proper routine and periodic maintenance. The lack of an asset management system makes prioritization of efficient resource allocation more challenging.[198] Like other countries in the region, government oversight of road construction projects is weak, and the road construction industry is well known for highly collusive rent-sharing relationships. Modernizing contracting and procurement practices could revolutionize the system and help to tackle current government funding constraints.

Uncompetitive fleet

The majority of Malawi's transport and logistics service providers are not competitive with their regional peers. Large exporters demand efficiency, reliability, and cost effectiveness. This requires firms to be competitive not only on rates, but also on service provision, including tracking, insurance, communication, and large fleets that can transport large loads at the same time. Smaller truckers with less efficient scale and little financial capacity to provide value-added services are therefore unable to compete sustainably in cross border freight.

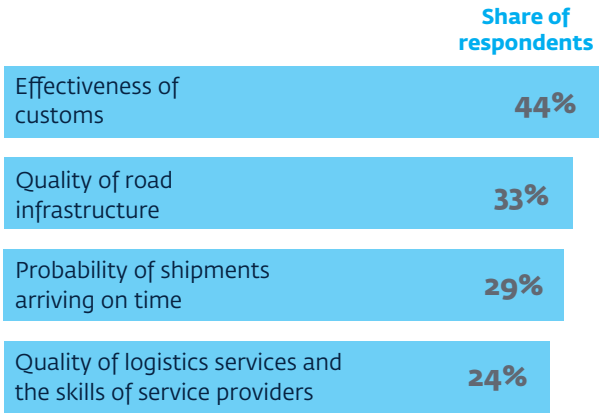
Freight forwarders also play an integral role in the market, providing a range of services and working closely with trucking companies.[199] The largest freight forwarders focus on specific routes and types of goods, providing value-added services such as coordinating goods handling, warehousing, port clearance, and transportation. Some freight forwarders also function as clearing agents, facilitating customs clearance. Competitive advantage comes from having operations and facilities at different borders and ports and in multiple countries.

The cost of running and maintaining a trucking fleet in Malawi is much higher than in Mozambique, the sector's main competitor.[200] Mozambican companies charge lower rates than Malawian truckers, in part because they spend less on fuel, which is roughly 25 percent cheaper than in Malawi. Malawi's trucking fleet is also old and must budget for frequent repairs, while Mozambican trucking companies benefit from lower import duties on vehicle spare parts and tires.[201] The language barrier is also a factor. Most Malawian trucking companies lack relationships at Mozambique's ports, putting Malawian trucking companies at a disadvantage while at the port, and making it more challenging for them to find and contract backhaul loads.[202]

Lack of effective regulation and political economy considerations

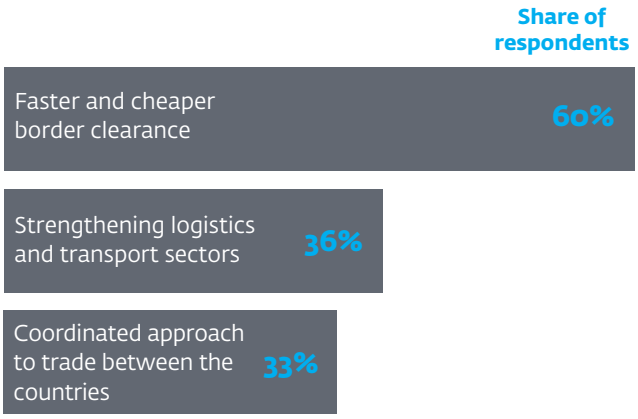
High logistics costs in Malawi are a structural and regulation problem rather than one arising primarily from exertion of market power and anticompetitive behavior (figure 4.8). Additional local costs such as port and border charges, local and comparative taxes and fees, high fuel and lending costs, and the fundamental imbalance of trade in Malawi add to the high costs of local transporters. Customs and border crossing procedures have improved significantly, and the introduction of e-payments and online systems at borders, preclearance of cargo, and one-stop border posts will lead to cost savings. Continued improvements in these areas would likely make Malawi more attractive to foreign investors (figure 4.9).

FIGURE 4.8 TOP INFRASTRUCTURE CONSTRAINTS



Source: World Bank Group Investor Survey 2019.
Note: Respondents n = 126 firms.

FIGURE 4.9 TOP MEASURES TO MAKE THE COUNTRY ATTRACTIVE TO FOREIGN INVESTORS



Source: World Bank Group Investor Survey 2019.
Note: Respondents n = 126 firms.

Malawi has been lagging its peers in the implementation of digital solutions and automation in trade processes, cross-border transactions, and customs clearance.[203] Reducing trade costs requires trade facilitation, including harmonizing regulations and processes with neighbors. Transport regulations are especially problematic, with different national technical requirements and cabotage restrictions continuing to protect national actors rather than allowing cheaper, more efficient service providers to enter the market.[204] This results in border delays and long standing times.

In addition, there are other factors likely distorting the market.[205] Trade and transport are highly sensitive sectors in both Malawi and Mozambique, with political interests geared toward a competition for control of rents.[206] As a result, the relationship does not provide a solid basis for improving coordination and cooperation along trade corridors. Many politicians and their families own trucking businesses and have been heavily involved in shaping the policy agenda in the transport sector to their benefit.[207] Other powerful private firms and local elites are closely connected to the same politicians and families and reliant on good relationships for continued licenses to operate, as is common across the region.[208] This is equally relevant in Malawi's domestic market, but even more complex across the region.

Lack of bankable projects

Malawi needs a credible pipeline of investable opportunities and viable PPPs to increase private sector participation in transport and logistics.[209] Since the national PPP program was launched in 2011, the government has mobilized more than US$1.1 billion in private capital, but nearly all came from one rail deal with the mining firm Vale. Private sector participation in the sector has been limited due to unstable macroeconomic and political conditions; the small market size; and limited information needed to assess feasibility, value for money, and affordability. The outcome of the three existing PPPs has been mixed, largely due to lack of institutional capacity to manage and monitor long-term concession contracts.

Drivers of Change

COVID-19 response

The pandemic provides an opportunity to accelerate reforms to improve connectivity by reducing barriers to trade while ensuring public safety. In light of COVID-19, the RECs to which Malawi belongs have called on member states to implement guidelines for trade facilitation that could have lasting effects on cooperation at the border.[210] The SADC Council of Ministers released revised regional guidelines in June 2020 to coordinate COVID-19 response measures, specifically to facilitate the adoption and implementation of harmonized standard operating procedures for management and monitoring of cross-border road transport.[211] COMESA has released similar guidance for member states.[212] And the African Union and EAC are working to improve identification, testing, contact tracing, and quarantine measures.

Digital technologies

COVID-19 has demonstrated the critical need for greater digital connectivity as a backbone for the resilience of economic activity. SADC, for example, issued emergency guidelines in April 2020, encouraging the adoption of digital trade solutions, including the use and recognition by trade partners of e-certificates of origin and other digital documentation.

COMESA, EAC, and SADC member states have leveraged the COVID-19 crisis to fast-track the piloting of promising new digital technologies that help facilitate cross-border trade. They have launched the regional electronic Corridor Trip Monitoring System (CTMS), which will allow cross-border road transport operators, drivers, regulators, and law enforcement agencies to record and monitor driver wellness data, such as COVID-19 test results, as well as track the driver, crew, and truck movements against preapproved route plans.[213] The system will eventually enable operator, vehicle, and driver information to be readily available along regional transport corridors at the roadside and at border posts to all regulatory and law enforcement agencies. The CTMS is being developed and deployed in a phased manner and was piloted on three corridors starting in June 2020, two of which cut across Zambia. Malawi has the opportunity to implement the system once the government meets preparedness criteria. With designs for the system to be fully integrated into regional the EAC Regional Electronic Cargo Tracking System, an expansion of this digital platform could provide new opportunities for Malawi's public and private sector to better manage freight movement and logistics services, reduce border delays and transport costs, and strengthen the competitiveness of domestic transport and logistics service providers.

Customs and border crossing procedures have improved significantly as a result of several initiatives championed by the Malawi Revenue Authority. there is room for improvement regarding system delays and network errors, the introduction of e-payments and online systems at borders and preclearance of cargo and the potential to introduce one-stop border posts in the future will be instrumental in reducing waiting time at border posts and therefore costs associated with delays.

Other enabling technologies such as sensors, artificial intelligence, and internet-of-things solutions are being deployed in the transport and logistics sector across the region, but are yet to be widely adopted in Malawi. These solutions can create multiple economic and social benefits, including unprecedented transparency, building trust and reducing corruption in the sector. Digital logistics platforms can provide granular real-time data (for example, available containers, rates) to optimize cargo movements, reducing empty backhauls. The private sector can play a transformative role in deploying digital solutions by getting the support infrastructure ready. Malawian truckers will need to modernize their fleets, at the very least by adopting new tools and techniques to digitalize data, to be competitive against more sophisticated regional players. Digital integration of government systems could also improve fiscal management, service delivery, and emergency response measures. One step would be the full implementation of the National Single Window, to digitize trade procedures and information for both traders and regulators.

Improvements along the Nacala Corridor

Billions of dollars in public and private investment have been made in the last few years to improve infrastructure along the Nacala Corridor, especially the rail network. The revitalization and modernization of the corridor offers Malawi a tremendous opportunity to reduce trade and transport costs and attract investments. Prior to the pandemic, some of those benefits were being realized by the private sector, as use of rail services along the corridor was growing.[214] If the infrastructure, regulation, and services can be further improved to reduce inefficiencies and costs, the rail corridor could change production and transport cost dynamics across the entire Malawian market. Any such improvements in rail services need to go hand-in-hand with interventions to improve capacity and infrastructure at the port of Nacala. The rail corridor will only be a viable competitive alternative if it can offer reliability and cost and operational efficiency end-to-end.

The Nacala Corridor could become a catalyst for competition and attract investment. Ongoing donor-funded projects aim to tackle policy-related obstacles to create more opportunities for greater investment along the corridor. Analysis has found opportunities for the development of the downstream gas, forestry, tourism, and agro-processing value chains in areas where connectivity to the corridor will be improved.

World Trade Organization Trade Facilitation Agreement

Improvements in transport and logistics will also be driven by the implementation of commitments under the World Trade Organization (WTO) Trade Facilitation Agreement (TFA). The government ratified the WTO TFA in 2017 and has since requested assistance to align with international best practices on advance rulings, appellate procedures, risk management, authorized operator programs, corridor management systems, and a national single window.[215] It has actively engaged with donors to meet its commitments under the TFA and progressed to fully operationalize the ASYCUDA World computerized system for administering customs.[216] Clearing agents can use ASYCUDA World to make online declarations of imports, self-assess taxes owed, and pay the assessed taxes through a bank or e-payment. Additional efforts are ongoing to complete an online national single window system for all trade procedures[217] and to create one-stop border posts for traders.[218]

Potential Opportunities

Corridor development

Malawi will need an organized and resourced corridor development body to realize the full benefits of recent and planned investments in railway, road, and neighboring port infrastructure. Such a body can lead national and regional coordination on infrastructure development, maintenance, and transport operations. It could also coordinate policy and regulation to ensure effective trade and transport corridors, especially as Malawi deepens engagement with the neighboring countries on the development of the Nacala corridor.[219]

Public-private partnerships

The government will not be able to finance transformative infrastructure projects through the national budget alone. Recognizing that Malawi must transform its economy under current conditions of capital scarcity, the previous government had shortlisted possible areas for PPPs, including the country's two major international airports, the inland water system, urban transport services, and roads. Most of these projects have been discussed for many years, with little appetite by investors to date. To strengthen its proposals, the government has been seeking external financial and technical support to conduct PPP viability assessments to identify the most optimal PPP models.

Opportunities for PPPs may be severely limited in the near-term, while both the public and private sector wait to see how long the impact of the Covid-19 crisis lasts. But there is much the government can do to better prepare project proposals in the meantime. With macroeconomic and fiscal constraints inhibiting public finance, the government will need to redouble its commitment to developing a viable PPP program.

Innovation

The government could consider different innovative solutions to improve performance, increase funding, and open opportunities for private investment in roads:

- **Issuance of bonds.** A significant drawback to investment in the road sector is the high amount of arrears owed to the private sector, currently estimated at MK100 billion—almost equal to the road sector's annual budget. Clearing these arrears, coupled with new initiatives in raising long-term financing (for example, through the capital markets) will be the key to improving the road network in the country and unlocking economic potential in different regions and areas.
- **Toll roads.** Another opportunity for the government to increase revenue for the sector and private sector investment would be to explore toll roads via PPPs.
- **Output and performance-based road contracts.** Output and performance-based road contracts could offer both local and international contractors assurance of commitment and contractual obligations, transfer asset quality risks to the private sector, and use dedicated funding resources from the RFA. This would be a new contract modality for the Roads Authority in Malawi and present an opportunity to develop the local construction industry, facilitate job creation, and increase the reliability and quality of road network connectivity to deliver on long-term maintenance for better asset value. However, without having the landscape of the road contractors that work in the Malawi space and knowing how much the government is investing in road maintenance, it can be hard to find an investor, particularly internationally, that will involve any significant risk transfer.

e-Logistics

Opportunities abound for technological disruption of Malawi's transport and logistics sector. The government will need to play a role in future-proofing trade. The private sector will need to meet increasingly stringent traceability, quality, and safety standards. Investments in shared data systems and e-logistics are areas already attracting foreign investment in the region. These systems could be viable in Malawi. Online marketing platforms could help Malawi's farmers, who frequently fail to access markets or storage and suffer high postharvest losses as a result. Similar e-logistics platforms could optimize backhaul in the region. Logistics startups in Africa had a record-breaking 2019, trailing only financial technology in terms of new investment.[220]

Developing new capabilities: Drones

Malawi has a unique opportunity to develop an ecosystem for the development of drones in Sub-Saharan Africa, bringing together public and private stakeholders. Seizing the first-mover advantage, the government created Africa's first Humanitarian Drone Testing corridor in 2017, which facilitated pilot projects to test drone use in mapping, disease control, connectivity, disaster assessment, and health delivery.[221] In January 2020, Malawi opened the first-of-its-kind African Drone and Data Academy (ADDA). The ADDA is internationally accredited by the Association for Unmanned Vehicle Systems International—one of only five accredited training institutions globally and the only one outside the United States.

ADDA aims to promote the use of drones in projects and commercial services to positively affect the lives of Malawi's youth while creating opportunities to innovate. The academy will train and attract talent, providing an opportunity to develop a tech-savvy ecosystem with local entrepreneurs and youth empowered with 21st century skills.[222] In early 2020, the academy graduated its first class of 25 students, trained in drone piloting, applications, and building skills for local businesses and solutions. Ninety percent of graduates found employment, and nine have started and registered new companies. ADDA plans to help incubate these young entrepreneurs by launching a business innovation center by 2022.

Drones have already been part of the response to the pandemic in Malawi, signaling both their usefulness and their commercial viability. As the volume and complexity of drone flights increases,[223] new policy frameworks, regulations, skills and capabilities will need to be developed to make certain flights are safe, secure, and sustainable.[224] The Department of Civil Aviation has been partnering on regulatory aspects with ADDA to finalize draft regulations, including developing criteria for a remote pilot license.

Recommendations

Earlier sections of this report provided actions to address cross-cutting issues that are equally as critical to support the private sector in transport and logistics— recommendations to improve macroeconomic stability, invest in digital infrastructure, and deepen regional cooperation, among others. Table 4.3 provides additional sector-specific recommendations to support the sector through the ongoing crisis, as well as medium-term actions that will help the sector restructure, recover, and accelerate growth in the coming years.

TABLE 4.3 RECOMMENDATIONS TO SUPPORT THE TRANSPORT AND LOGISTICS SECTOR

Short-term recommendations
Maintain trade facilitation measures and cooperation.
• Maintain COMESA and SADC guidelines and recommendations on improving the safety and sustainability of cross-border trade during the pandemic.
• Maintain frequent communication with neighboring country authorities to ensure the uninterrupted flow of goods across the border.
• Meet preparedness requirements for piloting of COMESA CTMS, and draft plans for piloting the CTMS along one of Malawi's main corridors.
Medium-term restructuring and recovery recommendations
Focus on trade facilitation to reduce trade costs.
• Prioritize the preparation for and implementation of the national single window system for traders.
• Reduce the number of agencies at the border by improving coordinated border management.
• Adopt and implement the following agreements to remove NTMs: Cross-Border Road Transport Agreement; Cross-Border Rail Transport Agreement; bilateral (or multilateral) one-stop border post legislation and regulations.
• Establish a corridor management body with a clear structure and mandate and transparent key performance indicators.
• Deepen engagement in the Nacala Corridor Development Trilateral Committee to harmonize rules and regulations that will reduce border delays and trade costs along the corridor.
• Leverage available resources and support under the WTO TFA to implement commitments.
Improve management and oversight of road network.
• Introduce a sustainable mechanism to measure road quality and traffic every two years to better inform road maintenance, upgrade, and expansion program.
• Improve enforcement of truck-axle overloading by procuring and introducing weighbridges and other real-time technologies to track cargo movements.
• Clear high public arrears to local contractors.
• Explore output and performance-based road contracts for asset management.[225]
• Explore long-term financing options in the capital markets to create fiscal space and revenues for investment in transport infrastructure and maintenance.
• Leverage risk mitigation facilities to rehabilitate infrastructure for which no sovereign guarantee is available.
• Enlist independent auditors in the construction industry to prevent underbidding, overinvoicing, and subpar construction quality on transport infrastructure projects; explore the possibility of the National Construction Industry Council registering independent auditors.
Increase competition in the logistics sector.
• Remove regulatory barriers of entry that foster cartel-like behavior in both domestic and international trucking.
• Explore blended finance instruments that can help improve access to loans, subordinated debt or equity to private sponsors engaging in pioneering investments, such as temperature-controlled logistics services.
• Explore financing options for a project-preparation facility to support the development of a pipeline of bankable infrastructure projects in transport and trade logistics.
• Develop a national strategy and digital skies roadmap for phased implementation of priority drone services and corridors.

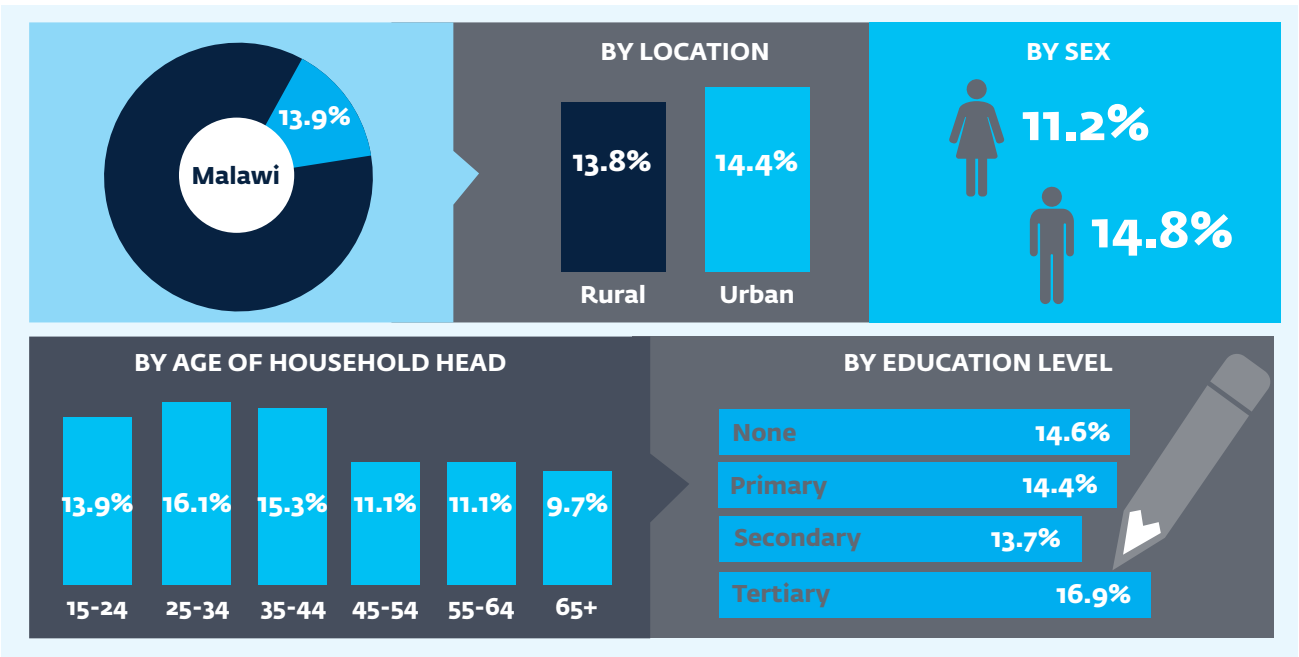
Note: COMESA = Common Market for Eastern and Southern Africa; CTMS = Corridor Trip Monitoring System; NTM = nontariff measure; SADC = Southern Africa Development Community; WTO TFA = World Trade Organization Trade Facilitation Agreement.

DIGITAL INFRASTRUCTURE AND SERVICES

Malawi is currently capturing only a fraction of its digital growth potential. The 2020 e-Conomy Africa report produced by IFC and Google suggests Africa's digital economy could be worth US$180 billion by 2025, accounting for 5.2 percent of the continent's GDP.[226] While many countries have embraced digital development, taking proactive steps to ensure that their citizens, businesses, and institutions are equipped to participate, innovate, and flourish in an increasingly digital environment, Malawi is lagging. The digital divide between rich and poor, as well as between urban and rural citizens and men and women, is wide. As a result, Malawi's citizens, businesses, and institutions are excluded from the benefits of digitalization and increasingly being left behind in the digital economy.

However, responses to the government's 2020 household survey signal big potential for digital technologies—and mobile phone–based digital connectivity, in particular—to level the playing field for entrepreneurs and create new opportunities in e-commerce. According to the survey, one out of every six nonfarm enterprises are mobile-based businesses. Furthermore, a fairly similar percentage of individuals are operating these businesses despite differences in place of residence, sex, age, and education level (figure 4.10). This demonstrates an impressive ability to overcome the lack of digital connectivity and digital literacy commonly cited as stifling the development of e-commerce in Malawi. Given greater connectivity at lower costs and a better enabling environment, Malawi's entrepreneurs may be able to quickly scale up e-commerce activities, similar to neighboring markets like Kenya, where the digital economy has blossomed.

FIGURE 4.10 PERCENTAGE OF INDIVIDUALS WITH NONFARM ENTERPRISES CONDUCTING BUSINESS VIA MOBILE TECHNOLOGY, 2019–2020



Source: Malawi Government (2020)[227]

COVID-19 has also shone the spotlight on the importance of digital connectivity for economic resilience and business continuity. The crisis and the measures taken to respond to it have made it clear that high-quality internet access is essential to maintain business and social interactions, and to enable the continuity of government and private sector services. In Malawi, the government has relied on digital connectivity to deliver critical public services, such social transfers and important health alerts to its citizens. Its COVID-19 response included providing additional spectrum to operators at heavily discounted rates to meet the increased demand for data. The question now is: how can Malawi leverage the crisis response to drive further digital development, while also improving its resilience to future shocks?

Although Malawi lags in digital development, the former government had committed to promoting private sector investment in the sector. It had called for digital infrastructure investment, especially in rural and underserved areas, through light-touch regulation that would strengthen competition and prioritize affordability over revenue maximization. To support its vision, the government has adopted a Digital Government Strategy, National Broadband Strategy, and the Cyber Security Strategy. The Public Private Partnership Commission launched in the spring of 2021 a public campaign to increase awareness around these strategies and their implementation.

State of the Private Sector

Malawi's telecommunications markets are dominated by just a few large firms. The digital market is segmented into two retail markets, for fixed and mobile retail services, and five wholesale markets. The mobile retail markets are characterized by the relative duopoly of Airtel and Telekom Networks Malawi (TNM). The government has attempted on three separate occasions to license a third national mobile operator to compete with Airtel and TNM, but in each instance the new licensee failed to launch service. In the country's very small fixed broadband market, Open Connect Limited (OCL), a spin-off of the incumbent Malawi Telecoms Limited (MTL), owns the most developed and, in many areas, the only fixed network infrastructure. There are currently no fully independent tower companies in Malawi. MNOs and internet service providers must build their own infrastructure, requiring significant capital expenditure, or negotiate commercially for sharing.

On the wholesale side, multiple fiber-optic backbone projects have improved connectivity but are yet to reduce prices at the retail level. Until recently, OCL effectively held a monopoly on international connectivity through access to the East Africa Submarine System (EASSy) submarine cable, though this has improved through the market entry of SimbaNet Malawi and investments from ESCOM, Airtel, and others. In 2013, the government partnered with SimbaNet to deploy a fiber-optic cable between Lilongwe and Dar es Salaam in Tanzania. The network now links to other fiber assets in the region, providing additional cross-border connectivity. In 2018 the first phase of the National Fiber Backbone Project, which connects the country's 28 districts via 1,230km of cabling, was completed. The fiber-optic cables were deployed by Huawei on power transmission lines owned by ESCOM. Despite this now extensive fiber coverage, some wholesale operators still do not offer dark fiber, i.e. fiber-optic infrastructure that is not yet in use by a service provider.

Sector-Specific Constraints to Growth and Investment in Digital Infrastructure and Services

High costs, low penetration, and gender issues

Less than 14 percent of the population uses the internet, in part because Malawi has some of the least affordable digital services in the world. Mobile broadband is the most popular way to access the Internet, and most of the country is now covered by 3G and 4G networks. But mobile penetration in Malawi is among the lowest in Africa, at just over 40 percent of the population. Roughly half of Malawians have mobile-cellular plans, but practically no one has a fixed telephone or broadband internet connection in their home. A mobile data and voice plan for 70 voice minutes, 20 text messages, and 500 megabytes of broadband data costs the average citizen in Malawi more than a third of their monthly salary. That ranked 173rd out of 179 countries in the International Telecommunication Union (ITU) price index.[228] The cost of mobile data is more than 11 times the United Nations target for affordable mobile broadband services in developing countries. Estimates suggest around 60 percent of the population would be able to access services if they were more affordable.

Broadband prices are higher in Malawi in part because of its being landlocked. Malawi relies on noncompetitive markets, such as Tanzania, for access to undersea cables. The country would benefit enormously from a cable landing station in Northern Mozambique, the construction of which has been discussed in recent dialogue with development partners. Recent investments in terrestrial fiber have improved internet speed, although it is still only roughly half of that in Kenya.[229]

The lack of competition in telecom market segments has not created incentives to lower prices. Airtel and TNM have controlled the mobile market for the past 15 years. The lack of competitive pressure to bring down prices and improve service quality has kept the market from growing, despite the vast majority of Malawians relying on mobile phones for access to both voice and broadband services. Meanwhile, OCL maintains dominance in the wholesale segment. The market for internet service providers is competitive, with 50 licensed providers, but the number of households with fixed access connections has actually decreased in recent years.

The government has been working with the private sector to make internet access more affordable. In August 2020 the Ministry of Information intervened to have the pay-as-you-go data rates decrease from an average of K20 to K15 per megabyte. The Malawi Communication Regulatory Authority (MACRA) announced in April 2021 that MNOs would reduce the cost of internet bundles. The operators agreed to a 30 percent reduction for the entry level one gigabyte (GB) data bundle, and a reduction for volume bundles (up to 4 GB) between 10 and 31 percent.

However, bringing down the cost of mobile phone ownership and services will also require a reassessment of policies. The high taxation regime in the telecom sector adversely impacts penetration, services, and profits. Taxes include 17.5 percent value added tax (VAT) on mobile phones and services, 16.5 percent on internet services including mobile data, 10 percent excise duty on short message service (SMS) and mobile data services, regulatory fees, and Universal Service Fund levies. In Kenya, mobile specific taxes stand at an average rate of around 7.5 percent, compared with 9.5 percent in Malawi. Adjustments to the tax regime would need to take into consideration the implications for government revenue, especially with the economic impact of the pandemic squeezing domestic resources.

Weak personal data protection on cross-border transactions

Cross-border transactions and personal data protection require particular attention from lawmakers to fill gaps in the legal framework. The absence of regulation can affect the willingness of others to send data (and money) to or from Malawi, affecting their ability to benefit from digital trade.[230] Malawi has been making progress. The government was recently involved in the process of preparing the African Union Convention on the establishment of a credible legal framework for cybersecurity in Africa. Malawi ranks 19th out of 42 countries in the region in the ITU Cybersecurity Index, although it ranks 106th out of 175 countries globally. Malawi has also passed legislation related to cyber security and electronic transactions. The government is currently in the process of drafting the Data Protection Legal and Regulatory framework as well as the Digital Government Legislation.

Underdeveloped ecosystem for e-commerce

Malawi's e-commerce ecosystem is still relatively nascent. The main challenges include the population's lack of trust in online systems, low level of internet access and usage, low technology adoption by firms, and a lack of digital skills across the population. Malawians are reluctant to use cashless solutions to buy goods and services online. Credit cards suffer from security concerns. The mobile money boom in Africa has yet to hit Malawi. Only around 23 percent of men and 18 percent of women have a mobile money account.[231] Uptake in the country is below the continental average, making the expansion of mobile money a high priority for financial inclusion.

Postal and logistics services that facilitate e-commerce are also underdeveloped. Most active operators have not yet structured a coherent offer that would suit e-commerce business models. Investments are also hindered by the lack of an addressing system. The Malawi Post Corporation, despite the existence of an e-post strategy, is still focused on its universal service mandate and has yet to fully embrace a digital modernization process. On top of this, costly and time-consuming procedures make the overall business environment quite cumbersome for tech start-ups, lowering the incentive to quit the informal economy and scale up into a formal e-commerce firm.

Drivers of Change

COVID-19 effect

The COVID-19 crisis has presented the opportunity for digital systems and innovations to prove their value. Malawi should see the crisis as an opportunity to speed up digital adoption across value chains and markets. The increased use of and reliance on digital technologies during the pandemic—such as mobile money, online education (education technology; edtech), and disease surveillance—demonstrate the potential for these technologies to strengthen resilience against similar shocks while expanding into new, profitable digitally enabled business models.

The edtech sector is a good example of how COVID-19 is helping drive the uptake of digital services in Malawi. There was a surge in demand as schools moved classes online and unemployed adults sought to improve skills through online learning while at home. The Malawi Research and Education Network responded to remote learning needs by providing free internet connectivity to various university campuses and other higher learning institutions in the country for a period of three months, so that they could continue to roll out their Open Distance and e-Learning program.[232] The network has also planned to provide specific educational content at discounted rates that can be accessed by all students in Malawi.

Mobile money and digital payment systems

MNOs are increasingly expanding into rural areas and actively working on strategies to target these communities with mobile products and services.[233] The mobile agent network is continuing to grow. As of mid-2019, there were 45,929 registered mobile money agents in Malawi.[234] Most agents are in urban and semiurban areas, with only 19 percent in rural areas. The majority of bank branches and ATMs are also in urban areas.[235] To fill this gap, MNOs are expanding agent networks in rural areas, in part motivated by the possibility of the government's Social Cash Transfer Programme (SCTP) being digitized across all districts.[236] Financial literacy programs will be necessary to ensure new users of financial services do not fall prey to overindebtedness or predatory lending. To that end, Malawi is now piloting SADC's mobile money guidelines to further deepen financial inclusion.[237]

Enabling policies

Malawi now has a legal framework in place that empowers the MACRA to regulate the telecom market and consumer costs. Previous attempts by MACRA to cap retail prices had been stymied because of a lack of clear legal authority. However, with the enactment of the revised Communications Act of 2016, MACRA is now mandated to regulate interconnection, number portability, and infrastructure sharing between service providers. MACRA has started economic regulation with the enactment of secondary legislation and the introduction of an interconnection glidepath. Early results have been encouraging with a reduction in voice tariffs of US$.0.25.

The Reserve Bank of Malawi has played an important role in creating a conducive regulatory environment to foster digital financial services and e-commerce. The Payment Systems Act, E-Transactions and Cyber Security Act, and the Communications Act in 2016 provided important frameworks to facilitate the development of the country's digital economy. Know-your-customer processes, which help reduce fraud and other illegal activity, have become more robust. For example, the Communications Act mandated that all SIM cards must be verified against an official form of identification, such as the customer's national identification number.[238]

e-Government

Government services are being increasingly automated, which will increase service efficiency and reduce corruption and nontransparent behavior. However, despite recent progress, development of and access to digital public services is still extremely low. Malawi ranks 165 out of 193 countries in the 2020 United Nations (UN) e-government survey,[239] which measures provision of online services, telecommunication connectivity, and human capacity. Shifting government employee payments to digital channels would be one step in the right direction.

Potential Opportunities

Mobile penetration

The market for mobile phones in Malawi is destined to grow—especially for women. Phone ownership shows a significant gender disparity. More than half of men own a mobile phone, but only one third of women.[240] The divide is most pronounced in rural areas, where 26 percent of women report owning a mobile phone compared to 47 percent of men. Women tend to lack the necessary disposable income to afford the phone and the digital literacy to use it. As such, mobile penetration and digital inclusion present unique opportunities to create new markets while closing a gender gap in Malawi.

Infrastructure sharing

ESCOM's national fiber backbone will increase connectivity and create new opportunities for improved service delivery and e-commerce. Major investments are still necessary in backbone infrastructure and data centers, as well as policy reforms to facilitate active and passive infrastructure sharing. The government should consider creating an independent special purpose vehicle to own and operate the ESCOM backbone, in line with good practices: (a) operating as a neutral, open-access wholesale network; (b) selecting a neutral, experienced third-party operator responsible for sales, operations, and maintenance; (c) adopting a competitive pricing strategy that prioritizes increased network utilization, downstream affordability, and access to broadband for citizens, businesses, and the government.

Digital financial services

Demand for digital financial services continues to grow in Malawi, despite connectivity challenges. The number of active subscribers continues to grow, with both the volume and value of transactions increasing steadily prior to the pandemic. The government's ongoing digitization of the SCTP is one example of where public and private interests have converged, with MNOs cooperating to facilitate for the expansion of the program to beneficiaries across districts.[241] The expansion of e-government services and additional financial players connecting to the National Switch will continue to expand the potential customer base for related digital financial services. Digital marketplace platforms need to be developed, designed for those with limited digital and financial literacy, to showcase digital financial services and help match borrowers with lenders.

Recommendations

The government is aware of the benefits that the digital economy can bring to its population and has undertaken important initiatives. Earlier sections of this report provided actions to address cross-cutting issues that must also be tackled to develop the digital economy—recommendations to improve human capital, expand access to affordable and reliable energy, and support the use of payment market infrastructure for microfinance institutions. Table 4.4 provides additional sector-specific recommendations to support the expansion of digital infrastructure and services through the ongoing crisis, as well as medium-term actions that will help the sector recover and accelerate growth in the coming years.

TABLE 4.4 RECOMMENDATIONS TO SUPPORT DIGITAL ECONOMY EXPANSION

Short-term priorities

Reduce the cost of mobile phone ownership and mobile broadband data.

- Review the cost of mobile devices and the sector-specific taxation framework by advocating for the removal of end-user direct taxation that has thwarted mobile penetration and constrained mobile services adoption.
- Strengthen public-private dialogue between the Malawi Communications Regulatory Authority and mobile network operators on how to reduce operating and consumer costs.
- Review the regulatory and licensing framework to ensure that it is not serving as a barrier to entry in the market.

Invest in digital financial literacy awareness programs.

- Develop and launch financial literacy programs to sensitize consumers and build trust in and awareness of the advantages of mobile money and e-payment systems.

Medium-term restructuring and recovery recommendations

Promote competition and infrastructure sharing.

- Strengthen regulatory frameworks to support active and passive infrastructure sharing and operationalization of neutral open access wholesale broadband networks.
- Develop a long-term incremental cost-based tariff framework to encourage nondiscriminatory access to national backbone infrastructures.
- Create an independent special purpose vehicle to own and operate the ESCOM backbone, commercializing the state-owned fiber network.
- Attract competition in the 4G MNO space to increase mobile broadband penetration and lower retail prices.

Strengthen the enabling environment and policy frameworks.

- Seek technical assistance to establish an independent Universal Service Fund agency to ensure neutrality, transparency, efficiency, and fair allocation of the funds toward the deployment of rural infrastructure assets.
- Implement the provisions of the Data Protection Act to facilitate cross-border data flows and foster users' trust.
- Develop a consumer protection system for digital financial services.
- Develop a national addressing system to facilitate the logistics of e-commerce delivery across the country.

Incubate and accelerate the development of digital financial services.

- Empower national development finance institutions, such as the Malawi Agricultural and Industry Investment Corporation, to invest in financial technology solutions that can help mitigate risk in lending and launch a wider set of affordable financial services for micro, small, and medium enterprises, including agribusinesses.
- Continue to expand government social payments through digital channels.
- Support private vocational training programs for Malawian youth to increase their employability and entrepreneurship.

Note: ESCOM = Electricity Supply Corporation of Malawi; MNO = mobile network operator.

4.3 AGRIBUSINESS

Malawi is one of the most agriculture-dependent economies in the world.

Agribusiness is the lifeblood of Malawi's economy, providing employment and income for the majority of households and critical foreign currency for other economic activities. Most of the sector's contribution to national GDP comes from crop production. Livestock and fisheries contribute little to national GDP (around 3 and 1 percent, respectively).[242] Maize is the country's primary food crop and tobacco the primary cash crop. Maize covers half of all Malawi's farmland, despite relatively good conditions for growing a wider basket of commodities. This is in part a reflection of government policy that has long prioritized maize production for food security, often to the detriment of other policies intended to promote diversification, commercialization, and resilience across the sector.

Most earnings come from tobacco exports, with other cash crops providing much smaller but significant revenue. Malawi's farmers sell their output into supply chains that reach global consumers, but the lack of structured markets within the country keeps most farmers at arms' length from global buyers and lead firms.[243] Thus, the flows of knowledge, technical assistance, and improved technologies that lead firms often provide to farmers and suppliers to improve productivity and competitiveness along their value chain have been less than in other markets in the region. In fact, the average value-added per worker in Malawi's agriculture sector is less than half of the Sub-Saharan Africa average.[244]

Malawi's top 10 exports in 2019 were agricultural products, and all but one have become increasingly important to the country's export basket over the past 10 years (table 4.5). Small but significant steps have been taken to increase total value addition across the sector since the mid-2000s. Raw tobacco exports, for example, have fallen since 2010, as exporters have increased primary processing to reduce bulk and weight prior to transport out of the country. Exports of roasted coffee are another good example, becoming a million-dollar export industry in just a few years. Other rapidly growing exports include pigeon peas, dried legumes, sesame, nuts, groundnuts, and soybean seed. At the same time, global demand for some important exports—notably, tobacco, raw cane sugar, and common peas—has been falling since 2015, emphasizing the need for continued diversification to respond to the market.

Malawi's agribusiness sector is confronting the uncertainty of the COVID-19 crisis.

At the time of writing, Malawi's agribusiness supply chains had proven resilient to the initial impacts of the pandemic. Trade disruptions and delays have not created any significant shortages of critical inputs, including imported fertilizer. The past harvest season was strong, and forecasts point to another good crop in fall 2021. Domestic food supplies and prices have been mostly stable, but these will be important to monitor closely as the pandemic stretches on. A gradual increase in prices in October 2020 was evidence of the turn to markets for purchases as farming households exhausted their own food supplies. Many of Malawi's farmers are net food consumers—even those that grow maize purchase substantial amounts during the lean season.[245]

TABLE 4.5 MALAWI'S TOP 10 EXPORTS BY VALUE, US$ MILLIONS

Rank	Product	Value of exports, by year (millions, US$)					Share of total exports, by value, 2019	Share of total exports, by value, 2010–2019
		2015	2016	2017	2018	2019		
	All products	**1,106.6**	**1,035.0**	**889.1**	**879.8**	**912.9**	**100.0%**	**100.0%**
1	Tobacco (stemmed and stripped)	460.9	444.5	435.5	465.1	462.8	50.7%	39.1%
2	Raw cane sugar	90.2	81.7	33.4	34.1	84.2	9.2%	3.6%
3	Black tea	60.0	67.0	70.9	87.2	79.8	8.7%	6.7%
4	Groundnuts (shelled)	9.127	9.5	18.5	13.8	39.5	4.3%	1.1%
5	Tobacco (unstemmed or unstripped)	58.0	93.9	88.8	23.6	30.9	3.4%	10.6%
6	Fresh or dried macadamia nuts, (shelled)	16.1	14.5	13.0	24.2	26.4	2.9%	0.9%
7	Dried, shelled peas	56.0	32.1	13.6	11.1	24.2	2.7%	2.0%
8	Oilcake and other solid residues	14.2	3.8	61.9	30.2	21.7	2.4%	1.2%
9	Soya bean seed, for sowing	5.0	7.0	16.6	20.1	14.8	1.6%	0.6%
10	Dried, shelled pigeon peas	0	0.8	0.1	2.6	7.6	0.8%	0.1%

Sources: ITC Trade Map, UN COMTRADE
Note: HS = harmonized system.

The coronavirus crisis has created both unemployment and uncertainty about future income streams. As of September 2020, demand for farm labor had dropped and job losses were pronounced in agro-processing.[246] In one early survey, nearly two-thirds of farmers said they planned to sell less to markets to ensure their own food security. Such shifts in upstream production and sales could have major effects on downstream traders, processors, manufacturers, and related service providers.[247] More important, these trends signal worrying implications for food security (box 4.1).

The global economic slowdown dampened demand for some of Malawi's most important exports in 2020, with implications for 2021 still unclear. Despite global agriculture commodity prices remaining broadly stable and the fact that agricultural commodities tend to be less sensitive to economic downturns than industrial commodities such as oil,[248] some of Malawi's most important crops have been seeing weaker external demand. Most critically, tobacco auction revenue fell roughly 31 percent in 2020 compared with 2019.[249] Early signs from auctions in 2021 suggest this trend may continue.

BOX 4.1 PREVALENCE OF FOOD INSECURITY EXPECTED TO INCREASE BECAUSE OF EFFECTS OF COVID-19

The number of food-insecure households in Malawi was rising as of mid-December 2020. Food is available on the market, but the lack of recent income and shortage of cash are problems, according to the most recent food security monitoring surveys and various media reports.[a] The upcoming lean season and the continued evolution of the coronavirus crisis are likely to aggravate food insecurity across the country. The 2020/2021 Malawi Vulnerability Assessment Committee estimates that 2.62 million people, nearly 15 percent of the nation's population, will face acute food insecurity between October 2020 and March 2021. This is an increase of more than 800,000 people from the year prior. Individuals and families could face anywhere between two to five months of food insecurity.[b] The government had announced an emergency cash transfer program to help its citizens meet these needs, initially intended to run May through December 2020, although funds were not disbursed until March 2021.[c]

Source: a. United Nations Office for the Coordination of Humanitarian Affairs, World Food Programme, Relief Web (2020)[250]; b. Reuters (2020)[251]; c. Mwale (2021)[252]

Public-private dialogue will therefore be critical to effectively identify, develop, and coordinate responses to the effects of the crisis. Even before the pandemic, Malawi needed a more productive, more resilient, more outward-oriented and commercialized agricultural sector. The government will need to focus on delivering promised relief measures while also keeping an eye on the future, articulating a policy platform that will put the country's agribusiness sector on a path to recovery, resilience, and long-term growth.

State of the Private Sector in Agribusiness

Stark dichotomies between formal and informal players characterize Malawi's agribusiness sector.

For most Malawians, crop production is a necessity, not a commercial activity. Smallholder farmers account for over 80 percent of agricultural production, but very few are market oriented. More than 90 percent of farmers grow maize, for example, but just 10 percent sell it in markets.[253] Fewer than one in five belong to a functional farmer organization. They farm on mostly small and fragmented plots, with limited and often unclear rights to the land. Tenure for most land is determined through customary systems[254] and community ownership, which reduces the incentive to invest in the land, keeping productivity and yields low.

Women play a critical role on these small farms. Women constitute nearly three-quarters of full-time farmers and produce more than 80 percent of all subsistence crops. They manage this despite political and cultural factors that greatly limit their ability to own land, access finance, and obtain other necessary inputs to increase productivity. Less than one-third of agricultural landholdings are owned by women.[255] If the government were able to level the playing field for women in agriculture, analysis suggests more than a quarter of a million Malawians could be lifted out of poverty.[256]

Prior to the pandemic, an emerging class of urban investors had been driving the creation of more medium-size farms. These urban-based professionals, entrepreneurs, and civil servants have helped increase the number of farms between 5 and 25 hectares to account for roughly a quarter of all land under production.[257] This infusion of investment at scale, if maintained, could have significant and lasting effects on productivity and commercialization along value chains. The impact of the pandemic on these investors and their commitment to farming should be closely monitored.

However, Malawi's large estates[258] generate the lion's share of revenue from exports of cash crops—mainly producing tobacco, tea, and sugar. These estates cover a quarter of all arable land. Most are run by large multinational firms, and they contribute roughly 80 percent of the country's export earnings each year and around 30 percent of agriculture's contribution to GDP. Many of these multinationals operate out-grower schemes that contract nearby smallholders to produce the same products and then aggregate the output for export. Yet not all estates are being used productively. More than 70 percent of leases for these estates have expired and not been renewed, although production continues to various extents on this land.[259] According to remote-sensing imagery in 2017, only 42 percent of estate land was being used to grow crops, and less than 20 percent of estates had crops growing on more than two-thirds of their land.

Off the farm, crop production creates jobs and incomes for a wide range of input suppliers, transporters, agro-processors, domestic food manufacturers, and other related service providers. The majority of these are informal middlemen and micro enterprises. Out of a total of 1.1 million businesses classified as MSMEs in the country, an estimated 188,000 are in agriculture and 15,000 in agro-processing. Most of the 42,000 manufacturing MSMEs rely on agricultural inputs or produce food products. A few medium- and large-sized agro-processors and food and beverage manufacturers do play an important role in the market as buyers and specialize in producing final goods for the domestic market. Very few of these firms export, or export only a few products, struggling to compete in regional and global markets. Considering the entirety of agribusiness and its value chains in Malawi, no other sector presents the same potential to meet the country's daunting challenge of job creation if growth and investment were to be better facilitated through enabling initiatives and policy reforms.

Role of the state in agribusiness

Government input subsidies are central to the policy agenda and highly politicized.

The government maintains a strong presence at multiple nodes of the agriculture value chain, ostensibly to enhance food security and to help poor farmers by addressing market failures. Without a large commercial base and with most farmers trapped in poverty, the market in Malawi is small and very thin. Thus, the government acts as both a major purchaser and seller of agricultural goods and services, often making it the largest customer of many private sector input suppliers. The government implements multiple programs through a network of parastatals, namely: Agricultural Development and Marketing Corporation (ADMARC), the National Food Reserve Agency (NFRA), the Smallholder Farmers' Fertilizer Revolving Fund of Malawi, and the Tobacco Commission.

The central pillar of Malawi's agricultural development and social protection strategies had long been the Farm Input Subsidy Programme (FISP), which has now been discontinued by the new administration and replaced with the larger Affordable Input Program (AIP). The FISP had provided smallholder farmers with coupons to subsidize the cost of fertilizer and seed, mostly for maize production but also rice, sorghum, and legumes. The FISP had been credited with essentially doubling the country's maize

production since its introduction in 2005, primarily by helping to triple the use of fertilizer. In 2019, the program supported roughly 900,000 rural households, accounting for 20 percent of the Ministry of Agriculture, Irrigation, and Water Development's budget.

The AIP launched at the start of the main planting season in October 2020, massively scaling up government subsidy support, making it available to over 3.7 million smallholder farmers. The program aims to further boost maize production to assure national and household food self-sufficiency while also creating a marketable surplus. Keeping in line with the FISP, AIP inputs will continue to be retailed by both private sector and public sector enterprises, with ADMARC and the Smallholder Farmers' Fertilizer Revolving Fund of Malawi distributing 20 percent of products. An e-voucher system has been developed that will only require the farmers to carry their national identification to redeem their inputs.[260]

SOEs are heavily involved in buying and selling commodities and inputs.

The new government has also pledged to improve the performance of ADMARC, the most important state actor in the country's agribusiness markets. Initially established to help smallholder farmers increase the volume and quality of agricultural production, and promote exports to new foreign markets, ADMARC has grown to take on a complex array of roles in the structure of the market. ADMARC is both a supplier of agricultural inputs and extension services while also a regulator of market prices and a buyer of key commodities for strategic reserves.

In an effort to remove some of these conflicts of interest and increase transparency, the previous government announced in May 2020 that ADMARC would be restructured by splitting its functions into ADMARC Social and ADMARC Commercial.[261] The announcement furthers one of the key recommendations of a functional review of ADMARC, carried out in 2018. The review outlined a series of actions to improve performance and reduce market distortions, which have been shown to negatively affect the smallholder farmers the organization was set up to help.[262] Few of these recommendations have been acted upon or effectively implemented. How the new government may choose to carry them out remains to be seen.

Much like ADMARC, the NFRA also plays an important role in the market by purchasing crops to maintain the Strategic Grain Reserve (SGR), using the reserve to help stabilize grain prices and overseeing grain imports and exports. The NFRA buys grain from farmers and traders and uses NFRA silos—the only silos in the country—to store the national SGR. These reserves are intended to be used as a tool to respond to food insecurity and unpredictable shocks by releasing grain during emergencies. The government has invested heavily in this infrastructure. The NFRA silo complex at Kanengo, for example, is one of the largest in Africa.

Beyond these two institutional buyers, commodities in Malawi are mostly traded through informal channels, despite the government's establishing commodity exchanges and warehouse receipt systems (WRSs).[263] These systems were established to allow farmers and traders to store their products until market prices are higher, helping to increase incomes, while also allowing storage receipts to be used as collateral to access needed financing to purchase vital goods and inputs for next season's crop. Malawi is one of only two countries in Africa to have two commodity exchanges, along with two WRSs plus a parallel system of direct collateral financing by commercial banks.[264] Yet, very little volume passes through these systems.

Sector-Specific Constraints to Growth and Investment in Agribusiness

Operating out of a landlocked, low-income country with poor infrastructure, agribusiness in Malawi faces obvious challenges to growth. Many of these challenges drag on all sectors of the economy (as detailed in section 3), including poor governance of SOEs in the sector, difficulty in accessing finance for MSMEs, and limited access to energy. Some of these issues are especially acute for agribusiness, such as the need for improved transport infrastructure in rural areas, land tenure security, and the mainstreaming of risk mitigation instruments, like crop insurance.

But the success of some firms in capturing global market share, in products like tobacco and macadamia, show these challenges can be overcome and Malawi's products can be competitive in global markets. For agribusiness to become a larger engine of growth and economic transformation, the government will need to continue make progress on alleviating these well-documented cross-cutting constraints, while also taking into account sector- and product-specific issues, some of the most important of which are detailed below.

Dominant role of the state, riddled with inefficiency

Government intervention in the market has not succeeded in transforming and commercializing agricultural value chains. Well-intentioned reforms and programs, often donor supported, have struggled with implementation.[265] The policy and regulatory regime has been historically weakened by nontransparent, ad hoc interventions that fail to address inconsistencies between the practices of different regulatory bodies. The current administration has only recently begun to ease some hard-line approaches, especially on export bans and price controls. This is not to say government intervention in the market is unhelpful in all cases, but the lack of transparency, the overt focus on ensuring voter support among farmers, and the protection of the interests of politically connected firms must be addressed in a serious manner if the sector is to become a viable engine of growth.

Uncertainty about government import and export controls, including when and how the amended Control of Goods Act (COGA) would come into full effect, has also been a deterrent to trade and investment. The original act had provided discretionary powers to the Minister of Trade to control the import and export of goods into and out of Malawi, as well as their distribution, disposal, sale, and purchase, based on an unclear definition of the public good. The act was then used to implement various export controls, whose ad hoc implementation created unpredictability in the market—most notably an export ban on maize and some maize-derived products from 2017 to early 2021.

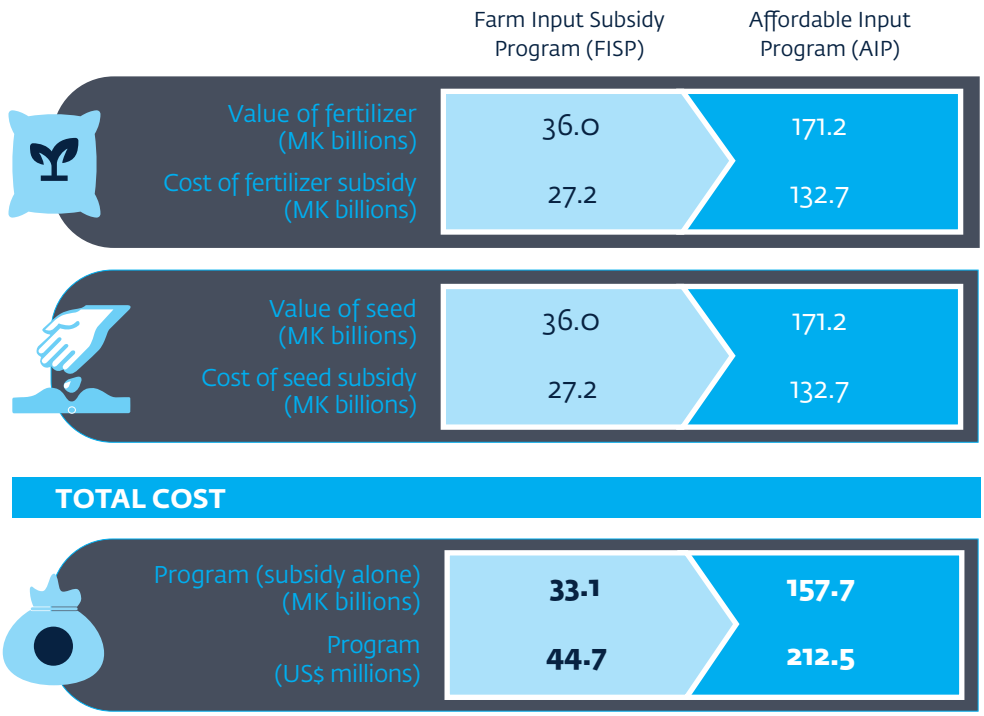
Inconsistency in government efforts to stabilize prices and maintain strategic reserves has also created uncertainty. ADMARC's price setting has too often been nontransparent, and the timing of purchases unpredictable. The government itself admitted the SGR's operations have lacked clear guidelines for years, creating "uncertainties which undermined private investments in storage, and the use of risk management and financing instruments such as warehouse receipts and commodity exchanges."[266] Poor implementation and weak oversight of these programs have drained government coffers while failing to create long-term resilience in the sector.[267]

Public financial management of agricultural support programs has been poor.

Public financial and investment management in the agriculture sector will need to be shored up to avoid serious shortfalls in the aftermath of the pandemic. Capacity in critical institutions remains weak. ADMARC has chronically lacked the funding it has needed during harvest periods to defend the minimum price of maize, resulting in numerous government bailouts. In FY2017/18, economic assistance to ADMARC cost the economy 1 percent of GDP in unplanned spending. The Ministry of Agriculture, Irrigation and Water Development has also struggled to control spending, with the FISP having been a major source of budget overruns in recent years.

One of the major concerns over the new AIP is the increased program cost and the government's departure from past reforms that have proved effective in reining in costs. A series of reforms to the FISP beginning in 2014 had helped to better target farmers in need and set fixed coupon values requiring the farmer to pay any difference in market price. This helped lower costs for the government while also allowing for market price competition. The AIP has a budget of more than US$212 million (MK160 billion), representing 45 percent of the total agriculture sector budget and 7 percent of the FY2020/21 national budget proposed in September 2020. This is a tremendous increase from the FISP budget, which had been brought down to roughly US$46.5 million (MK35 billion) in FY2019/20 (figure 4.11).

FIGURE 4.11 COMPARISON OF AFFORDABLE INPUT PROGRAM (AIP) AND FARM INPUT SUBSIDY PROGRAM (FISP)



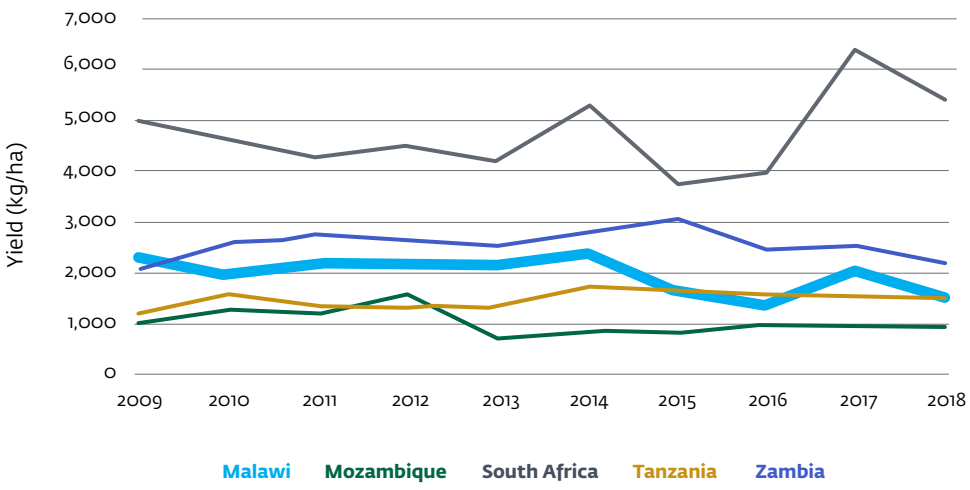
Source: World Bank Group staff calculations
Note: MK = Malawi Kwacha.

Implementation of the AIP will challenge the government to reduce leakages and increase transparency to ensure the program does not become another mechanism that only generates high rents for political and business elites. The market for farm inputs is thin in Malawi, and fertilizer companies and maize-traders stand to benefit greatly. In the past, those with close relationships to political leadership benefited from such programs.[268] The AIP will require the participation of a broader set of private sector players, simply due to the program's unprecedented scale. Success will depend on transparent contracting and enforcement, holding both suppliers and the government accountable for timely delivery of high-quality inputs and timely fulfillment of payments.

Continued focus on maize input subsidies reduces fiscal space to invest in other important sector priorities, such as irrigation and extension services.

With crop yields highly dependent on precipitation, input subsidies have experienced diminishing returns. Yields have largely stagnated over the last decade, despite the FISP (figure 4.12). The program accounted for over 40 percent of government spending on social protection between 2011 and 2019, yet more than half of Malawians continued to face severe food insecurity.[269] Analysis has shown that shifting some of the input subsidy expenditures into other social protection programs would be more effective in improving food security, while allocating a larger share of resources to investment in irrigation infrastructure and extension services to improve climate-smart agricultural practices would help to boost resilience to shocks.[270]

FIGURE 4.12 MAIZE YIELD, SELECT COUNTRIES, (KG/HA)



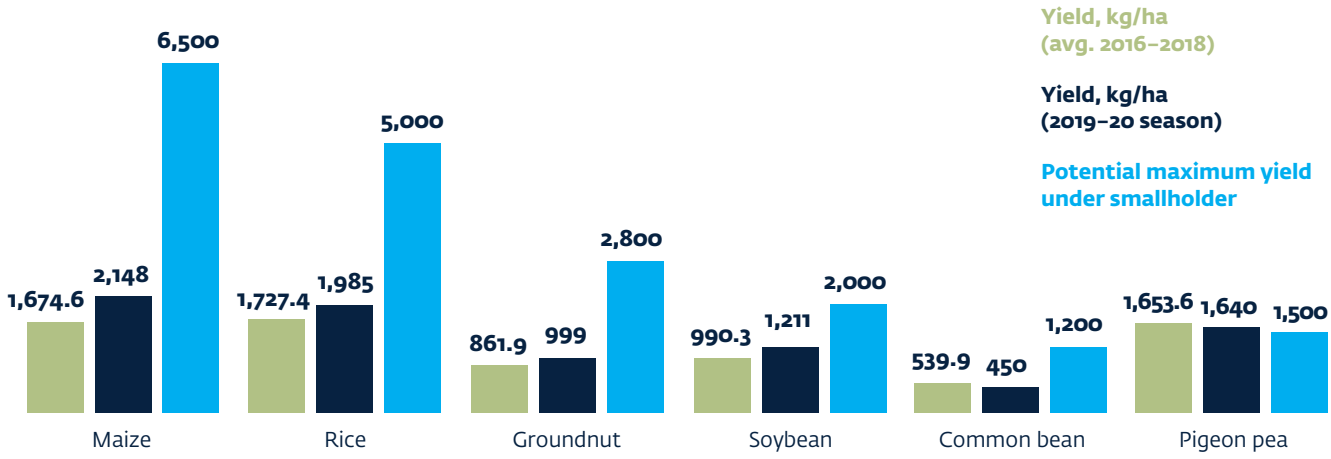
Source: Food and Agriculture Organization of the United Nations, FAOSTAT database.
Note: ha = hectare, kg = kilogram.

The continued focus on increasing maize production also detracts from efforts to diversify agricultural production. The country already suffers from an overdependence on maize, which drives soil degradation and increases vulnerability to climate shocks and pests, like the fall army worm. Intercropping and diversification help increase resilience to shocks. Unlike the FISP, the AIP does not provide coupons for legumes. Sorghum and rice are included in the program, but experience has shown they are not redeemed by farmers, who prefer maize as part of the cereal coupon.

Lack of access to improved inputs

The challenges to improving agricultural productivity are both structural and behavioral. Only 15 percent of Malawians live in urban areas, and this distribution has changed very little in recent years. This lack of urbanization, combined with the country's growing population, means rural communities are growing while the land most families have access to farm is not. Smaller plots encourage more intensive farming, but farmers lack the finance to invest in machinery and infrastructure. Reliance on traditional and poor agronomic practices depletes the soil, making it increasingly difficult for farmers to produce a high-quality crop, illustrated by the wide gaps between current and potential production (figure 4.13).

FIGURE 4.13 CURRENT VERSUS POTENTIAL YIELD, SELECTED CROPS

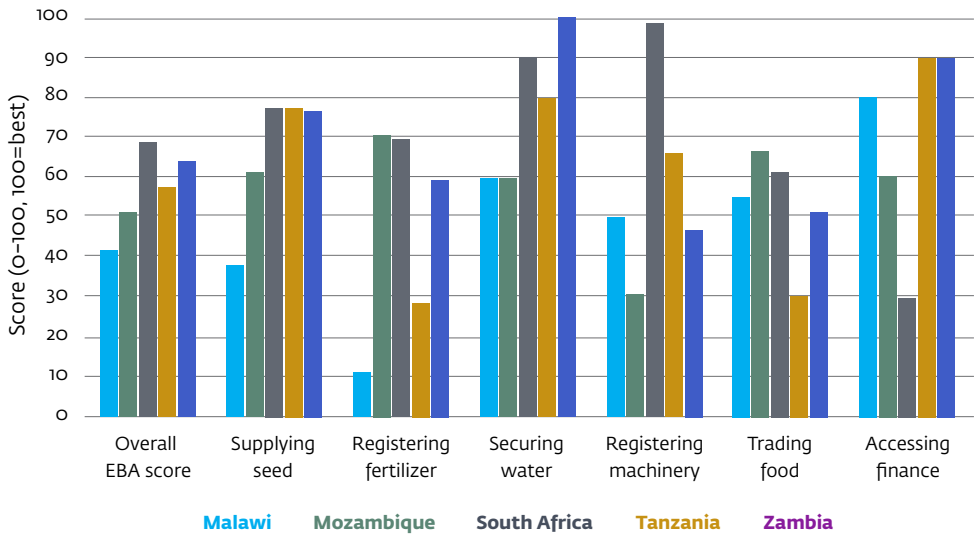


Source: Yield estimates have been calculated from the 2019/20 second-round agricultural production estimates, three-year average calculated from the FAOSTAT database (2020), and potential maximum yield estimated by International Food Policy Research Institute (2012).
Note: ha = hectare, kg = kilogram.

The government's continual efforts to boost productivity have not delivered results at scale and fall short when compared with regional peers. In assessing the enabling environment for agribusiness solely from the perspective of the country's policy frameworks, Malawi is the lowest-scoring country among neighboring countries (figure 4.14). Two areas directly related to productivity stand out: supplying seed and registering fertilizer. Delays in the finalization of Malawi's seed bill have thwarted access to improved seeds for farmers and stunted the development of the commercial seed sector. The current framework is more than 20 years old and has not encouraged investment in R&D of improved seed varieties for the specific conditions in the country. As a result, farmers rely on the continued use of low-yielding varieties. Meanwhile, poor regulation has allowed for a proliferation of low-quality and counterfeit seed on the market. A new policy was drafted in 2018 that would help by (a) creating a semiautonomous Seed Commission to regulate the seed industry; (b) adopting the COMESA and the SADC standards to promote regional harmonization in seed trade; and (c) increasing the government's role in regulating production and sale of seed by informal actors. Parliament has yet to pass the legislation as the bill is pending cabinet approval.

The legal and regulatory framework for fertilizer is also fragmented and out-of-date. Fertilizer production, importation, distribution, and trade remain regulated and controlled by multiple institutions, with significant coordination failures—as evidenced by some of the initial challenges of the AIP's fertilizer tendering and distribution processes. A National Fertilizer Policy was endorsed in 2018, but the cabinet has not yet approved necessary regulations and guidance for implementation. The new policy aims to improve institutional coordination while also improving extension service delivery (table 4.6). This would include increasing soil testing to better determine the best fertilizer blends for different geographic areas and expanding extension services to provide farmers with this information.

FIGURE 4.14 ENABLING THE BUSINESS OF AGRICULTURE (EBA) SCORES FOR MALAWI AND SELECTED COUNTRIES



Source: Based on World Bank Enabling Business of Agriculture data (2020).

TABLE 4.6 PROPORTION OF HOUSEHOLDS RECEIVING EXTENSION SERVICES DURING THE 2018/19 RAINY SEASON, BY SERVICE AND AGRICULTURAL ACTIVITY

Type of extension service (%)

13.9	11.5	9.3	7.8	7.5	6.4	5.8	5.6
Composting	New seed varieties	Fertilizer use	Irrigation	Pest control	General animal care	Animal disease/ vaccination	Pit planting

Type of activity (%)

5.5	4.8	4.7	4.5	4.4	3.1	2.9	2.2
Agro-forestry	Forestry	Growing/ selling tobacco	Access to credit	Marketing/ crop sales	Fishery production	Contract farming	Other

Source: Malawi Government (2020)[271]

Lack of trust in commodity exchanges and warehouse receipt systems

Despite strong government and donor support, Malawi's commodity exchanges and WRSs have generally failed to improve incomes or access to finance. The programs have struggled to build trust among lenders and borrowers. Most commercial banks stopped providing financing to farmers based on warehouse receipts as collateral after suffering significant losses from defaults in a market crash in 2016 (box 4.2). Farmers associations and small traders point to delays in sales, high fees, and costly withholding tax as reasons for not using the systems more.[272] Meanwhile, processors, feed manufacturers, and large traders are discouraged by the relatively limited volumes available for purchase on the exchanges, frequent defaults on spot contracts, and the cost of hiring staff to manage collateral. Today, neither the Agricultural Commodity Exchange, largely supported by donors, nor the Auction Holdings Commodity Exchange, largely supported by government, is financially viable.

BOX 4.2 TRUST IN WAREHOUSE RECEIPT SYSTEMS

One of the major reasons for the struggles of Malawi's warehouse receipt systems traces back to the second half of 2016, when India introduced a ban on pigeon pea imports. Prior to this, pigeon peas had been a large and lucrative export for Malawi. After the ban, prices fell from roughly MK1,000/kg (>US$1) to as low as MK100/kg, leaving stored peas essentially unsellable. Commercial banks that had accepted these beans as collateral suddenly had to deal with a spike in defaults, causing most banks to cease offering financing on warehouse receipts. Trade volumes through the exchanges plummeted.

Source: Flora J. Nankhuni and Nathalie M. Me-Nsope (2018)[273]
Note: kg = kilogram, MK = Malawi kwacha.

The previous government had sought to support the commodity exchanges and WRS by proposing new export regulations for selected agricultural commodities under COGA, referred to collectively as the "Export Mandate". Currently, only exports of tea and tobacco are regulated through a similar certification scheme. The proposed new regulations would expand these controls to any exporter of Malawi's other major agricultural commodities, including soya, groundnuts, cottonseeds, sunflower, pigeon peas, beans, and sesame. Exporters would be required to submit documentation to one of the two commodity exchanges for verification of pricing and an approved certification for export. This is intended to structure the market, formalize exports, and allow the government to better track repatriated foreign currency. The implementation of such measures would need to be consistent with the spirit and provisions of the COGA.

Consultations with multiple public and private stakeholders for this diagnostic revealed serious concerns that, if adopted, the Export Mandate could be a significant step backward in terms of lowering trade costs and simplifying export procedures. Past performance and current capacity indicate there are legitimate concerns over the capabilities of the exchanges to process these requests in an efficient, timely manner. These organizations would be assuming a quasi-state regulatory role. If indeed the system is not rolled out in an efficient manner, the mandate may actually encourage more informal trade, as smaller traders seek to avoid additional costs and delays, or hurt farmgate prices, if traders pass costs on to farmers.

Limited resilience to climate change

Agricultural production in Malawi is extremely vulnerable to climate change. Reliance on rain-fed agriculture leaves production vulnerable to increasingly irregular precipitation patterns, more frequent natural disasters, and new pest and disease outbreaks being driven by climate change. Drought and flooding provide the most immediate near-term risk. Yet most farmers have little capacity to adopt climate-smart practices or invest in the necessary infrastructure and technology, including irrigation systems, to adapt to these changes.

The impacts of climate change are already being felt by farmers in Malawi. When the country was hit by drought and floods in 2015, maize production fell 30 percent. When droughts continued into 2016, production fell a further 12 percent—resulting in more than a third of the country needing emergency food aid.[274] A 2018 survey of farmers found that 81 percent of respondents believed weather conditions for growing crops were worsening.[275] Over the next few years, extreme climatic events may further reduce agricultural yields and increase damage to critical infrastructure, like roads.[276]

Failing to mitigate climate risks and adapt to new climatic conditions poses grave long-term risks to the sector. An analysis of more than 30 climate projection models finds robust agreement on rising temperatures, with a future of increasingly frequent and intense heatwaves.[277] The models suggest the number of days above 30° C in Malawi may raise from around 10 currently to as many as 100 per year by 2040.[278] This could surpass the heat stress tolerance of maize varieties in the country—a nightmare scenario for farmers in Malawi. Effects on rainfall are less certain, but the models agree there will likely be fewer rainy days, but more intense rainstorms—meaning a higher overall likelihood of droughts and floods.

Drivers of Change

Investments in diversification by lead firms

In the past few years, Malawi's largest agribusinesses have been implementing long-term strategies to diversify their revenue streams. Lead firms—especially those involved in tobacco, tea, and sugar—have been investing in macadamia, legumes, and groundnuts and developing improved seed varieties to commercialize (box 4.3). These companies have well-established relationships with tens of thousands of farmers, many through contract farming, and the market power as large buyers to drive diversification at scale. According to interviews with firms conducted for this diagnostic, further investments are planned to scale production and expand into value-added activities in the near future. Meanwhile, smallholder tobacco farmers are increasingly willing to grow new crops, dispirited by volatile producer prices and rising production costs.[279] Initial indications of a decline in FDI, lower development aid assistance, and tighter capital markets anticipate investment in Malawi, and in agribusiness in particular, is more likely to come from incumbents than from an influx of new foreign investors.

BOX 4.3 TOBACCO FIRMS INVESTING IN THE FUTURE OF AGRICULTURE IN MALAWI

The largest multinational tobacco firms operating in Malawi have been investing in diversification of their production systems with an eye to the future. One of the leaders in this area, Pyxus Agriculture Limited, invested US$11 million in diversification activities in Malawi in its first operational year (2018) and had announced plans to inject an additional US$50 million (about MK37 billion) over the next five years, although these plans may change in light of the coronavirus pandemic.

A subsidiary of Alliance One International—one of the world's largest tobacco leaf buying companies—Pyxus was established to spearhead the parent company's diversification efforts into other high-value crops. In Malawi, the firm is currently working with the USAID-funded Feed the Future program to support farmers in switching from tobacco to new and fast-maturing soybean varieties. In other initiatives, Pyxus is focusing on seed development and multiplication, scaling up production of groundnuts and sunflower, and has plans to expand into other crops, including industrial hemp.

Sources: World Bank, Pyxus Agriculture Ltd Malawi.
Note: MK = Malawi Kwacha; USAID = United States Agency for International Development.

Improving regional connectivity

Ongoing projects to improve trade corridors and trade facilitation should help Malawi's agribusinesses become more competitive regionally and globally by lowering trade costs. Investments in hard and soft infrastructure at key border crossings and along the Nacala Corridor, as detailed in section 4.2, should reduce delays at borders and speed access to markets. More cost-competitive rail services would be particularly beneficial to exporters of bulk commodities. At the same time, lower trade costs should also make important imports less expensive, such as fertilizer, which could lead to increased productivity. Improving connectivity to regional markets could also create new trade and merger and acquisition opportunities for Malawi's private sector.

Improving governance

The new administration has a tremendous opportunity through implementation of ADMARC reforms to facilitate, rather than crowd out, private investment in agribusiness. Installing more transparent, market-oriented principles in its operations would help improve the business environment. The current lack of information about the split of ADMARC functions creates uncertainty in the markets and additional disincentives for private sector development. The government could make clear its intention to follow through on reforms, making the agency more efficient, less politicized, and less distortive for the sector.

The entry into force of the amended COGA should help to improve predictability of trade. The removal of the export ban on maize in early 2021, following a review under COGA's new provisions, showed the government's willingness to break from business-as-usual, although a reversal soon followed. The act lays out requirements that the government will need to meet to legally justify any intervention in trade. One of these requirements is dialogue with the private sector, which, if carried out in good faith, should help provide more predictability, certainty, and transparency when any such decision is made.[280]

Digital response to the COVID-19 pandemic

Digital solutions have been at the forefront of the global COVID-19 response and have the potential for tremendous impact in Malawi. As discussed in section 4.2, a desire to limit physical interaction in transactions while also ensuring business continuity has driven the world's leading agribusiness players to speed up plans to digitize more of their operations.[281] Table 4.7 details how digital agriculture technologies (DATs) are already being used across Africa.[282] If the government prioritizes the expansion of digital infrastructure and connectivity, many of these DATs are cost-effective and market-ready, even in low-income and low-capacity countries like Malawi. As global supply chains continue to adjust to the pandemic and develop more resilience, having more and better-connected agribusinesses in Malawi could help to attract new buyers.

If the response to the pandemic can drive improvements in digital connectivity, Malawi could see relatively rapid improvements in agricultural productivity and competitiveness. The range of applications is wide, from digital services developed to help provide information to individual farmers, to logistics platforms that help large multinational firms manage thousands of complex transactions across their supplier networks in real-time. As global supply chains continue to adjust to the pandemic and develop more resilience, having more and better-connected agribusinesses in Malawi could help to attract new buyers.

TABLE 4.7 AGRICULTURAL CHALLENGES AND RELEVANT EXAMPLES OF DIGITAL AGRICULTURAL TECHNOLOGIES IN AFRICA

Challenge framework	Agricultural challenges	Standard agricultural solutions	DAT solutions	Illustrative examples and DAT businesses
Agricultural productivity	Insufficient advisory and climate-smart services	Producer organizations, extension agents, radio, TV	Agricultural extension and advisory services delivered through videos and platforms linking experts	Digital Green in Ethiopia; Precision Agriculture for Development in Kenya
	Limited access to inputs (tractors) for land preparation	Manual, animal-aided, mechanized	Digitally enabled tractor-hiring services	Hello Tractor in Nigeria
	No systematic pest and disease management	Observe and respond	Real-time alert systems	Waterwatch Cooperative in Kenya
Market links	Poor market access	Farmer cooperatives, intermediaries	Digital platforms for finding buyers and linking buyers and sellers	Tulaa in Kenya; Maano in Zambia; Farmshine in Kenya; Zowasel in NIgeria
Farmer financial inclusion	Insufficient or unfair access to credit and financial products	Moneylenders, family and friends	Platforms for input credit, e-wallets, and insurance products	Agri-wallet in Kenya
Data analytics and agricultural intelligence	No or inadequate access to data for informed decision-making	Intuition based on observation, no solution	Portable soil testers, satellite images, remote sensing	Agrocares, based in the Netherlands and operating in Kenya; Ujuuzikilimo in Kenya
Energy for agriculture	Poor irrigation infrastructure	Rainfed, manual, gravity-aided	Solar-powered irrigation pumps	SunCulture in Kenya

Source: Jeehye Kim et al. (2020)[283]
Note: DAT = digital agriculture technology.

Adapting to the impacts of climate change and investing in climate-smart agriculture

For agribusiness to remain viable in Malawi, the public and private sectors will need to scale up investment in climate change mitigation and adaptation. Malawi already has a relatively strong policy environment for climate change adaptation and resilience, including commitments to unconditional actions.[284] Implementation and coordination have struggled, in part due to insufficient financial resources, with most climate-smart agriculture (CSA) interventions being funded by donors and very little by the national budget. COVID-19 has reinforced the need for more investment in resilience, and allocation of resources in recovery should reflect this. The government needs to mainstream climate disaster risk and adaptation, such as improved early warning systems, into government planning and budget allocations and seek to better leverage available international climate finance schemes.[285] Government can also deepen engagement with the private sector through a serious commitment to public-private dialogue and encourage lead firms to strengthen cooperation with suppliers, find effective and affordable ways to increase the use of improved practices and technologies, and share more information on building resilience along the value chain.

Potential Opportunities

Strengthen value chains of competitive products

Despite a challenging enabling environment, limited connectivity, and high transportation costs, some of Malawi's agrifood exports are globally competitive and reach high-value markets. Raw cane sugar, tea, macadamia, dried beans, and dried peas have found strong demand on overseas markets. Malawi's agrifood products reach Belgium, China, the Netherlands, the Russian Federation, and the United States. Regionally, the Arab Republic of Egypt, Kenya, and South Africa are also important destination markets. In assessing areas where Malawi's lead firms are currently investing and noting some of the latest drivers in the market, the following section highlights value chains where private investment could be leveraged and further incentivized in the next few years.

Soybeans and soy-derived products

Malawi is an established, albeit small, regional exporter of soybeans, with growth potential. Domestic and regional demand for soybeans is growing, driven mainly by their use in producing cooking oil and oilcake. The latter is a primary ingredient in animal feed and has a wide range of other industrial uses. Malawi is a net importer of cooking oil, with domestic producers telling the World Bank Group that they cannot procure enough soybeans from the domestic market to meet demand. Meanwhile, as incomes have risen across the region, demand for protein in the diet has also grown. More countries are seeking to develop domestic poultry and fish farming industries, many of which rely on importing oilcake for use in feed production. In 2019, imports of soybeans, oilcake, and soybean cooking oil each exceeded over $1 billion across the continent.

To seize this opportunity, the country needs to significantly increase productivity. Total production in Malawi has grown—in part due to the inclusion of soya seeds in the FISP—but yields have remained stagnant, often failing to produce half of what can reasonably be expected.[287] Although it is the fifth-largest producer in Africa, Malawi is falling behind regional competitors who have invested heavily in improving productivity in recent years. Soybeans from Zambia, where yields are roughly double those in Malawi, are often imported informally across the border and found in local markets at cheaper prices than those grown domestically. If Malawi does not fix the chronic production impediments and reduce production costs, the country's soy sector could struggle to compete with cheaper imports from more productive neighbors in coming years.

Groundnuts

Malawi has a strong track record of groundnut exports, especially within the region, and scope to increase its market share. Unlike maize and soybeans, groundnuts have been less prone to government restrictions on exports, making trade more predictable. Malawi increased the value of exports by 36 percent from 2015 to 2019, driven mostly by increased trade with Kenya and Tanzania. Globally, demand for groundnuts has also been growing steadily, with the value of imports increasing nearly 75 percent since 2010. In 2019, Malawi was able to crack into the Indonesian market, the world's second-largest importer.

While regional exports have been profitable, seizing market potential will require more investment in higher quality inputs and better postharvest handling and storage. The high aflatoxin levels of Malawi's nuts generally do not meet the technical standards required to export to European and other international markets where they could fetch higher prices. This could be overcome with investment in farmer training and wider use of Aflasafe.[288] As with other crops, farmers tend to rely on recycled seed and lack irrigation, which reduces overall productivity. The government has not approved the use of new seed varieties, which if approved could simultaneously make the country's groundnut farmers more productive and increase export demand for these more popular varieties. USAID estimates groundnut farmers could triple their incomes with some of these regulatory and behavioral changes. Considering groundnuts are grown overwhelmingly by smallholder farmers, particularly women, more-structured markets and investment in formalized exports would have significant antipoverty impacts.[289]

Macadamia

Malawi's comparative advantages in macadamia production have been attracting significant investment, with strong potential for additional growth.[290] The quality of Malawi macadamia is considered second only to Australia's and comparable to South Africa's, the world's largest exporter. Harvest season comes two months earlier in Malawi than in other major producing regions, and production costs are lower than in South Africa and Kenya (another major producer) because of lower wages. Postharvest processing and storage is generally managed by large vertically integrated estates, and logistics requirements are less challenging for exporters to meet than those of other more perishable commodities.

Macadamia exports have been a particularly notable bright spot for Malawi. Global demand has grown 10 percent year-on-year since 2015, with exports from Malawi growing 16 percent over that same time period. In 2019, Malawi was the world's fifth-largest exporter by value, capturing just over 4 percent of world market share. Firms operating out of Malawi have managed to plug into the global value chain, with two-thirds of their macadamias going to the world's biggest markets and largest buyers, particularly the United States, the Netherlands, and Japan, with the rest going to South Africa, where they are likely re-exported.

To further facilitate investment and scale production, farmers will need access to long-term financing and patient capital. Macadamia trees require roughly five years after planting to begin producing a significant crop. This limits the ability of smallholders to invest on their own. Most recent investments have been driven by large commercial firms, and through their outgrower networks. Further investments may be possible with rehabilitation of former estates and replanting exercises and the introduction of macadamia on suitable tracts of land in the central and northern regions. The trees are also well suited for afforestation efforts, an initiative the government must start to scale up.

Fruits and vegetables

Malawi's subtropical climate is ideal for producing a diverse array of fruits and vegetables, and investment has recently begun to develop these opportunities. Most notable is the recent PPP between the government's Green Belt Authority and Israeli-based Inosselia Commercial Limited to set up one of the region's largest horticulture greenhouses, targeting both domestic and export markets. This is a promising achievement for the Green Belt Authority, which has evolved from an initiative with serious shortcomings in its initial years.[291] Further investment in irrigation infrastructure and logistics services could expand opportunities to develop a value chain connecting neighboring districts.

The potential for developing fresh fruit and vegetable exports from Malawi is highly uncertain with the ongoing pandemic but still presents medium-term growth potential. High-value horticulture exports require sophisticated cold chain and quality-control services, with the highest-value produce often exported via air cargo in the belly hold of commercial flights. The Inosselia project, for example, is strategically located next to the capital's Kamuzu International Airport. But, as discussed in section 4.2, the pandemic has drastically reduced the number of flights in and out of Malawi. The hope is that air traffic will bounce back quickly as the pandemic comes under control, but this is highly uncertain.

Opportunities to invest in digital and climate-smart technologies

In the immediate future, most government and donor funding is likely to be directed toward COVID-19 relief programs—which offers opportunities to leverage these resources to put in place the foundations for resilience and future growth in agribusiness. Malawi's market for agricultural technologies and services will need to grow to respond to the many challenges the sector faces in improving productivity and sustainability. CGIAR estimates that Malawi needs to invest roughly US$55 million per district each year to effectively adapt their agricultural systems to climate change.[292] Investments in adaptation are often for public goods, requiring government to foot the bill, but many present opportunities for PPPs. In addition, given its low-income status, Malawi is eligible to access international climate financing programs designed to help fund exactly these types of projects—an opportunity not capitalized on to date.

Scaling up CSA will present opportunities for private sector players along the entire value chain. Malawi's current low use of inputs, poor quality of inputs on the market, and minimal adoption of CSA practices signals that farms could rapidly increase productivity and product quality with investment, improved inputs, modern technology, and training. Production and sale of improved seed varieties—including those engineered for higher yields; earlier maturation; and drought, pest, and disease resistance—is often the first opportunity mentioned by private actors, assuming the legal and regulatory framework are updated to become more enabling in the next few years. Water management and irrigation techniques and technologies, such as solar-powered drip irrigation systems, should also see increased demand. With only a small fraction of mostly sugar and rice production currently irrigated, and the impacts of climate change continuing to disrupt traditional weather patterns, successful efforts to diversify and scale production of other high-value crops will require significant investment in such systems. Ensuring that government- and donor-financed projects help facilitate such investments is critical. The Shire Valley Transformation Programme (box 4.4), for example, has been building bulk irrigation drainage infrastructure, creating the necessary backbone for further on-farm investments in irrigation and drainage, land leveling, and commercial farm development.[293]

BOX 4.4 MALAWI SHIRE VALLEY IRRIGATION PROGRAMME

The Shire Valley Transformation Programme is a massive US$235 million program to increase agricultural productivity and commercialization in the Shire Valley and to improve sustainable natural resource management. The program kicked off in 2018 and will run through 2031. By the end, it aims to irrigate more than 43,000 hectares of land by extracting water from the Shire River and conveying it by gravity through canals to irrigable areas. Improved water infrastructure is hoped to spur further investment in irrigation infrastructure and attract investment in large-scale commercial farming.

Sources: Government of Malawi, World Bank.

Recommendations

Earlier sections of this report provided actions to address cross-cutting issues that are equally as critical to support the private sector in agribusiness—recommendations to increase access to finance, deepen the domestic long-term finance market, strengthen entrepreneurship and human capital, improve trade facilitation, create an enabling environment for fintech and ecommerce, among others. Table 4.8 provides short-term sector-specific recommendations to support agribusiness through the ongoing crisis, and medium-term actions that will help the sector restructure, recover, and accelerate growth.

TABLE 4.8 RECOMMENDATIONS TO SUPPORT THE AGRIBUSINESS SECTOR

Short-term priorities
Focus on resilience and monitor food security. • Collaborate with development partners and United Nations technical agencies on replenishment needs and gaps in funding for SGR. • Ensure funding for continued operation of market surveillance tools and the Emergency Food Security Surveillance System to monitor food prices and availability, and, if disruptions occur, develop risk-sharing schemes for input purchases and reallocate resources to support distribution. • Collaborate with development partners to ensure food price and availability data is digitized and shared across platforms and organizations in real time.
Recalibrate extension services in the immediate term to focus on health and safety, and pursue opportunities to modernize extension services through digital solutions. • Design alternative mechanisms to provide extension support and guidance on COVID-19 preventive practices to farmers through toll-free lines, SMS and social media, and so forth.
Commit to increased transparency and more public-private dialogue. • Develop a series of public-private roundtables to discuss the implementation of AIP, COGA, and the proposed Export Mandate regulations to increase awareness, foster consensus about their objectives, and develop joint solutions to improve implementation in a way that does not create new market distortions. • Communicate clear plans on crop purchasing and SGR replenishment in advance of government procurement.

Medium-term restructuring and recovery recommendations

Advance backlogged legislation.

- Enact the Seed Bill and Fertilizer Bill and gazette new regulations, providing operational guidelines to support timely implementation.
- Harmonize seed regulation with the COMESA/SADC framework and consider strategic reallocation of subsidies toward distribution of more seasonally appropriate drought and flood-resistant seeds.

Clarify objectives and adjust medium-term strategy of AIP.

- Reinstitute improved targeting of beneficiaries, reintroduce the legume component, and remove fixed price controls to reestablish private competition in the market.
- Develop and publicize a sustainable financial strategy in the near term and a clear exit strategy from the subsidy program in the long term.
- Develop and publicize a clear roadmap for farmers to maximize the program for productivity, which could include the introduction of systems of graduated payments that reward farmers for better performance and conditional funding based on improved environmental practices and the uptake of climate-smart agronomic practices.
- Reallocate funding from the AIP, over time, into more effective social safety net instruments, such as the SCTP, linking less productive farmers to more effective social protection programs.

Restructure ADMARC into a not-for-profit statutory corporation (social functions) and a public liability company managed on a for-profit basis (commercial functions).

- Initiate structural reforms of ADMARC commercial and social functions, and request donor support for advisory services to support change management.
- Engage the private sector on PPPs for leasing and operating of ADMARC storage and processing facilities.

Ensure transparency and predictability in implementation of the Control of Goods Act.

- Create standard operating procedures for conducting reviews of trade restrictive measures under the COGA, including quarterly updates of the Food Balance Sheet and wider public-private consultations in validating important data points prior to implementing changes to licensing or trade restrictions.
- Publicize proposed Export Mandate regulations for public comment and convene a series of public-private dialogue events across districts to sensitize the private sector—farmers and traders—to proposed new requirements while also seeking agreed upon solutions that could improve implementation.

Rebuild trust in commodity exchanges and warehouse receipt schemes.

- Survey commercial financial institutions to understand what support they would need to reintroduce lending on warehouse receipts and engage farmers.
- Survey farmer organizations to determine what measures could be taken to reduce the cost of storage and build trust in WRSs.
- Conduct a capacity needs assessment of the commodity exchanges if the Export Mandate were to be fully implemented for all proposed commodities at prepandemic trade volumes, modeling the potential impact of implementation on trade costs and informal trade.

Support the development of more affordable financial and insurance products tailored to the needs of agribusiness SMEs.

- Develop de-risking solutions for long-term financing in collaboration with the financial institutions to promote macadamia planting and production, which could include a partial guarantee scheme, interest support, and future contracting mechanisms.
- Facilitate the financial sector to develop crop, leasing, and index insurance products affordable to SMEs, to hedge against climate and disaster risk.

Note: ADMARC = Agricultural Development and Marketing Corporation; AIP = Affordable Input Program; COGA = Control of Goods Act; COMESA = Common Market for Eastern and Southern Africa; SADC = Southern Africa Development Community; SCTP = Social Cash Transfer Programme; SGR = Strategic Grain Reserve; SME = small and medium enterprises; SMS = short message service; WRS = warehouse receipt system.

ENDNOTES

1 R. Record, P. Kumar, and P. Kandoole, From Falling Behind to Catching Up: A Country Economic Memorandum for Malawi (English). (Washington, DC: World Bank Group, 2017), http://documents.worldbank.org/curated/en/164281510135924764/A-country-economic-memorandum-for-Malawi. "

2 World Bank Group, Malawi Systematic Country Diagnostic: Breaking the Cycle of Low Growth and Slow Poverty Reduction (Washington, DC: World Bank, 2018).

3 Malawi Government, "The Fifth Integrated Household Survey (IHS5) 2020 Report" (National Statistics Office, November 2020).

4 Notre Dame Global Adaptation Initiative (ND-GAIN), Country Index Rankings, https://gain.nd.edu/our-work/country-index/rankings/.

5 The International Labour Organization estimates job growth at 1.5 percent per annum, as of 2017. Sources: Patrick Shawn Hettinger, Malawi Economic Monitor: Strengthening Human Capital through Nutrition (Washington, DC: World Bank Group, 2019), http://documents.worldbank.org/curated/en/403401576093803229/Malawi-Economic-Monitor-Strengthening-Human-Capital-Through-Nutrition; Francisco Obreque, "Putting Malawi's Food System Front and Center to Save Lives and Livelihoods," World Bank blog, https://blogs.worldbank.org/nasikiliza/putting-malawis-food-system-front-and-center-save-lives-and-livelihoods.

6 Malawi Government, "The Fifth Integrated Household Survey."

7 Patrick Shawn Hettinger et al., Malawi Economic Monitor: Doing More with Less: Improving Service Delivery in Energy (Washington, DC: World Bank Group, 2020), http://documents.worldbank.org/curated/en/697811607978316710/Malawi-Economic-Monitor-Doing-More-with-Less-Improving-Service-Delivery-in-Energy.

8 IMF (International Monetary Fund), African Department, "Malawi: Request for Disbursement under the Rapid Credit Facility-Press Release; Staff Report; and Statement by the Executive Director for Malawi" (Country Report 2020/288, October 21, 2020), https://www.imf.org/en/Publications/CR/Issues/2020/10/20/Malawi-Request-for-Disbursement-Under-the-Rapid-Credit-Facility-Press-Release-Staff-Report-49831. Malawian authorities note that as of end-December 2020, total public debt stock amounted for 54 percent of rebased GDP, of which 23 percent and 31 percent of GDP accounted for external and domestic debt, respectively.

9 World Bank, Malawi Economic Monitor, May 2018: Realizing Safety Nets' Potential (Lilongwe, Malawi: World Bank, 2018), https://openknowledge.worldbank.org/handle/10986/29872.

10 Customary land tenure refers to a set of rules and norms that govern allocation, use, access, and transfer of land and other natural resources determined by indigenous communities and administered in accordance with their customs. For more, see Food and Agriculture Organization of the United Nations, Gender and Land Rights Database, Malawi, "Customary Norms, Religious Beliefs and Social Practices That Influence Gender-Differentiated Land Rights," http://www.fao.org/gender-landrights-database/country-profiles/countries-list/customary-law/en/?country_iso3=MWI.

11 Klaus Deininger and Fang Xia, "Assessing Effects of Large-Scale Land Transfers: Challenges and Opportunities in Malawi's Estate Sector" (Policy Research Working Paper 8200, World Bank, Washington, DC, September 2017), http://pubdocs.worldbank.org/en/979501495654692975/A2-ABCA-Malawi-Estates.pdf.

12 Malawi Government, Malawi Sustainable Energy Investment Study, September 2019, https://www.un.org/zh/unpdf/assets/pdf/PDF-SDG-2017-05%20Malawi.pdf.

13 Jean Marie Takouleu, "Malawi: SustainSolar Connects Containerised Solar Mini-Grid to Mthembanji," Afrik 21, August 28, 2020, https://www.afrik21.africa/en/malawi-sustainsolar-connects-containerised-solar-mini-grid-to-mthembanji/.

14 T. Vilakazi, "The Causes of High Intra-regional Road Freight Rates for Food and Commodities in Southern Africa," Development Southern Africa 35, no. 3: Regional Growth Opportunities (2018).

15 National Statistical Office (NSO) [Malawi] and ICF, Malawi Demographic and Health Survey 2015–16 (Zomba, Malawi: NSO and Rockville, MD: ICF, 2017).

16 Tea Trumbic, "New Measures Are Needed to Safeguard Women's Economic Opportunities during COVID-19," World Bank blog, September 10, 2020, https://blogs.worldbank.org/developmenttalk/new-measures-are-needed-safeguard-womens-economic-opportunities-during-covid-19.

17 ITU Publications, Measuring Digital Development: ICT Price Trends 2019 (Geneva: International Telecommunication Union, 2020), https://www.itu.int/en/mediacentre/Documents/Documents/ITU-Measuring_Digital_Development_ICT_Price_Trends_2019.pdf.

18 Percentage of monthly gross national income per capita. Two percent is the United Nations Broadband Commission for Sustainable Development's target for 2025. Broadband Commission for Sustainable Development, ITU, UNESCO, "2025 Targets: Connecting the Other Half," Broadband Commission website, January 13, 2021, https://www.broadbandcommission.org/broadband-targets/.

19 Data provided by World Bank Digital Economy for Africa Initiative Malawi project team.

20 H. Fuje and H. K. Pullabhotla, "Impact of Grain Trade Policies on Prices and Welfare: Evidence from Malawi" (Policy Research Working Paper 9436, World Bank Group, October 2020).

21 Malawi Government, "The Fourth Integrated Household Survey 2016–2017" (National Statistical Office, November 2017).

22 World Bank, World Development Indicators database.

23 The Fifth Integrated Household Survey (IHS5), conducted in 2019–20 by the Malawi National Statistical Office (NSO) in collaboration with the World Bank, found the percentage of households involved in rainy season cultivation in rural areas was still 92.8 percent in 2019 (up from 90 percent in 2016).

24 Climate Investment Funds, "PPCR Strategic Program for Climate Resilience for Malawi" (meeting of the PPCR Sub-Committee, Washington DC, December 12–13, 2017).

25 The Notre Dame Global Adaptation Initiative (ND-GAIN) assesses the vulnerability of a country by considering six life-supporting sectors: food, water, health, ecosystem services, human habitat, and infrastructure. Each sector is in turn represented by six indicators that represent three cross-cutting components: the exposure of the sector to climate-related or climate-exacerbated hazards; the sensitivity of that sector to the impacts of the hazard; and the adaptive capacity of the sector to cope or adapt to these impacts. ND-GAIN measures readiness by considering a country's ability to leverage investments to adaptation actions. ND-GAIN measures overall readiness by considering three components: economic readiness, governance readiness, and social readiness. Economic Readiness: the investment climate that facilitates mobilizing capital from the private sector. Governance Readiness: the stability of the society and institutional arrangements that contribute to the investment risks. A stable country with high governance capacity reassures investors that the invested capital could grow under the help of responsive public services and without significant interruption. Social Readiness: social conditions that help society to make efficient and equitable use of investment and yield more benefit from the investment. For more, see https://gain.nd.edu/our-work/country-index/.

26 The number of COVID-19 positive cases in Malawi was in sharp decline at time of writing, and among the lowest totals in the world. As of May 13, 2021, the country registered 34,183 cases, since the first case was registered on April 2, 2020. The number of recoveries was increasing, with very few new infections recorded, and preventive measures being relaxed.

27 IMF (International Monetary Fund), African Department, "Malawi: Request for Disbursement under the Rapid Credit Facility-Press Release; Staff Report; and Statement by the Executive Director for Malawi" (Country Report No. 2020/288, October 21, 2020), https://www.imf.org/en/Publications/CR/Issues/2020/10/20/Malawi-Request-for-Disbursement-Under-the-Rapid-Credit-Facility-Press-Release-Staff-Report-49831.

28 World Bank, "Malawi Economic Monitor, July 2020: From Crisis Response to a Strong Recovery" (Lilongwe, Malawi, 2020), https://openknowledge.worldbank.org/handle/10986/34220.

29 IMF DataMapper, Real GDP growth (annual percent change) indicator, https://www.imf.org/external/datamapper/datasets.

30 Poverty is defined by the World Bank as US$1.90/day in 2011 purchasing power parity. Dean Mitchell Jolliffe and Espen Beer Prydz, "Estimating International Poverty Lines from Comparable National Thresholds" (English) (Policy Research working paper WPS 7606, World Bank Group, Washington, DC, 2016, http://documents.worldbank.org/curated/en/837051468184454513/Estimating-international-poverty-lines-from-comparable-national-thresholds.

31 According to the World Bank, maize production increased from 3.39 to 3.69 million metric tons from 2018 to 2019. World Bank, Malawi Economic Monitor, July 2020.

32 IMF, "Malawi: Request for Disbursement under the Rapid Credit Facility."

33 Most recent was the "Cashgate" scandal in 2013, when revelations came to light of the misappropriation of public funds through fraudulent transactions carried out in the government's Integrated Financial Management Information System (IFMIS). World Bank Group, Malawi Systematic Country Diagnostic: Breaking the Cycle of Low Growth and Slow Poverty Reduction (Washington, DC: World Bank, 2018).

34 The Country Economic Memorandum (CEM) notes that Malawi has been among the top receivers of official development assistance (ODA) in low- and middle-income Sub-Saharan Africa, averaging US$60 per capita over the past seven years—or around US$1 billion annually—compared with an average of about US$50 per capita for the Sub-Saharan African region. Richard Record, Praveen Kumar, and Priscilla Kandoole, From Falling Behind to Catching Up: A Country Economic Memorandum for Malawi (Washington, DC: World Bank Group, 2018), http://documents.worldbank.org/curated/en/164281510135924764/A-country-economic-memorandum-for-Malawi.

35 Patrick Hettinger and Yalenga Nyirenda, "Malawi FY20–21 Draft Budget Brief," World Bank.

36 IMF (International Monetary Fund), "Regional Economic Outlook: Sub-Saharan Africa" (IMF, Washington, DC, 2020).

37 World Bank, Macro Poverty Outlook: Sub-Saharan Africa (Washington, DC: World Bank, October 2020).

38 Malawi Government, "The Fourth Integrated Household Survey 2016–2017."

39 Malawi Government, "The Fifth Integrated Household Survey (IHS5)."

40 Obreque, "Putting Malawi's Food System Front and Center." The International Labour Organization estimates job growth at 1.5 percent per annum, as of 2017. Hettinger, Malawi Economic Monitor: Strengthening Human Capital through Nutrition.

41 Malawi Government "The Fifth Integrated Household Survey (IHS5) 2020 Report."

42 Hettinger et al., Malawi Economic Monitor: Doing More with Less.

43 Malawi Government, "Vision 2063," National Planning Commission (NPC), Malawi, launch 2020.

44 Malawi Government, "Malawi Growth Development Strategy (MGDS III)—2017-2022," September 2017.

45 World Bank, "COVID 19: Debt Service Suspension Initiative" (Brief, February 19, 2021), https://www.worldbank.org/en/topic/debt/brief/covid-19-debt-service-suspension-initiative.

46 World Bank Group, Malawi Systematic Country Diagnostic : Breaking the Cycle of Low Growth and Slow Poverty Reduction (Washington, DC: World Bank, 2018), https://openknowledge.worldbank.org/handle/10986/31131.

47 Foundation for a Smoke-Free World, Malawi Country Overview, updated February 2019, https://www.smokefreeworld.org/wp-content/uploads/2019/06/fsfw-malawi-country-overview-040819-v1.pdf.

48 World Bank, World Development Indicators database; World Bank, Malawi Urbanization Review: Leveraging Urbanization for National Growth and Development (Washington, DC: World Bank, 2016), https://openknowledge.worldbank.org/handle/10986/24391.

49 UN Women, the United Nations Development Programme, United Nations Environment Programme Poverty, Environment Initiative Africa, and the World Bank, 2015. The Cost of Agricultural Productivity in Malawi, Tanzania and Uganda.

50 Malawi Government, "The Fifth Integrated Household Survey (IHS5)."

51 Malawi Government, "The Fifth Integrated Household Survey (IHS5)."

52 World Bank, "Africa Industrialization Report," forthcoming.

53 According to the 2014 Enterprise Survey, as of 2014, about 25 percent of manufacturing markets in Malawi were duopolies or oligopolies, slightly above the average of about 20 percent for its peer group. World Bank, Enterprise Survey 2014: Malawi 2014–15 (dataset), https://microdata.worldbank.org/index.php/catalog/2358.

54 FinScope MSME Malawi 2019 reports that there are 1.1 million businesses classified as MSMEs in Malawi. A microenterprise is defined as one that has one to four employees, a turnover of up to MK5 million and an asset value of up to MK1 million. A small enterprise has five to 20 employees, a turnover of between MK5 million and MK50 million and maximum assets value of MK20 million (MSME Policy, 2018). A medium enterprise has 21 to 99 employees, turnover of between MK50 million and MK500 million and maximum asset value of MK250 million. Source: FinScope survey 2019. https://www.genesis-analytics.com/uploads/downloads/Malawi_MSME-Survey-2020-05-22.pdf.

55 FinScope survey 2019.

56 Malawi Government, "The Fifth Integrated Household Survey (IHS5)."

57 World Bank, "COVID-19 Pandemic through a Gender Lens" (Africa Knowledge in Time Policy Brief, issue 1, no. 2, World Bank, Washington, DC, June 2020), http://documents1.worldbank.org/curated/en/132121593107858356/pdf/COVID-19-Pandemic-Through-a-Gender-Lens.pdf.

58 World Bank Group, "Profiting from Parity: Unlocking the Potential of Women's Business in Africa" (Washington, DC: World Bank, 2019), https://openknowledge.worldbank.org/handle/10986/31421.

59 World Bank, Enterprise Survey 2014.

60 O'Sullivan, M. and A. Rao with R. Banerjee, K. Gulati and M. Vinez, "Levelling the Field: Improving Opportunities for Women Farmers in Africa" (World Bank and the One Campaign, Washington, DC, 2014). http://documents.worldbank.org/curated/en/579161468007198488/pdf/860390WP0WB00N00sureodate0March0180.pdf

61 CEIC Data, Malawi Labour Productivity Growth: 1992–2019, https://www.ceicdata.com/en/indicator/malawi/labour-productivity-growth.

62 See Akuffo Amankwah, Sydney Gourlay, and Alberto Zezza, "Agriculture as a Buffer in COVID-19 Crisis: Evidence from Five Sub-Saharan African Countries," World Bank blog, February 2, 2021, https://blogs.worldbank.org/opendata/agriculture-buffer-covid-19-crisis-evidence-five-sub-saharan-african-countries.

63 Derived using World Bank national accounts data, OECD (Organisation for Economic Co-operation and Development) National Accounts data files, and employment data from the International Labour Organization's ILOSTAT database.

64 Hettinger, Patrick. 2019. Malawi Economic Monitor: Strengthening Human Capital Through Nutrition (English). Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/403401576093803229/Malawi-Economic-Monitor-Strengthening-Human-Capital-Through-Nutrition

65 U.S. Department of State, 2019 Investment Climate Statements: Malawi, https://www.state.gov/reports/2019-investment-climate-statements/malawi/.

66 U.S. Department of State, 2019 Investment Climate Statements: Malawi.

67 Soumitra Dutta, Bruno Lanvin, and Sacha Wunsch-Vincent, eds., The Global Innovation Index 2020: Who Will Finance Innovation? 13th ed. (Ithaca, NY: Cornell University; Fontainebleau, France: INSEAD; and Geneva: WIPO, 2020), https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2020.pdf.

68 U.S. Department of State, 2019 Investment Climate Statements: Malawi.

69 WTO Trade Policy Review, 2016.

70 See United Nations Conference on Trade and Development (UNCTAD), World Investment Report 2019: Special Economic Zones (New York: United Nations, 2019), https://unctad.org/system/files/official-document/wir2019_en.

71 World Bank, Malawi Country Profile 2014, https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/country-profiles/Malawi-2014.pdf.

72 World Bank, World Development Report 2020: Trading for Development in the Age of Global Value Chains (Washington, DC: World Bank, 2020), https://openknowledge.worldbank.org/handle/10986/32437.

73 A. Alfaro-Urena, I. Manelici, and J. Vasquez, "The Effects of Joining Multinational Supply Chains: New Evidence from Firm-to-Firm Linkages" (working paper, April 2019).

74 Malawi Government, "The Fifth Integrated Household Survey (IHS5) 2020 Report" (National Statistics Office, November 2020).

75 World Bank, Malawi Country Profile 2014.

76 Data comes from the World Bank Group's World Integrated Trade Solutions (WITS) and International Trade Center (ITC) Trade Map, based on UN Comtrade data and World Trade Organization (WTO) trade in services database based on IMF statistics. Mirror data from reporting trade partners suggests total exports were higher, totaling US$940.8 million in 2018, although the long-term trend remains unchanged.

77 Early data for 2019 show the spike in imports for reconstruction materials after the cyclone in the second half of the year was mostly offset by a slowdown in imports from the cyclone itself and the political situation, according to the IMF's "Second and Third Reviews under the Three-Year Extended Credit Facility Arrangement and Requests for Waivers of Nonobservance of Performance Criteria and Augmentation of Access—Press Release; Staff Report; and Statement by the Executive Director for Malawi" from December 2019.

78 Requests to confirm data were not returned prior to finalization of this draft.

79 See World Bank, International Development Association (IDA), "Sustainable Development Finance Policy: Promoting Sustainable Borrowing and Lending Practices in IDA Countries" (SDFP at a Glance, July 1, 2020), https://ida.worldbank.org/sites/default/files/pdfs/sdfp-at-a-glance-2020-8-14.pdf.

80 Jonathan Said and Khwima Singini, "The Political Economy Determinants of Economic Growth in Malawi" (ESID Working Paper no. 40, University of Manchester, October 2014).

81 Economist Intelligence Unit 2018 Risk Tracker survey.

82 Record, Kumar, and Kandoole, From Falling Behind to Catching.

83 World Bank, Malawi Systemic Country Diagnostic."

84 Klaus Schwab, ed., The Global Competitiveness Report 2019 (Geneva: World Economic Forum, 2019).

85 U.S. State Department, "2019 Investment Climate Statements: Malawi," 2019, https://www.state.gov/reports/2019-investment-climate-statements/malawi/.

86 World Bank, Malawi: Mobilizing Long-Term Finance for Infrastructure (Washington, DC: World Bank, 2021), https://openknowledge.worldbank.org/handle/10986/35138.

87 World Bank, Malawi: Mobilizing Long-Term Finance for Infrastructure.

88 World Bank, Malawi: Mobilizing Long-Term Finance for Infrastructure.

89 World Bank, Malawi: Mobilizing Long-Term Finance for Infrastructure.

90 World Bank. "Integrated SOE framework (iSOEF)." Overview Note Final, World Bank, Washington, DC, 2019

91 UNCTAD (United Nations Conference on Trade and Development). "UNCTAD Research Partnership Platform: Competitive Neutrality and Its Application in Selected Developing Countries." Geneva, 2014

92 OECD (Organisation for Economic Co-operation and Development). "Competitive Neutrality: National Practices." Paris, 2012.

93 The Convention on the Recognition and Enforcement of Foreign Arbitral Awards, also known as the New York Arbitration Convention or the New York Convention, is one of the key instruments in international arbitration. The New York Convention applies to the recognition and enforcement of foreign arbitral awards and the referral by a court to arbitration. For more information, see http://www.newyorkconvention.org/.

94 See Transparency International, "Corruption Perceptions Index 2019" (Berlin: Transparency International, 2020), https://www.transparency.org/files/content/pages/2019_CPI_Report_EN.pdf.

95 Transparency International, "Corruption Perceptions Index 2019."

96 World Trade Organization (WTO), International Trade Centre (ITC), and the United Nations Conference on Trade and Development (UNCTAD), World Tariff Profiles, (WTO, ITC, and UNCTAD, 2019), 120, https://www.wto.org/english/res_e/statis_e/daily_update_e/tariff_profiles/MW_E.pdf.

97 WTO. Tariff Profiles. Accessed: May 2021.https://www.wto.org/english/res_e/statis_e/daily_update_e/tariff_profiles/MW_e.pdf.

98 Exports to COMESA rose from 13 percent of Malawi's total exports in 2016 to 21 percent in 2018, but still only accounted for 0.1 percent of all imports by COMESA members. Imports from COMESA have also fallen since 2016. Exports to SADC have fallen consistently since 2014, while imports saw a slight increase in 2018. Source: World Bank Group's World Integrated Trade Solutions (WITS).

99 Malawi scores 65.3 in the Trading across Borders indicators in the 2020 Doing Business report. World Bank, Doing Business 2020 (Washington, DC: World Bank, 2020), https://openknowledge.worldbank.org/bitstream/handle/10986/32436/9781464814402.pdf.

100 Malawi Government, Ministry of Industry, Trade and Tourism, National African Growth and Opportunity Act (AGOA) Response Strategy and Action Plan for Malawi, October 2018, https://agoa.info/images/documents/15624/agoa-country-strategy-malawi.pdf.

101 The Logistics Performance Index ranking is the weighted average of the country scores on six key dimensions: (a) efficiency of the clearance process for customs; (b) quality of trade and transport-related infrastructure (such as ports, railroads, roads, information technology); (c) ease of arranging competitively priced shipments; (d) competence and quality of logistics services (such as transport operators, customs brokers); (e) ability to track and trace consignments; and (f) timeliness of shipments in reaching the destination within the scheduled or expected delivery time. World Bank, Logistics Performance Index 2018, https://lpi.worldbank.org/.

102 World Bank. Malawi: Mobilizing Long-Term Finance for Infrastructure. Washington, DC: World Bank, 2020. See also Benchmarking Infrastructure Development 2020, which assesses the regulatory quality for preparation, procurement, and management of large infrastructure projects through both PPPs and traditional public investments: https://bpp.worldbank.org/.

103 World Bank, World Development Indicators database, "Access to Electricity (% of Population: Malawi, 1992–2018," https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=MW.

104 Government of Malawi, Integrated Resource Plan, 2017.

105 In the 2014 Enterprise Survey, on average, firms reported losing 5.1 percent of their annual sales due to electricity outages. World Bank, Enterprise Survey 2014: Malawi, 2014–15, https://microdata.worldbank.org/index.php/catalog/2358.

106 United Nations Energy Statistics Database (accessed April 25, 2020), http://data.un.org/Data.aspx?d=EDATA&f=cmID%3AEC; United Nations Energy Statistics Database (accessed April 25, 2020), http://data.un.org/Data.aspx?d=EDATA&f=cmID%3AEC.

107 United Nations, Department of Economic and Social Affairs, Population Division, World Urbanization Prospects: The 2018 Revision (ST/ESA/SER.A/420, New York: United Nations, 2019).

108 United Nations, E-Government Survey 2020: Digital Government in the Decade of Action for Sustainable Development (New York: United Nations, 2020), https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2020-Survey/2020%20UN%20E-Government%20Survey%20(Full%20Report).pdf.

109 Hettinger et al., Malawi Economic Monitor: Doing More with Less.

110 Malawi Government, "The Fifth Integrated Household Survey (IHS5).

111 2019 FinScope survey.

112 Malawi Government. "The Fifth Integrated Household Survey (IHS5) 2020 Report" (National Statistics Office, November 2020).

113 Malawi Government. "The Fifth Integrated Household Survey (IHS5) 2020 Report" (National Statistics Office, November 2020).

114 International Monetary Fund, 2018 Financial Sector Assessment Program (FSAP), https://www.imf.org/external/np/fsap/fssa.aspx.

115 2019 FinScope survey.

116 In 2016 and 2017 Malawi adopted 10 new land-related laws that institutionalized a codified and accountable land administration system that addresses tenure security and gender-equitable land access and allows for the registration of customary land. The 10 new land related laws are Land Act (2016); Customary Land Act (2016); Physical Planning Act (2016); Land Survey Act (2016); Registered Land (Amendment) Act (2017); Land Acquisition Act (2017); Forest (Amendment) Act (2017); Malawi Housing Corporation (Amendment) Act (2017); Public Roads (Amendment) Act (2017); and Local Government (Amendment) Act (2017). World Bank, "Land Policy Dialogue ASA: Implementation Status of the Malawi National Land Policy and Land Laws," forthcoming.

117 U.S. Agency for International Development, LandLinks, Country Profile: Malawi, https://www.land-links.org/country-profile/malawi/#land.

118 World Bank, Malawi Systematic Country Diagnostic: Breaking the Cycle.

119 For more on Malawi's emerging drone capabilities, see section 4.2.

120 Malawi Government, "The Fift Integrated Household Survey (IHS5).

121 Record, Kumar, and Kandoole, From Falling Behind to Catching Up.

122 World Bank, Human Capital Index—Malawi, 2020, https://data.worldbank.org/indicator/HD.HCI.OVRL?locations=MW.

123 C. Burgi et al., "IFC's Economic Impact Estimation" (IFC, Washington, DC, forthcoming).

124 Obreque, "Putting Malawi's Food System Front and Center."

125 Edward Borgstein et al., "Malawi Sustainable Energy Investment Study" (Rocky Mountain Institute for Malawi Ministry of Natural Resources, Energy and Mining, 2019), https://www.un.org/en/unpdf/assets/pdf/PDF-SDG-2017-05%20Malawi.pdf.

126 Edward Borgstein et al. "Sustainable Energy Investment Study" (Rocky Mountain Institute for Malawi Ministry of Natural Resources, Energy and Mining, 2019), https://www.un.org/en/unpdf/assets/pdf/PDF-SDG-2017-05%20Malawi.pdf.

127 J. L. Taulo, K. J. Gondwe, and A. Ben Sebitosi, "Energy Supply in Malawi: Options and Issues," Journal of Energy in South. Africa 26, no. 2 (May 2015): 19–32.

128 International Energy Agency, "Africa Energy Outlook 2019" (Country Report, November 2019).

129 Government of Malawi, National Energy Policy, August 2018, https://www.energy.gov.mw/download/27/policies-and-strategies/1893/national-energy-policy-2018-final. See also International Energy Agency, World Energy Balances, https://www.iea.org/data-and-statistics?country=WEOAFRICA&fuel=Energy%20consumption&indicator=ElecConsBySector.

130 B. Rivard and D. S. Reay, "Future Scenarios of Malawi's Energy Mix and Implications for Forest Resources," Carbon Management 3, no. 4 (2012).

131 World Bank, World Development Indicators database, 2020. 2018 is the latest year of available data.

132 World Bank, "Malawi Electricity Access Project," https://projects.worldbank.org/en/projects-operations/project-detail/P164331.

133 One project has advanced (JCM 60 megawatts in Salima) while others are at early stages of project development and not yet reaching financial close.

134 WB energy specialists; "Malawian Power Co Signs PPAs for 140 MW of Renewables," press release, Renewables Now, May 22, 2019, https://renewablesnow.com/news/malawian-power-co-signs-ppas-for-140-mw-of-renewables-655030/; and Electricity Supply Corporation of Malawi Limited (ESCOM), "Update on Solar Projects That ESCOM Is Undertaking with Independent Power Producers," press release, 2019. http://www.escom.mw/solarprojects.php.

135 See Grace Phiri, "IPPs Given 2 Months to Rollout Projects." the Nation, September 28, 2019, https://www.mwnation.com/ipps-given-2-months-to-rollout-projects/; Justin Mkweu, "Minister Talks Tough on Dormant IPPs," Times Group, September 26, 2020, https://times.mw/minister-talks-tough-on-dormant-ipps/.

136 World Bank, "Private Participation in Infrastructure (PPI) database.

137 See Duncan Mlanjira, "Energy Minister Muluzi Says Steady Path to Reduce Load-Shedding," Nyasa Times, April 2, 2020, https://www.nyasatimes.com/energy-minister-muluzi-says-steady-path-to-reduce-load-shedding/; Orama Chiphwanya, "Tedzani IV Construction at 84% Completion," the Nation, May 19, 2020, https://www.mwnation.com/tedzani-iv-construction-at-84-completion/.

138 Unaudited estimate, World Bank, "Mozambique-Malawi Regional Interconnector Project (P164354)–Project Appraisal Document," August 2019.

139 Inception report detailing ongoing work on loss reduction initiative.

140 Jameson Chauluka, "ESCOM Losing Billions in Egenco, Aggreko Deals," Times Group, August 5, 2020, https://times.mw/escom-losing-billions-in-egenco-aggreko-deals/.

141 Nyasa Times, "Malawi: Government Will Not Bail Out Escom From K53bn Bill to Egenco," August 25, 2020, https://allafrica.com/stories/202008250781.html.

142 World Bank, "Mozambique-Malawi Regional Interconnector Project."

143 Karen Sanje, "Malawi's Hydropower Dries Up as River Runs Low, Menacing Forests," Reuters, October 29, 2015.

144 World Bank, "Mozambique-Malawi Regional Interconnector Project."

145 Reuters, "African Nations Urged to Avoid Hydropower Reliance," February 21, 2018.

146 World Bank, Doing Business Indicators (database), https://www.doingbusiness.org/en/data/exploretopics/getting-electricity.

147 World Bank Group, Malawi Systematic Country Diagnostic "

148 REN21, Renewables 2018: Global Status Report, 2018.

149 Mpatamanga Hydro, Investment Overview, https://www.mpathydro.com/investment-overview.

150 The World Bank is contributing US$350 million. An additional US$5 million is being provided through IFC InfraVentures (Source: Official IFC Project documentation)

151 Millennium Challenge Corporation, "Reforming the Power Sector in Malawi" (evaluation brief, June 2020), https://www.mcc.gov/resources/doc/evalbrief-070720-mwi-power-reform.

152 Malawi Government, "Malawi Sustainable Energy Investment Study" (September 2019), https://www.un.org/zh/unpdf/assets/pdf/PDF-SDG-2017-05%20Malawi.pdf.

153 Asami Miketa and Nawfal Saadi, "Africa Power Sector: Planning and Prospects for Renewable Energy" (International Renewable Energy Agency [IRENA], 2015), 44.

154 G. Malunga, "Wind Energy Potential in Malawi" (technical file, 2019).

155 Jean Marie Takouleu, "Malawi: SustainSolar Connects Containerised Solar Mini-Grid to Mthembanji," Afrik 21, August 28, 2020, https://www.afrik21.africa/en/malawi-sustainsolar-connects-containerised-solar-mini-grid-to-mthembanji/.

156 World Bank, Malawi: Electricity Access Project (P164331) documentation, https://projects.worldbank.org/en/projects-operations/document-detail/P164331?type=projects.

157 International Labour Organization, ILOSTAT database, "Employment in industry (% female employment) (modeled ILO estimate)-Malawi, 2020" (accessed May 2021), https://data.worldbank.org/indicator/SL.IND.EMPL.ZS?locations=MW.

158 World Health Organization, "Household Air Pollution and Health" (fact sheet, May 2018), https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health#:~:text=Each%20year%2C%20close%20to%204,with%20solid%20fuels%20and%20kerosene.

159 Jemimah Njuki, "Addressing the Double Burden of Work for Rural Women" (International Development Research Center, March 2017), https://www.idrc.ca/en/perspectives/addressing-double-burden-work-rural-women.

160 IFC, "Case Study: Kenya's Solar Lighting Entrepreneurs," 2019, https://www.lightingafrica.org/wp-content/uploads/2019/03/Lighting-Africa-Case-Study-V7-FINAL.pdf.

161 IFC, Powered by Women, https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/hydro+advisory/resources/powered+by+women.

162 Malawi Government, Malawi National Transport Master Plan (Ministry of Transport and Public Works, 2017), https://npc.mw/wp-content/uploads/2020/07/National-Transport-Master-Plan1.pdf.

163 Malawi Government, National Transport Policy, April 2015. https://npc.mw/wp-content/uploads/2020/07/transport_policy.pdf.

164 World Bank, "Women, Business and the Law 2020," (Washington, DC: World Bank, 2020), https://openknowledge.worldbank.org/handle/10986/32639.

165 World Bank, "Women, Business and the Law 2020."

166 World Bank, "Preventing Violence against Women in Transport Systems," March 2016, https://www.worldbank.org/en/news/feature/2016/03/08/preventing-violence-against-women-in-transport-systems.

167 World Bank Group, "Women, Business and the Law 2019: A Decade of Reform" (Washington, DC: World Bank, 2019), http://pubdocs.worldbank.org/en/702301554216687135/WBL-DECADE-OF-REFORM-2019-WEB-04-01.pdf.

168 World Bank Group country office staff and various media reports.

169 Malawi Government, National Transport Policy, 2015.

170 The Beira Corridor links the south of the country to the port of Beira in Mozambique. The North-South Corridor runs the length of the country, branching west and southwest into Zambia and Zimbabwe, before stretching southward all the way to Johannesburg and Durban in South Africa. The Dar es Salaam Corridor cuts east-northeast out of the north of Malawi.

171 See World Bank, "Southern Africa Trade and Transport Facilitation Program—SOP2 (P145566) Project Appraisal Document," http://documents1.worldbank.org/curated/en/525191468202173969/pdf/PAD9160PAD01DA060Box391426B00OUO090.pdf.

172 Malawi Government, Malawi National Transport Master Plan.

173 Two consecutive cyclones in 2019 caused damages estimated in US$220 million. Economic disruption accounted for US$62.5 million, or 28 percent, of total losses. World Bank, Malawi Economic Monitor, June 2019: Charting a New Course (World Bank, Lilongwe, Malawi. 2019), https://openknowledge.worldbank.org/handle/10986/31929.

174 A private placement is a sale of bonds to preselected investors and institutions rather than on the stock exchange.

175 Malawi Government, Transport Sector Performance, Monitoring Indicators Framework, 2019.

176 AFREXIMBANK, "Study on the Trade-Carrying Infrastructure Gap in One African Region" (Nathan Associates, 2020).

177 Japan International Cooperation Agency (JICA), Project for the Study on Development of the Sena Corridor in the Republic of Malawi: Final Report (JICA, February 2012), chap. 3, https://openjicareport.jica.go.jp/pdf/1000004247_03.pdf.

178 The NTMP proposes improving port facilities at Nkhata Bay, providing roll-on roll-off freight services to Mbamba Bay on the Mtwara Corridor, and constructing a wet port at Liwonde—but feasibility analysis would be needed to determine if these projects are commercially viable. Happy Kayuni, "Malawi's Dream of a Waterway to the Indian Ocean May Yet Come True," Phys.org, November 2019, https://phys.org/news/2019-11-malawi-waterway-indian-ocean-true.html.

179 Taonga Sabola, "Aviation Industry to Lose K1.5 Billion," Times Group, June 22, 2020, https://times.mw/aviation-industry-to-lose-k1-5-billion/, citing report from the Treasury.

180 Logistics Capacity Assessment, "2.2.1 Ethiopia Bole International Airport," https://dlca.logcluster.org/display/public/DLCA/2.2.1+Ethiopia+Bole+International+Airport.

181 IATA, " Industry Losses to Top $84 Billion in 2020" (Press Release No: 50, June 9, 2020). https://www.iata.org/en/pressroom/pr/2020-06-09-01/.

182 Sabola, "Aviation Industry to Lose K1.5 Billion."

183 G. Nsomba, E. Jangale, and T. Vilakazi, "Assessing Competition and Political Economy Dynamics in the Transport and Logistics Sector in Malawi," (Centre for Competition, Regulation, and Economic Development [CCRED]), prepared for World Bank Southern African Trade and Connectivity Project, 2020.

184 Nsomba, Jangale, and Vilakazi, "Assessing Competition and Political Economy Dynamics."

185 Information provided by the government of Malawi, based on 2017 figures, acquired on October 26, 2020.

186 J. Klaaren, S. Roberts, and I. Valodia, eds., Competition and Regulation for Inclusive Growth in Southern Africa (Johannesburg: Fanele [Jacana Media], 2019); P. Ncube, S. Roberts, and T. Vilakazi, "Regulation and Rivalry in Transport and Supply in the Fertilizer Industry in Malawi, Tanzania and Zambia," in S. Roberts, ed, Competition in Africa: Insights from Key Industries (Cape Town: HSRC Press, 2016), 102–31.

187 "[T]his is hindering the growth and competitiveness of Malawian transporters and there is a perception that the industry is driven by cartels that reduce domestic competitiveness." Malawi Government, Malawi National Transport Master Plan, 36.

188 Nsomba, Jangale, and Vilakazi, "Assessing Competition and Political Economy Dynamics."

189 Nsomba, Jangale, and Vilakazi, "Assessing Competition and Political Economy Dynamics."

190 Nsomba, Jangale, and Vilakazi, "Assessing Competition and Political Economy Dynamics."

191 S. Lowitt, "Cross-Cutting Logistics Issues Undermining Regional Integration in SADC" (Trade & Industrial Policy Strategy [TIPS], December 2017), https://www.tips.org.za/research-archive/trade-and-industry/item/download/1473_91d4526dad0f252ee8ee21cd10a60705.

192 Competition and Fair Trading Commission. "Competition Assessment in Malawi Transport Sector" (Paper prepared for Annual Competition and Economic Regulation [ACER] Conference Livingstone Zambia, 2016), 10, http://static1.squarespace.com/static/52246331e4b0a46e5f1b8ce5/t/56f1352c22482e727503e388/1458648367884/Fexter+Katungwe+Competition+in+transport+in+Malawi.pdf.

193 T. Vilakazi and A. Paelo. "Understanding Intra-Regional Transport: Competition in Road Transportation between Malawi, Mozambique, South Africa, Zambia and Zimbabwe" (UNU-WIDER Working Paper No. 2017/46, 2017)

194 G. Nsomba, E. Jangale, and T. Vilakazi, "Assessing Competition and Political Economy Dynamics in the Transport and Logistics Sector in Malawi" (Centre for Competition, Regulation, and Economic Development [CCRED], prepared for World Bank Southern African Trade and Connectivity Project, 2020).

195 World Bank, Doing Business 2020.

196 World Bank, Logistics Performance Index, World Bank Group, 2018, https://lpi.worldbank.org/international/scorecard/radar/2/C/MWI/2018?sort=asc&order=Timeliness#datatable.

197 Vilakazi, "The Causes of High Intra-regional Road Freight Rates."

198 An ongoing second phase of the Southern Africa Trade and Transport Facilitation Program (SATTFP-SOP2) will develop an asset management strategy, including a more comprehensive and prioritized road infrastructure investment plan, in which investments shall be prioritized through a multicriteria analysis system or tool. The tool will be based on strategic, social, economic, technical, environmental, poverty aspects, and agricultural production potential. The government is seeking to adopt the strategy once developed and to initiate the implementation a three-year rolling road infrastructure investment plan at both national and district levels across the country.

199 Background study on the political economy of the transport sector in Malawi conducted for Southern Africa Trade & Connectivity Project (P164847).

200 T. Vilakazi and A. Paelo, "Understanding Intra-regional Transport: Competition in Road Transportation between Malawi, Mozambique, South Africa, Zambia and Zimbabwe" (UNU-WIDER Working Paper No. 2017/46, 2017).

201 C. Ksoll and C. Kunaka, "Malawi's New Connectivity: Paving the Way for Seamless Corridors" (background paper, World Bank, Washington, DC, 2016); Vilakazi and Paelo, "Understanding Intra-regional Transport."

202 Vilakazi and Paelo, "Understanding Intra-regional Transport."

203 Currently, cargo trains entering Malawi stop at Nayuchi (for a preliminary border inspection), Liwonde (for generating transit documents and additional customs inspections), and Nkaya (for rail marshalling). At Nkaya, general cargo trains are diverted to either Limbe/Blantyre or Kanengo/Lilongwe and Chipata, where final clearance of cargo occurs.

204 Gerhard Erasmus, "The Implications of COVID-19 for Regional Trade," tralacBlog, May 2020, https://www.tralac.org/blog/article/14630-the-implications-of-covid-19-for-regional-trade.html.

205 T. Vilakazi, "The Causes of High Intra-regional Road Freight Rates."

206 Bruce Byiers, Poorva Karkare, and Luckystar Miyandazi, "A Political Economy Analysis of the Nacala and Beira Corridors" (ECDPM discussion paper, July 2020), https://ecdpm.org/publications/political-economy-analysis-nacala-beira-corridors/.

207 Said and Singini, "The Political Economy Determinants of Economic Growth in Malawi."

208 Wang Guohua and Gift Chiundira, "Unintended Consequences from the Implementation of Targeted Agricultural Subsidy Policy in Malawi," International Journal of African and Asian Studies, 49 (2018); Phumzile Ncube, Simon Roberts, and Thando Vilakazi. "Study of Competition in the Road Freight Sector in the SADC Region-Case Study of Fertilizer Transport and Trading in Zambia, Tanzania and Malawi" (CCRED working paper 3/2015, Centre for Competition, Regulation, and Economic Development, Johannesburg, 2015).

209 Malawi Government, Malawi National Transport Master Plan, 259.

210 TRALAC, "Regional Responses to COVID-19 in Africa," May 5, 2020, https://www.tralac.org/news/article/14570-regional-responses-to-covid-19-in-africa.html?utm_source=tralac+Newsletter&utm_campaign=d5ed72035d-Daily_News_08082019_COPY_01&utm_medium=email&utm_term=0_a95cb1d7ad-d5ed72035d-311118117.

211 TRALAC, "SADC Guidelines on Harmonisation and Facilitation of Cross Border Transport Operations across the Region during the COVID-19 Pandemic," April 2020, https://www.tralac.org/documents/resources/covid-19/regional/3222-final-sadc-guidelines-on-cross-border-transport-during-covid-19-adopted-on-6-april-2020/file.html; see also: "SADC Ministers Approve Guidelines to Ease Cross-Border Transport amid COVID-19," Xinhuanet, June 24, 2020, http://www.xinhuanet.com/english/2020-06/24/c_139164296.htm.

212 TRALAC, "COMESA Ministers Approve Harmonized Regional Trade Facilitation Guidelines," May 15, 2020, https://www.tralac.org/news/article/14597-comesa-ministers-approve-harmonized-regional-trade-facilitation-guidelines.html.

213 Willis Osemo, "COMESA-EAC-SADC Develop Electronic Corridor Trip Monitoring System," COMESA news, August 22, 2020, https://www.comesa.int/comesa-eac-sadc-develop-electronic-corridor-trip-monitoring-system/.

214 Much of the increase in volume along the corridor has been driven by the Vale-Mitsui Consortium constructing a coalmine in Mozambique. In order to export the coal, the consortium helped fund the construction and rehabilitation of the 912 km corridor—200 km of which runs through Malawi—to a coal terminal in a new port at Nacala-a-Velha. Total investment in all related projects was estimated to be US$5 billion.

215 WTO (World Trade Organization), "Notification of Category Commitments under The Agreement on Trade Facilitation," September 22, 2019, https://tfadatabase.org/uploads/notification/NMW11_3.pdf.

216 See ASYCUDA's website: https://asycuda.org/en/.

217 See United Nations, "Trade Facilitation Implementation Guide: The Single Window Concept," http://tfig.unece.org/contents/single-window-for-trade.htm.

218 Interview with Malawi Revenue Authority, February 12, 2020.

219 Malawi has already developed with neighboring countries important legal frameworks to structure and guide cooperation: The Tripartite Railway Transport Agreement, The Tripartite Road Transport Agreement, and The Nacala Development Corridor Agreement, which are now ready for signing.

220 Tom Jackson, "Africa's Logistics Space on Fast Growth Trajectory as Funding and Opportunities Pile Up," Disrupt Africa, August 20, 2020, https://disrupt-africa.com/2020/08/africas-logistics-space-on-fast-growth-trajectory-as-funding-and-opportunities-pile-up/.

221 Maria Catalina Ochoa Sepulveda and Edward Charles Anderson, "Rising to Help in a Crisis: Unlocking the Potential for Drone Use in Africa," World Bank Group, internal blog, July 10, 2020,.

222 Sepulveda, and Ed Anderson, "Rising to Help in a Crisis."

223 Several African countries, including Ghana, Rwanda, and Sierra Leone, are using drones to reach remote communities faster and more efficiently. The uses are numerous: drones can gather information, collect test samples, and deliver medicine and vaccines to people in isolated communities. Beyond emergencies, drones can be used for zoning and land registration in rural areas, livestock monitoring, and last-mile delivery of e-commerce 223

224 Sepulveda and Anderson, "Rising to Help in a Crisis."

225 World Bank team with IFC Upstream can do the preliminary feasibility analysis.

226 IFC and Google, e-Conomy Africa 2020: Africa's $180 Billion Internet Economy Future, 2020, https://www.ifc.org/wps/wcm/connect/publications_ext_content/ifc_external_publication_site/publications_listing_page/google-e-conomy.

227 Malawi Government, "The Fifth Integrated Household Survey (IHS5) 2020 Report" (National Statistics Office, November 2020).

228 According to ITU's 2019 methodology, the standard measurement for a "data-and-voice basket" is one that offers at least 140 minutes of voice communication, 70 SMSs, and 1.5 GB of data. Source: International Telecommunication Union, 2020, https://www.itu.int/en/ITU-D/Statistics/Documents/events/egti2020/EGTI2020_ICTPriceBasketIndicators_BackgroundDocument.pdf.

229 Broadband Worldwide Speed League, interactive map, 2020, https://www.cable.co.uk/broadband/speed/worldwide-speed-league/.

230 Javier Lopez Gonzalez, "Don't Panic! Hitchhiker's Guide to Cross-Border Data Flows" (Organisation for Economic Co-operation and Development opinion article, June 3, 2019), https://www.oecd.org/trade/hitchhikers-guide-cross-border-data-flows/.

231 World Bank, Global Findex database 2017, https://globalfindex.worldbank.org/.

232 The campuses include the Lilongwe University of Agriculture and Natural Resources, Mzuzu University, The Polytechnic, Chancellor College, College of Medicine, and the Malawi University of Science and Technology .

233 Lani Jacobs, "Opportunities for Improving Digital Identification in Social Cash Transfer Programs through Mobile: Insights from Kenya and Malawi," GSMA, April 2020.

234 "Development Pathways: The 'Unity Solution', E-payment prototype" (unpublished manuscript, 2019), quoting Reserve Bank of Malawi, National Payment Systems (NPS) Second Quarter 2019 NPS Report.

235 Lani Jacobs, "Opportunities for Improving Digital Identification."

236 Lani Jacobs, "Opportunities for Improving Digital Identification."

237 Southern African Development Community (SADC) Secretariat, Status of Integration in the Southern African Development Community (SADC) (Gaborone, Botswana: SADC, 2019).

238 Tom Sangala, "Macra Sets New Sim card Registration Deadlines," Times Group, June 4, 2018, https://times.mw/macra-sets-new-sim-card-registration-deadlines/.

239 United Nations, E-Government Survey 2020.

240 National Statistical Office (NSO) [Malawi] and ICF, Malawi Demographic and Health Survey 2015-16 (Zomba, Malawi: NSO and Rockville, Maryland: ICF, 2017).

241 ItWeb, "Malawi's Reserve Bank in Showdown with FinTech over Ecommerce," March 14, 2019, https://itweb.africa/content/DZQ587VPbd3qzXy2.

242 Malawi Government, National Agricultural Investment Plan (NAIP), January 2018, 4, https://www.scotland-malawipartnership.org/assets/resources/National_Agicultural_Investment_Plan_2018_Final_Signed.pdf.

243 "A structured market is an organized and formal place where farmers, traders, processors, millers, banks and others enter into organized, regulated trading and financial arrangements." See Anderson Gondwe and Bob Baulch, "The Case for Structured Markets in Malawi" (International Food Policy Research Institute Strategy Support Program policy note 29, August 2017), 1, http://massp.ifpri.info/files/2017/08/MaSSP-Policy-Note-29_The-case-for-structured-markets-in-Malawi-revised-11.24.17.pdf.

244 World Bank, World Development Indicators Database: Agriculture, Forestry, and Fishing, Value Added Per Worker (Constant 2010 US$)—Malawi, Sub-Saharan Africa, 2019. Accessed 2020. Derived using World Bank national accounts data and OECD (Organisation for Economic Co-operation and Development) National Accounts data files, and employment data from International Labour Organization, ILOSTAT database.

245 Todd Benson and Brent Edelman, "Policies for Accelerating Growth in Agriculture and Agribusiness in Malawi" (background paper, Country Economic Memorandum Series, World Bank, Washington, DC, 2016), 5.

246 According to reports from World Bank Group country office staff, conversations with development partners, and various media reports.

247 African Fertilizer and Agribusiness Partnership, "COVID-19 Impact Assessment on the Farming Community of Malawi," 2020, https://files.constantcontact.com/cc31a670501/662af0b5-cf29-4545-8251-f7d55bed48a4.pdf.

248 World Bank Group, Commodity Markets Outlook (Washington, DC: World Bank, 2020), https://openknowledge.worldbank.org/bitstream/handle/10986/33624/CMO-April-2020.pdf.

249 Steve Chilundu, "Covid-19 Dampens Cash Crops' Prospects," the Nation, July 22, 2020, https://www.mwnation.com/covid-19-dampens-cash-crops-prospects/.

250 United Nations Office for the Coordination of Humanitarian Affairs, World Food Programme, Relief Web, "Malawi Household Food Security Bulletin: Mobile Vulnerability Analysis and Mapping (mVAM) on the Effects of COVID-19 in Malawi—Round 6" (Situation Report. December 16, 2020), https://reliefweb.int/report/malawi/malawi-household-food-security-bulletin-mobile-vulnerability-analysis-and-mapping-3.

251 Reuters, "Bad Weather, COVID-19 Leave over 2.6 million Malawians Short of Food," September 2, 2020, https://www.reuters.com/article/us-malawi-hunger/bad-weather-covid-19-leave-over-2-6-million-malawians-short-of-food-idUSKBN25T2GX.

252 Joseph Mwale, "Govt Rolls Out Covid-19 Safety Net," the Nation, March 1, 2021, https://www.mwnation.com/section/news/national-news/.

253 World Bank Group, "Country Partnership Framework for the Republic of Malawi for the Period FY21–FY25," World Bank, Washington, DC, 2021, https://openknowledge.worldbank.org/handle/10986/35513.

254 Customary land tenure refers to a set of rules and norms that govern allocation, use, access, and transfer of land and other natural resources determined by indigenous communities and administered in accordance with their customs. For more, see Food and Agriculture Organization of the United Nations, Gender and Land Rights Database, Malawi, "Customary Norms, Religious Beliefs and Social Practices That Influence Gender-Differentiated Land Rights," http://www.fao.org/gender-landrights-database/country-profiles/countries-list/customary-law/en/?country_iso3=MWI.

255 CIAT (International Center for Tropical Agriculture) and World Bank, "Climate-Smart Agriculture in Malawi" (CSA Country Profiles for Africa Series, CIAT, Washington, DC, 2018), https://cgspace.cgiar.org/bitstream/handle/10568/100325/CSA%20_Profile_Malawi.pdf.

256 See UN Women, the United Nations Development Programme–United Nations Environment Programme Poverty-Environment Initiative (UNDP-UNEP PEI) Africa, and the World Bank, "The Cost of the Gender Gap in Agricultural Productivity in Malawi, Tanzania, and Uganda," October 2015, https://africa.unwomen.org/en/digital-library/publications/2015/10/the-cost-of-the-gender-gap-in-agricultural-productivity-in-malawi-tanzania-and-uganda; Malawi Government, National Agricultural Investment Plan (NAIP).

257 Thomas Jayne et al., "Africa's Changing Farmland Ownership: The Rise of the Emergent Investor Farmer" (Feed the Future Innovation Lab for Food Security Policy Research Paper 259048, Michigan State University, Department of Agricultural, Food, and Resource Economics, Feed the Future Innovation Lab for Food Security, 2015). See also CIAT and World Bank, "Climate-Smart Agriculture in Malawi"; and Ward Anseeuw et al., "The Quiet Rise of Medium-Scale Farm in Malawi," Land 5, no. 3 (2016), https://www.mdpi.com/2073-445X/5/3/19.

258 Greater than 25 hectares. For more on Malawi's estates, see Deininger and Xia, "Assessing Effects of Large-Scale Land Transfers."

259 Deininger and Xia, "Assessing Effects of Large-Scale Land Transfers."

260 Each smallholder farmer will be entitled to a 50 kg bag of nitrogen-phosphorous-potassium fertilizer, a 50 kg bag of urea, and either 5 kg of maize seed, 7 kg of sorghum, or 7 kg of rice seed, depending on the farmer's preference, for a small fixed price. World Bank Group, "COVID-19 and Food Security: Update September 24, 2020," internal document.

261 Lucky Mkandawire, "Govt Breaks Up Admarc," the Nation, May 16, 2020, https://www.mwnation.com/govt-breaks-up-admarc/.

262 See O. Porteous, "Empirical Effects of Short-Term Export Bans: The Case of African Maize," Food Policy 71 (2017): 17–26. See also B. Edelman and B. Baulch, "Are Malawi's Maize and Soya Trade Restrictions Causing More Harm Than Good? A Summary of Evidence and Practical Alternatives" (Malawi Strategy Support Program Policy Note 25, International Food Policy Research Institute, Lilongwe, Malawi, 2016). See also K. Pauw and B. Edelman, "Is Malawi's Mix of Maize Market Policies Ultimately Harming Food Security?"(policy note 22, IFPRI, 2015).

263 A warehouse receipt system is a platform that enables farmers, traders, processors, and exporters to obtain finance secured by agricultural commodities deposited in a warehouse. The Warehouse Receipt Act passed in 2018.

264 Bob Baulch, "Commodity Exchanges and Warehouse Receipts in Malawi" (Strategy Support Program working paper 25, IFPRI, October 2018), http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/132922/filename/133133.pdf.

265 Colin Poulton and Blessings Chinsinga, "The Political Economy of Agricultural Commercialization in Malawi" (Agricultural Policy Research in Africa, working paper 16, APRA programme, July 2018). https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/14027/WP_16_The%20Political%20Economy%20of%20Agricultural%20Commercialisation%20in%20Africa.pdf; Blessings Chinsinga and Michael Chasukwa, "Agricultural Policy, Employment Opportunities and Social Mobility in Rural Malawi," Agrarian South: Journal of Political Economy 7, no. 1 (2018): 28–50; Said and Singini, "The Political Economy Determinants of Economic Growth in Malawi"; Kate Bridges, "Drivers of Agricultural Policy in Malawi," World Bank Discussion Note (unpublished manuscript, 2017).

266 Malawi Government, National Agricultural Investment Plan (NAIP), 8.

267 Seife Ayele et al., "Agribusiness Investment in Agricultural Commercialisation: Rethinking Policy Incentives in Africa" (Agricultural Policy Research in Africa, working paper 33, APRA programme, May 2020).

268 H. Chingaipe and B. Hoffman, "Political Economy Analysis of ADMARC and Grain Markets in Malawi, s.l.: s.n. 2017. [[AQ: Not clear what s.l:s.n. is here. Is this a chapter from a book?]]

269 See United Nations Development Programme, "Malawi: Brief on the Budget Statement (Financial Year 2018/19)," May 24, 2018, https://www.undp.org/content/dam/malawi/docs/diat/Budget%20Analysis%202018-19.pdf; Flora Janet Nankhuni and Athur Mabiso, "Redesigning the Farm Input Subsidy Programme (FISP) for Malawi" (Feed the Future Innovation Lab for Food Security Policy, Michigan State University, March 16, 2015), https://www.canr.msu.edu/resources/redesigning-the-farm-input-subsidy-programme-fisp-for-malawi; Ephraim Chirwa et al., "Evaluation of the 2014/15 Farm Input Subsidy Programme, Malawi" (technical report for the Ministry of Agriculture, Irrigation and Water Development, July 2015), https://www.researchgate.net/publication/309180680_Evaluation_of_the_201415_Farm_Input_Subsidy_Programme_Malawi; Food and Agriculture Organization of the United Nations, FAOSTAT database, http://www.fao.org/faostat/en/#country/130.

270 World Bank, "Human Capital Public Expenditure Review" (forthcoming).

271 Malawi Government, "The Fifth Integrated Household Survey (IHS5) 2020 Report" (National Statistics Office, November 2020).

272 Baulch, "Commodity Exchanges and Warehouse Receipts in Malawi."

273 Flora J. Nankhuni and Nathalie M. Me-Nsope, "Is the Future of Malawi's Pigeon Pea Industry at the Mercy of India? An Analysis of Malawi's Pigeon Pea Value Chain" (Feed the Future Innovation Lab for Food Security Policy, Policy Research Brief 62, Michigan State University, 2018).

274 Kamwendo, "Climate Change Is Making It Harder to Reduce Poverty in Malawi," the *Economist*, September 19, 2019, https://www.economist.com/middle-east-and-africa/2019/09/19/climate-change-is-making-it-harder-to-reduce-poverty-in-malawi.

275 Edem E. Selormey et al., "Change Ahead: Experience and Awareness of Climate Change in Africa" (Afrobarometer Policy Paper 60, August 2019), http://afrobarometer.org/sites/default/files/publications/Policy%20papers/ab_r7_policypaperno60_experience_and_awareness_of_climate_change_in_africa.pdf.

276 Channing Arndt et al., "Climate Change and Economic Growth Prospects for Malawi: An Uncertainty Approach," Journal of African Economies 23, issue supplement 2 (August 2014): ii83–ii107, https://academic.oup.com/jae/article/23/suppl_2/ii83/684947.

277 FCFA (Future Climate For Africa), "Country Climate Brief. Future Climate Projections for Malawi" (FCFA, Cape Town, October 2017), https://futureclimateafrica.org/wp-content/uploads/2017/11/2772_malawi_summary_v4_final_web-version-1.pdf.

278 "Hotter Future in Store for Tanzania and Malawi," Climate & Development Knowledge Network, December 6, 2017, https://cdkn.org/2017/12/feature-hotter-future-tanzania-and-malawi/?loclang=en_gb.

279 In fact, Malawi is one of the focus countries of the Foundation for a Smoke-Free World. For more on Malawi, see the Foundation's country profile: https://www.smokefreeworld.org/wp-content/uploads/2019/06/fsfw-malawi-country-overview-040819-v1.pdf.

280 Orama Chiphwanya, "Industry Cautions on New Goods Law," the Nation, March 8, 2020, https://www.mwnation.com/industry-cautions-on-new-goods-law/.

281 Gillian Pais, Kartik Jayaram, and Arend van Wamelen, "Safeguarding Africa's Food Systems through and beyond the Crisis" (McKinsey & Company, June 5, 2020), https://www.mckinsey.com/featured-insights/middle-east-and-africa/safeguarding-africas-food-systems-through-and-beyond-the-crisis.

282 Richard Martyn-Hemphill, "Farm Tech Investment up 370% in 6 Years. How Will Covid-19 Impact 2020 Trends?," AgFunderNews, April 30, 2020, https://agfundernews.com/farm-tech-investment-up-370-in-6-years-how-will-covid-19-impact-2020-trends.html.

283 Jeehye Kim et al., Scaling Up Disruptive Agricultural Technologies in Africa (International Development in Focus, Washington, DC: World Bank, 2020), xiv, https://openknowledge.worldbank.org/bitstream/handle/10986/33961/9781464815225.pdf.

284 CIAT and World Bank, "Climate-Smart Agriculture in Malawi."

285 For more see Intergovernmental Panel on Climate Change (IPCC), "Chapter 5: Food Security," in Climate Change and Land: An IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems (IPCC, 2019), https://www.ipcc.ch/site/assets/uploads/2019/08/2f.-Chapter-5_FINAL.pdf.

286 Based on multiple analyses, from World Bank, USAID, and ITC, that have informed the draft Malawi National Export Strategy (forthcoming).

287 Low levels of high-quality input use and poor agronomic practices often result in yields ranging from 800 to 1,000 kg/ha, while the most advanced countries can reach over 3,000 kg/ha. See Finmark Trust, "Making Access Possible in Malawi: RoadMAP to MSME Success (Diagnostic report, G:Enesis, Johannesburg, for Finmark Trust, 2020)," http://finmark.org.za/wp-content/uploads/2020/06/Malawi_Diagnostic-2020-05-22.pdf.

288 Aflasafe website: https://aflasafe.com/aflasafe/.

289 USAID (United States Agency for International Development), "USAID/Malawi: Agriculture Value Chain Opportunities" (Presentation, May 2019).

290 Justin P. du Toit, Flora J. Nankhuni, and Joseph S. Kanyamuka, "Can Malawi Increase Its Share of the Global Macadamia Market? Opportunities and Threats to the Expansion of Malawi's Macadamia Industry" (poster presented at World Bank 22nd ICABR Conference, Washington, DC, June 13, 2018), https://www.canr.msu.edu/fsp/outreach/presentations/macadamia-poster-june2018.pdf.

291 The Green Belt Initiative (GBI) was a presidential initiative introduced in 2009, which aimed to increase the availability of land for irrigated agriculture in an effort to boost productivity, farmer incomes, and investment. The initiative was widely criticized for facilitating land grabs. Recently, the GBI has undergone a transformation to become the Green Belt Authority (GBA). The authority is responsible for (a) marketing irrigation projects to investors; (b) conducting market analyses; and (c) conducting feasibility studies of potential irrigation schemes; and (d) promoting PPPs and joint ventures in irrigation. See B. Chinsinga and M. Chasukwa, "The Green Belt Initiative and Land Grabs in Malawi" (policy brief 55. Future Agricultures Consortium, 2012), https://assets.publishing.service.gov.uk/media/57a08a90ed915d3cfd00081c/Policy_Brief_055.pdf.

292 CIAT and World Bank, "Climate-Smart Agriculture in Malawi."

293 World Bank, "Shire Valley Transformation Program–1," https://projects.worldbank.org/en/projects-operations/project-detail/P158805?lang=ar&tab=details.

IFC
2121 Pennsylvania Avenue, N.W.
Washington, D.C. 20433 U.S.A.

CONTACTS

Sudha Bala Krishnan
skrishnan8@ifc.org

Miles McKenna
mmckenna@ifc.org

Elena Gasol Ramos
egasolramos@worldbank.org

ifc.org

WORLD BANK GROUP
THE WORLD BANK IBRD • IDA | IFC International Finance Corporation