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INTERNATIONAL TRADE AND RECOVERY STRATEGIES IN KENYA IN THE CONTEXT OF COVID-19
EDITED BY TABITHA KIRITI-NGANGA

INTERNATIONAL TRADE AND RECOVERY STRATEGIES IN KENYA IN THE CONTEXT OF COVID-19

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The publisher (AOSIS) endorses the South African 'National Scholarly Book Publishers Forum Best Practice for Peer-Review of Scholarly Books'. The manuscript underwent an evaluation to compare the level of originality with other published works and was subjected to rigorous two-step peer-review before publication, with the identities of the reviewers not revealed to the editor(s) or author(s). The reviewers were independent of the publisher, editor(s) and author(s). The publisher shared feedback on the similarity report and the reviewers' inputs with the manuscript's editor(s) or author(s) to improve the manuscript. Where the reviewers recommended revision and improvements the editor(s) or author(s) responded adequately to such recommendations. The reviewers commented positively on the scholarly merits of the manuscript and recommended that the book be published.

Research justification

The central notion of the book, *International trade and recovery strategies in Kenya in the context of COVID-19*, is to analyse the effects of the deadly SARS-CoV-2 coronavirus disease 2019 (COVID-19) pandemic on international trade and to recommend post-recovery strategies in Kenya while taking into consideration the opportunities offered by the African Continental Free Trade Area. The purpose of this book on global macroeconomic performance was to identify the trends of these aggregates prior to the COVID-19 pandemic, the situation when the pandemic struck and the projections after the pandemic. The target audience of the book includes academics and researchers. The analysis has showcased that the pandemic has adversely affected the economic performance of countries and that countries will continue to experience the harmful negative effects of the pandemic patterns of countries in the East African Community member states (EAC), namely, Kenya, Uganda, Tanzania, Rwanda, Burundi and South Sudan. It has also indicated that exports and imports of goods were resilient to the COVID-19 recession. However, imports and exports of services in the region slumped during the pandemic, mainly travel services. Other business services (OBS) – usually transacted online – increased during the pandemic. Intra-EAC and intra-African trade in goods was robust but weak for services during the pandemic. Over time, exporters are observed to adjust their reactions towards the spread of the disease, thus exerting growing pressure on exports.

The conclusions, therefore, include effective budget policy functions of governments (stabilisation, distribution and allocation) to be undertaken for enhanced and sustainable growth processes, wide dissemination of good hygiene practices and global cooperation, especially in the sphere of public health and economic development. The analysis presented in the book and the conclusions reached will contribute to the economics of international trade. The evaluation took cognisance of the government's efforts in containing the pandemic, both at the individual and international levels, in terms of appropriate policy measures with a critical examination of the efficacy and appropriateness of such policy measures. Indeed, the pandemic represents substantial global macroeconomic demand and supply shocks with significant adverse effects on global economic growth, employment and poverty.

We acknowledge that the chapters in this book were presented virtually by the authors during the 25th Annual Conference on Global Economic Analysis in 2021 and were uploaded as Resource 6615 on the Global Trade Analysis Project, affiliated with Purdue University. The book has undergone a double-blind peer-review process by expert peer-reviewers at AOSIS Scholarly Books, and subsequent revisions and improvements based on the review outcome were made by the authors for this publication. An essential aspect of new knowledge produced in this scholarly open-access book is the substantiated argument that an analysis of the COVID-19 containment measures demonstrates the difference between 'trade-restrictive' and 'trade-facilitative' measures. This analysis shows the need for countries to reduce their trade restrictions.

The discourse employed by economics scholars determines the methodology applied in the book. In some chapters, methods represent a descriptive mode, employing tables and graphs, while in other chapters, econometric methods are used to analyse data.

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Contents

Abbreviations and acronyms, figures and tables appearing in the text and notes

List of abbreviations and acronyms

ACIS	automated cargo information system
ACP	Africa Caribbean and Pacific Countries
AEO	authorised economic operator
AERC	African Economic Research Consortium
AFA	Agriculture and Food Authority
AfCFTA	African Continental Free Trade Area
AfDB	Africa Development Bank
AfT	Aid for Trade
ARVs	antiretrovirals
AU	African Union
BCOCC	Border Control Operational Coordination Committee
CAC	Customs Advisory Committee
CBC	Customs Business Centre
CBK	Central Bank of Kenya
CBS	community-based system
CEPI	Coalition for Epidemic Preparedness Innovations
CFS	container freight station
COC	certificate of conformity
COMESA	Common Market for East and Southern Africa
COVID-19	coronavirus disease 2019
CRM	Customs Services Department Reform and Modernization Project
CTS	cargo tracking system
DBS	doing business
DLT	distributed ledger technology
EAC	East African Community
EMA	European Medical Agency
EODB	ease of doing business
EU	European Union
FDI	foreign direct investment
FTA	free trade area

GATT	General Agreement on Tariff and Trade
GCI	Global Competitive Index
GDP	gross domestic product
GVCs	global value chains
IATA	International Air Transport Association
ICD	internal container depot
ICMS	Integrated Customs Management System
ILO	International Labour Organization
IMF	International Monetary Fund
JKIA	Jomo Kenyatta International Airport
JMC	Joint Monitoring Centre
KAM	Kenya Association of Manufacturers
KEBS	Kenya Bureau of Standards
KEPHIS	Kenya plant health inspectorate services
KES	Kenyan Shilling
KNBS	Kenya National Bureau of Statistics
KPA	Kenya Ports Authority
KRA	Kenya Revenue Authority
KRC	Kenya Railways Corporation
KSh	Kenyan Shilling
KTB	Kenya Tourist Board
KWS	Kenya Wildlife Service
LAPSSET	Lamu Port South Sudan Ethiopia Transport Corridor
LIC	low-income country
LMIC	lower-middle-income country
LPI	Logistics Performance Index
MICE	meetings, incentives, conferences and exhibitions
MoH	Ministry of Health
MoITED	Ministry of Industrialisation, Trade and Enterprise Development
MoU	memorandum of understanding
MSMEs	micro, small and medium enterprises
NERC	National Emergency Response Committee
NSAC	National Security Advisory Council
NTBS	non-tariff barriers
OBS	other business services
OECD	Organization for Economic Co-operation and Development
OSBPs	One-Stop Border Posts

PCR	polymerase chain reaction
PPEs	personal protective equipment
RCN	Railage Consignment Note
RECTS	Regional Electronic Cargo Tracking System
RO	release order
RVCs	regional value chains
SADC	Southern African Development Community
SCT	Single Customs Territory
SDGs	Sustainable Development Goals
SMEs	small and medium enterprises
SOPs	standard operating procedures
TFA	Trade-Facilitating Agreement
TFIs	Trade Facilitation Indicators
TLIP	Trade Logistics Information Pipeline
TMEA	Trade Mark East Africa
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
UNWTO	United Nations World Tourism Organization
WB	World Bank
WB-TFSP	World Bank Trade Facilitation Support Programme
WCO	World Customs Organization
WDI	World Development Indicator
WEF	World Economic Forum
WGI	World Governance Index
WHO	World Health Organization
WITS	World Integrated Trade Solution
WTO	World Trade Organization
WTTC	World Travel and Tourism Council

List of figures

List of tables

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Acknowledgement

The publication of this book is timely as Kenya, East Africa, Africa and the rest of the world try to gain momentum towards building resilience and sustainable economic growth and development after the devastating effects of the COVID-19 pandemic. We acknowledge that the chapters in this book were presented virtually by the authors during the 25th Annual Conference on Global Economic Analysis in 2021 and were uploaded as resource 6615 on the Global Trade Analysis Project, affiliated with Purdue University (see Mogendi et al. 2022).

The publication will not only help in policy formulation in dealing with future pandemics but also help in making sure that lives and livelihoods are protected and economies sustained through trade not only in goods but also in services at the domestic level, as well as across borders and internationally.

This book benefited greatly from rigorous independent peer-review sessions.

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Preface

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The main objective of this book is to analyse the effects of the coronavirus disease 2019 (COVID-19) pandemic on international trade and recommend post-recovery strategies in Kenya, taking into consideration the opportunities offered by the African Continental Free Trade Area.

Many sectors have been affected in one way or another, some of them adversely since the reporting of the first COVID-19 case in Kenya on 12 March 2021 and especially more by the measures the Kenyan government took to contain the spread of the pandemic. Other trading partners also took measures to control the spread of the virus across borders. However, these measures turned into non-tariff barriers, which became trade-restrictive. These restrictions were in the form of quotas, embargoes, sanitary measures, import licensing, conditions or specific market requirements that made the exportation or importation of services and goods difficult or costly. The measures led to disruptions in the supply chains of essential commodities such as testing kits, personal protective equipment (PPE) and other medical equipment. They also disrupted trade not only in the East African Community member states but also in the whole world. It is, therefore, important that the Kenyan Government comes up with strategies to stop the spread of COVID-19 while at the same time protecting the lives and livelihoods of its citizens by making sure that international trade and related activities continue uninterrupted.

The East African Community member states (EAC), as well as other African countries, should prioritise vaccination in the short term to stop the spread of COVID-19. Trade-restrictive measures that have translated into NTBs require Kenya and other African countries to start thinking of how they can become producers as well as consumers of their own products, and more so those products that are essential for human life, such as pharmaceuticals and vaccines.

The global macroeconomic performance trend is a critical analysis that illustrates countries' growth trajectories. Indeed, both developing and developed world countries do experience some trends with their macroeconomic aggregates, which may be negative or positive. These aggregates are measured by the gross domestic product, employment and

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inflation as the most prominent in assessing their impact on consumers, firms and governments. Therefore, the purpose of this book on global macroeconomic performance was to identify the trends of these aggregates prior to the COVID-19 pandemic, the situation when the pandemic struck and the projections past the pandemic. The evaluation took cognisant of the government's efforts in containing the pandemic, both at the individual country level and at the international level, in terms of appropriate policy measures with a critical examination of the efficacy and appropriateness of such policy measures. Indeed, the pandemic represents substantial global macroeconomic demand and supply shocks with significant adverse effects on global economic growth, employment and poverty. Evidently, prior to the pandemic outbreak, many countries experienced high levels of public debt and incidental micro-debt by households and businesses. The evaluation established that the pandemic has adversely affected the economic performance of countries. It was also established that countries would continue to experience the negative effect of the pandemic for the unforeseeable future. The conclusions, therefore, include effective budget policy functions of governments (stabilisation, distribution and allocation) to be undertaken for enhanced and sustainable growth process, wide dissemination of good hygiene practices and global cooperation, especially in the sphere of public health and economic development.

The trade patterns of member states in the EAC – Kenya, Uganda, Tanzania, Rwanda, Burundi and South Sudan – indicate that exports and imports of goods were resilient to the COVID-19 recession. However, imports and exports of services in the region slumped during the pandemic, mainly travel services. Other business services (OBS), which are usually transacted online, increased during the pandemic period. Intra-EAC and intra-Africa trade in goods was robust but weak for services during the pandemic. In the recovery phase of the pandemic, EAC governments should continue implementing trade facilitation measures to boost international trade. EAC countries should also consider boosting the services sector given the massive drop in exports and imports of services of most member states – for instance, opening the tourism sector. The massive increase in exports and imports implies that EAC countries should adopt and enhance the digitalisation of services. Businesses, especially micro, small and medium enterprises (MSMEs), can also be supported to transit towards digital trade. The weak intra-EAC and intra-Africa trade in services indicate a need for further prioritisation and discussion of services in the ongoing AfCFTA negotiations.

An empirical analysis of the impact of COVID-19 on merchandise trade shows that the spread of COVID-19 reduced exports by 0.47% and imports by 0.29%. However, over time, exporters are observed to adjust their reactions towards the spread of the disease, thus exerting upward pressure on exports. On government measures to combat the spread of the disease, imports were

the most affected, with a reduction of around 0.9%, while exports were reduced by around 0.6%. On specific product categories, the negative impact of the spread of COVID-19 on merchandise exports was observed more in consumer goods, followed by industrial supplies and, finally, food and beverages. In terms of imports, the largest negative impact of the spread of COVID-19 was observed on imports of fuel and lubricants. Imports in this category fell by 37%. Generally, in terms of the magnitudes of the impact, a large impact was observed on the government response to COVID-19 in relation to the general spread of the disease. The strict measures placed by the government, like the closing of its borders, were observed to affect the volumes of both imports and exports in the country. The negative impact was large on imports compared to exports. However, over time, both exporters and importers began to adjust their importing and exporting reactions.

These adjustments are seen to exert positive upward pressure on both imports and exports in the country. A review of government records like the Kenya National Budget 2021–2022 report shows that the government allocated more funds to the health sector. Specifically, it allocated KSh121bn to the health sector, of which KSh3.9bn was for the procurement of COVID vaccines and KSh9.5bn was for the engagement of COVID-19 specialists and for supplying hospitals with equipment. Furthermore (International Trade Administration 2021):

> [T]he finance bill proposed VAT exemptions for various medical inputs like ventilators, physiotherapy accessories, treadmills for cardiology therapy, diagnostic or laboratory reagents, electro-diagnostic apparatus, instruments, and appliances used in dental sciences, categories of medical instruments and appliances including breathing appliances. All these exemptions are expected to result in increased affordability of medical services in Kenya. (n.p.)

In addition, the measures are expected to increase investments in the health sector of the country. The effect of the pandemic on the services sector has been severe, thereby threatening businesses and their employees, especially with respect to their livelihoods.

The nature of the service sector is that most activities are interactive. When responding to the pandemic, the transmission mechanism is varied. Public health measures limit the operations of service firms. The demand from their customers becomes lower, and the supply chains get disrupted. This is then followed by difficulties in accessing finance as firms are faced with prolonged uncertainty.

This review found that (International Trade Administration 2021):

> [*A*]ctivity in the accommodation sector and the restaurant subsector was severely impacted by the pandemic as international travel was suspended for much of 2020. Hotels closed or significantly scaled down their operations since movement restrictions were imposed in most countries. (n.p.)

Tourism and travel are major components of the services sector, especially in some developing countries where they contribute a big proportion to foreign

exchange earnings as well as being major contributors to employment creation. This subsector is also a major contributor to these countries' GDPs.

Globally, there has been an extraordinary rise in the twin sectors of tourism and travel in the last six decades. The industry has grown in leaps and bounds as a result of multiple factors, such as increasing incomes in the west as well as technological developments in both communications and transportation.

In Kenya, the pandemic has led to a decline in park visitation from March 2020 by a massive 87% in the first quarter of 2020, given that visitation to KWS national parks and reserves is a good indicator of the performance of the tourism sector where wildlife tourism is a key component of the tourism industry.

The COVID-19 pandemic caused a dramatic fall in global foreign investments (FDI) in 2020 and has brought FDI flows to a level last seen in 2005. It has been an immense negative impact, especially on the most productive of investments, the Greenfield investment in industrial and infrastructure projects. According to the UNCTAD (2021) investment report, the implication of this is that international production, the engine of global economic growth and development, has been seriously affected.

The pandemic caused a serious drop in FDI in Kenya as it muzzled trade arrangements across the world. The UNCTAD (2021) investment report on FDI shows that Kenya attracted US$717m worth of FDI investments in 2020 compared to US$1.3bn in 2019. This was the second straight drop considering that US$1.6bn was attracted in 2018. Kenya, considered to be the East African Community member states' powerhouse, lagged its neighbours Uganda and Tanzania at US$823m and US$1.013bn, respectively. The World Investment Report projects a better performance on the eased COVID-19 restrictions.

The advent of COVID-19 in Kenya impacted the education sector severely, leading to an abrupt closure of all learning institutions. The closures affected learners, instructors and households. There were significant social and economic consequences associated with the closures.

There have been long-term ramifications with regard to education and COVID-19, especially for marginalised and most vulnerable children with a heightened risk of being excluded from education for a variety of reasons. These were mainly learners from urban slums, those with disabilities, those from remote locations, refugees, as well as those whose families' lost livelihoods as a result of employment lay-offs and business closures associated with the COVID-19 pandemic.

The advent of COVID-19 has made it clear to the policy-makers and the decision-makers at the unit levels that the entire health care system needs a major overhaul with a view to making the system responsive to the needs of the citizens. It is also crystal clear that major resource investments will have to

be put in the sector if there is to be a change in service delivery levels in the health sector.

The pandemic also brought to the fore the immediate need for some form of universal health care insurance coverage to bring about some semblance of medical coverage for the majority of the residents. The imbalance between the rural and urban areas needs some attention.

The first wave of the COVID-19 pandemic brought confusion to many African countries. This placed cross-border trade on hold as border activities were suspended. The process led to the introduction of border restrictions and regulations to help manage the cross-border transmission of the virus. It implied countries develop rapid policy measures and regulations to help contain the spread. To encourage cross-border trade, there is a need for the Kenyan government to come up with the following policies and strategies that will not only build economic resilience but also deal with future pandemics.

The Kenyan government, being a member of the EAC, participated in the publication of COVID-19 border guidelines. But, to enhance the perception of COVID-19 border regulations and how to safely trade, government authorities should develop a simplified step-by-step guide for small cross-border traders and truck drivers. Their aim should focus on easing the implementation challenges at borders.

They should make efforts to widen the scope of guidelines to facilitate the movement of merchandise across the border. This will create more business opportunities and further help kick-start economic recoveries towards the 'new normal'. Priority should be given towards the speedy movement and clearance of essential goods and services.

Any new updates or advancements in border regulations should be made public and announced in advance to allow stakeholders to adapt to avoid conflicts at border posts. This should include sharing updates on test certificates for drivers and other essential service providers at designated testing points and border points.

Kenya and the greater African continent through African Union should develop a common COVID-19 protocol for the region as the region is characterised by membership overlaps. This will help harmonise and coordinate the implementation of trade and transport-related regulations.

Mobile banking and cashless payment systems should be encouraged to limit the spread through cross-border trade. Mobile lending platforms should also be encouraged to facilitate credit transfers to cross-border traders. Similar guidelines should be encouraged and issued in other countries and regions as well. There is a need for the government to design a system that can be used to capture informal cross-border trade data and integrate it into the national database. However, caution must be taken to ensure that the data

are not being used against informal traders. More appropriate information and customs regulations should be provided to protect small-scale and female traders, especially during the pandemic.

The Kenyan government and its people struggled to slow down the spread of the virus using all means at their disposal, including knowledge and experiences shared by other countries, especially China. The quick response and swift actions managed to minimise the spike of the virus; saved lives and livelihood and economy from recession; and protected businesses, companies, workers who were laid off and casual workers who stayed home because of lockdowns from the temporary disruption of their incomes caused by COVID-19. The measures stretched from providing an economic stimulus plan to the flexibility of the private sectors like banks in regard to loan adjustments and repayments to companies like Safaricom, implementing a fee waiver on M-PESA, among many other measures implemented.

The measures to minimise the spread of the virus affected the border and behind-the-border trade processes. The measures and processes at the ports and border affected the efficiency of trade flows, and in the end, they led to a rise in transactions cost. The main issues at the borders and behind the border ranged from clearance procedures, customs procedures and documentation, movement of goods in transit and clearance formalities at the border points, which were complicated by social distancing and testing certificate norms. Kenya closed the land border and increased roadblocks and restrictions on modes of transport and people.

The government managed to control the spike of the virus, but the robustness with which the measures were enforced by the police caused harassment of people, injuries, deaths and corruption of a higher magnitude.

Now that COVID-19 is here to stay, the government should open more special counters, green lanes and smart gates to provide round-the-clock clearance at critical ports; customs can conduct off-site audits via video or electronic data transmission or base the audit on the inventory data provided by enterprises rather than on-site audits; customs can guide and train online on clearance formalities, especially to MSMEs to lessen declaration errors and avoid procedural non-compliance; the government should exchange data and share information among customs authorities in countries and the EAC region and should embrace technology in trade facilitation; WTO should enforce the trade facilitation agreement and assist build capacity; regional integration should be the area of focus as regards to trade facilitation; the government should prove that neighbouring countries can access and trade easily even if there is a pandemic; the government should have retained some stimulus package for MSMEs and tax-free for people in the lower-earning bracket (KSh24 000 and below); and finally, the Kenyan people should bear and pay for what they were given during the pandemic in the form of tax reductions

so as to save the economy and the country which is headed to a general election in 2022 from debt default and wild fiscal deficit.

The Kenyan government should pursue strategies to support the lives and livelihoods of its citizens, support industries to remain in operation and, at the same time, take advantage of the opportunities offered by the regional integration, the AfCFTA, development partners in the form of trade facilitation as well as aid for trade. The COVID-19 pandemic is still spreading, with Kenya in its fourth wave by the time of writing this report. It is, therefore, important for the country to stop the spread of the virus by making sure that almost all individuals are vaccinated; reducing taxes on essential items such as gas, water and kerosene; and continuing campaigns to promote proper hygiene, wearing masks and adhering to social distances in the short run. In the medium term, lives and livelihoods must be protected by both monetary and fiscal strategies, while simultaneously maintaining macroeconomic stability and fiscal sustainability. In the long haul, the government should restructure the economy to increase the domestic production of goods and services; achieve self-sufficiency and stop over-reliance on a few global suppliers of goods and services; strive to have a green economy to combat the effects of climate change; diversify the economy in terms of export products, adding value to exports towards more manufactured items; reduce over-reliance on exports of raw materials; have multiple sources of supply of goods and services; enhance domestic resource mobilisation; and diversify sources of financial resources.

Kenya should pursue policies that help in overcoming constraints to economic growth arising from factor accumulation and hence lead to exports and product diversification. Kenya should aim at increasing its levels of both domestic investments and foreign direct investments; addressing governance issues such as corruption and ethnic conflicts; addressing the rising fiscal deficit and lack of fiscal space through effective mobilisation of domestic resources; ensuring macroeconomic, monetary, industrial trade policies that foster diversification in order to contain inflationary pressure; and ensuring regional value chains and global value chains are not disrupted by the prevailing COVID-19 pandemic.

Chapter 1

COVID-19 and non-tariff barriers to combat the spread of disease

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Introduction[1]

The coronavirus disease 2019 (COVID-19) pandemic brought unprecedented implications for East African Community (EAC) member states' trade. East African Community member states have had to impose non-tariff barriers (NTBs), including closing borders and ports of entry (sea and airports), to prevent the spread of the virus. This disrupted international trade through supply chains as traders had to incur extra costs to meet health requirements and slow border clearance procedures. Kenya mostly trades with EAC member state partners, specifically Uganda and Tanzania. Kenya had the eighth highest number of COVID-19 positive cases and deaths in Africa, respectively, as of 09 May 2021. Kenya is also among the top 10 economies in Africa by gross domestic

1. A version of this chapter appears as a journal article, Kiriti-Nganga (2021). Some sections in this chapter are based on the following published material: WTO Chairs (2021).

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product (GDP) and total trade (exports and imports). The main objective of this book is to analyse the effects of the COVID-19 pandemic on international trade and recommend post-recovery strategies in Kenya, taking into consideration the opportunities offered by the African Continental Free Trade Area (AfCFTA). This book assesses the effect of the virus on one of Africa's superstar traders by estimating the effect of the virus on Kenya's trade in EAC for exports and imports and value chains. Ultimately, this book shall contribute towards Kenya's and EAC's trade policy in the ongoing COVID-19 pandemic, with the primary outcome being the safety of borders or ports for effective trade in goods and services in the EAC member states (Kiriti-Nganga 2021).

The measures taken by different governments to stop the spread of the COVID-19 pandemic translated to NTBs, which ended up disrupting trade (global and regional value chains) not just in the East African Community member states, but also in the whole world.

Justification

The main objective of this book is to analyse the impact of the COVID-19 pandemic on international trade and recommend post-recovery strategies in Kenya, taking into consideration the opportunities offered by the AfCFTA and other international organisations and trading partners.

This book represents a scholarly discourse, written by economics scholars from the University of Nairobi to be used by other economic scholars in Kenya, East Africa, Africa and globally. However, the publication of this book is timely as Kenya, East Africa, Africa and the rest of the world try to gain momentum towards building resilience and sustainable economic growth and development after the devastating effects of the COVID-19 pandemic. The publication will not only help in policy formulation in dealing with future pandemics but also help in making sure that lives and livelihoods are protected and economies sustained through trade not only in goods but also in services at the domestic level as well as across borders and internationally.

Sources of data

The book is based on desktop research using secondary data from the Kenya National Bureau of Statistics (KNBS), State Department for Trade and Enterprise Development, Ministry of Health, National Treasury, African Union (AU), United Nations Conference on Trade and Development (UNCTAD), Kenya Government Policy Documents, World Bank, International Monetary Fund (IMF), World Integrated Trade Solutions, the World Trade Organization (WTO), World Health Organization (WHO), review of journal articles and other grey literature.

Methodology and process

Webinars and physical meetings were held by the authors of the book right from the inception of the idea, verification of data, peer-review of the draft chapters as well as an international conference with WTO secretariat, academia, policymakers and non-governmental organisations to disseminate the findings and get feedback in order to improve the book.

The methodology used in writing the book is descriptive in some chapters using tables and graphs, while in other chapters, econometric methods are used to analyse the data.

Some of the chapters are based on previous studies by some authors, and where this is the case, this is duly acknowledged.

Organisation of the book

This introductory chapter is followed by an analysis of the macroeconomic performance of the global, regional, African, sub-Saharan and Kenyan situation before and during the COVID-19 pandemic. This chapter is followed by an analysis of East Africa's trade patterns in terms of products, services and partners. Thereafter, an analysis of the impact of the pandemic on merchandise trade is presented, followed by a chapter on the impact of COVID-19 on services and foreign direct investments (FDIs). The impact of the pandemic on small and medium enterprises (SMEs) and on the informal cross-border follows. The last chapter is on Kenya's COVID-19 recovery strategies taking advantage of the opportunities afforded by the (AfCFTA).

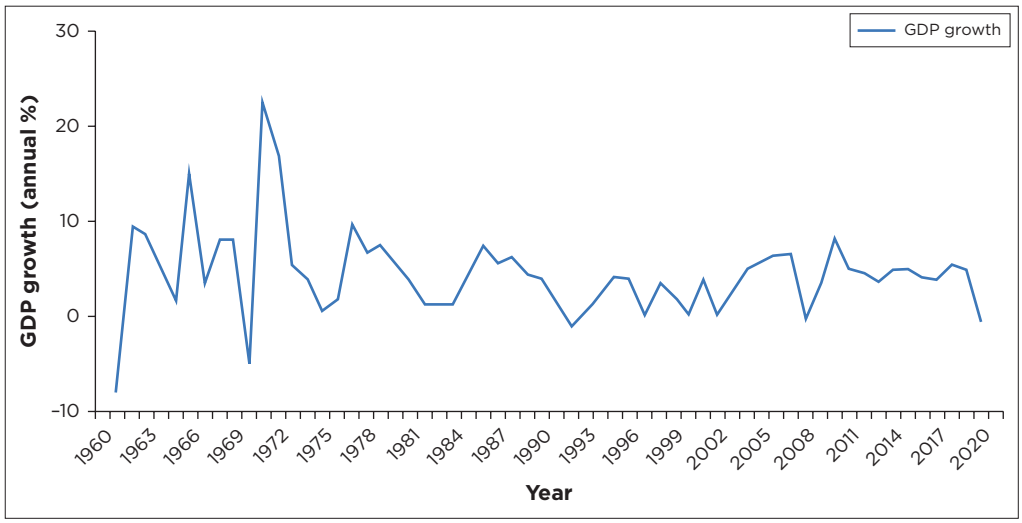
Kenya's economic growth performance

Kenya's economic growth has followed an oscillating pattern since its independence in 1963, as shown in Figure 1.1. In 1964, the economy took an upward trajectory up to 1972, when the growth took a nosedive but started rising again in 1975. In a previously published article, this was put as follows (Kiriti-Nganga 2020):

> Following two decades of stagnation in per capita income and high volatility of economic activity, Kenya's economy moved to a path of accelerating growth after 2002 when a new government was sworn in. The rate of economic growth increased steadily from below 1% in 2002 to 7% in 2007. (p. 170)

Following the December 2007 election, the country was hit by post-election violence in January 2008 followed by a global financial crisis in 2008/09, and this negatively impacted the rate of economic growth, as shown in Figure 1.1.

Kenya's GDP growth rates declined from 5.4% in 2019 to 1.4% in 2020 because of the COVID-19 preventative measures taken by the government. These measures led to a decrease in tourism activity and export sales and a disruption in the supply chain. Tanzania and Uganda have shown similar



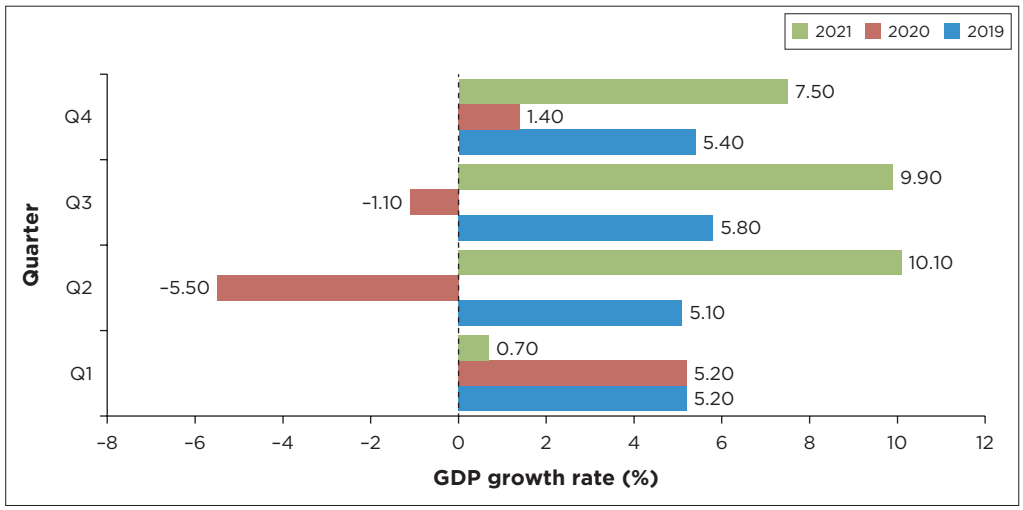
Source: World Bank 2022.
Key: GDP, gross domestic product.
FIGURE 1.1: Kenya's gross domestic product growth between 1960–2020.

trends, with their GDP growths declining from 6.8% and 7.5% in 2019 to 2.1% and −0.5% in 2020, respectively.

When the first positive cases of COVID-19 were recorded in Kenya, the country was experiencing a decline in economic growth, which had fallen from 5.8% in the fourth quarter of 2019. This declined to 5.2% in the first quarter of 2020. When COVID-19 was declared a pandemic in March 2020, Kenya's economic growth rate declined drastically to 5.5%. However, the economy showed an improvement in the third quarter of 2020, as shown in Figure 1.2.

Kenya's GDP growth may have dropped due to the preventative measures the Kenyan government took to halt COVID-19's spread in the second quarter. This led to tightening of financial conditions in Kenya, with most of the financing directed to measures to curb COVID-19 spread coupled with a reduction of government revenue because of weakening in economic activity, tax reliefs to vulnerable households and an increase in COVID-19-related spending needs (World Bank 2020).

Nevertheless, Kenya's economy portrays an improvement in the third and fourth quarters of 2020, as shown in Figure 1.2. This improvement is attributed to an increase in business because of the partial reopening of the economy after easing on some of the COVID-19 measures, increased exports in July–August after decreasing in the second quarter of the year and increased distribution of cash transfers to the vulnerable groups through mobile money accounts.



Source: KNBS 2022.
Key: GDP, gross domestic profit.

FIGURE 1.2: Kenya's quarterly gross domestic product growth rate between 2019–2021.

Drivers of economic growth in Kenya[2]

Kenya's economy is mainly dominated by the services sector. Services have been the main engine of Kenya's economy over the past decade. Expansion of the services sectors accounted for almost two-thirds of the increase in output between 2010 and 2020 (Table 1.1).

In 2020, the share of agriculture in Kenya's GDP was 23.1%, the industry contributed approximately 17.4% and the services sector contributed about 53.6%.

The services sector has remained resilient, albeit with differences across subsectors. The services sector, which accounts for 58.5% of GDP, was the main engine of economic growth in 2017, single-handedly accounting for some 80% of the 4.8% growth in 2017. However, the robust performance in the sector was negatively impacted by COVID-19 in 2020, as shown in Figure 1.3, which shows the percentage reduction in cash flows in the services sector in 2020 (Kiriti-Nganga 2022).

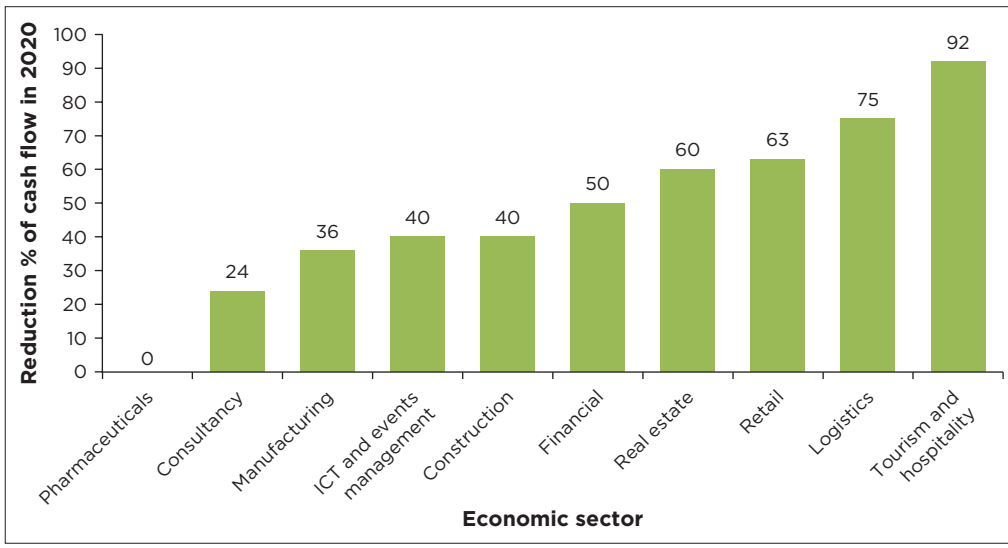
Nevertheless, the services sector remains highly informal except for the few large firms in finance, telecommunication, and information and communication technologies (ICTs) and is dominated by a large number of low-productivity small firms.

2. The following section is based on Kiriti-Nganga (2019).

TABLE 1.1: Share of economic sectors in the gross domestic product in Kenya between 2010–2020.

Year	Agriculture (%)	Industry (%)	Services (%)
2010	17.6	18.6	57.0
2011	18.9	19.7	55.2
2012	18.3	19.3	55.7
2013	18.6	19.1	56.1
2014	18.3	19.0	57.0
2015	19.5	18.9	56.1
2016	20.0	18.2	56.5
2017	20.9	17.5	55.9
2018	20.3	17.3	56.0
2019	21.2	16.7	55.9
2020	23.1	17.4	53.6

Source: KNBS (2021).



Source: KNBS (2021).
Key: ICT, information and communication technology.

FIGURE 1.3: Reduction percentage of cash flow in economic sectors in 2020.

Kenya's exports, imports and major trading partners

Kenya's most valuable export product is tea. Other top Kenyan exports are fresh or dried flowers for bouquets or ornamental purposes, refined petroleum oils, coffee, titanium ores and concentrates and medication mixes in dosage, as shown in Table 1.2.

Table 1.2 shows a very high level of export and import concentration as Kenya's top 10 exports accounted for about two-thirds (64.6% and 66.9%, respectively) of the overall value of its global shipments and imports.

TABLE 1.2: Top 10 exported products and their destinations, and imported products and their destinations in Kenya (average between 2018–2020).

No.	Exported products	%	Imported products	%	Export destination	%	Import destination	%
1.	Coffee, tea, matï and spices	25.7	Refined mineral fuels and oils and the product of their distillation	17.8	Uganda	10.3	PRC	21.3
2.	Live trees, plants, bulbs and roots	11.1	Nuclear reactors, boilers and machinery	9.5	Pakistan	8.8	India	10.6
3.	Refined mineral fuels and oils and the product of their distillation	5.2	Electrical machinery equipment	7.3	USA	8.2	UAE	7.9
4.	Edible vegetables and certain roots	4.5	Rolling stock, e.g. railway vehicles, trams and locomotives	7.1	the Netherlands	7.9	Saudi Arabia	7.2
5.	Edible fruit and nuts and citrus peel	3.8	Iron and steel	5.4	UK	7.2	Japan	5.5
6.	Art of apparel and access to wearable clothing	3.8	Cereals	5.0	UAE	5.3	South Africa	3.5
7.	Titanium ore: ores, slag and ash	3.6	Plastic and manufactured plastic goods	4.5	Tanzania	5.0	USA	3.3
8.	Tobacco and tobacco supply	2.5	Animal and vegetable fats and oils and its cleavage	4.0	Rwanda	3.5	Indonesia	3.1
9.	Animal and vegetable fats and oils and its cleavage	2.3	Pharmaceutical products	3.6	Egypt	3.2	Germany	2.5
10.	Iron and steel	2.1	Paper and cardboard; paper production	2.7	South Sudan	2.5	Egypt	2.4
	Total	**64.6**	**Total**	**66.9**	**Total**	**61.9**	**Total**	**67.3**

Source: World Integrated Trade Solution 2021.
Key: UAE, United Arab Emirates; UK, United Kingdom; USA, United States of America; PRC, People's Republic of China.

This export and import concentration increases Kenya's vulnerability to external shocks such as COVID-19 that undermine its sustained economic growth and development. The table also shows that Kenya's export and import destinations accounted for 61.9% and 67.3%, respectively, of all export and imports out of and into the country. This lack of diversification limits Kenya's flexibility in coping with external shocks such as COVID-19 (Kiriti-Nganga 2022).

Trade balance

Kenya typically has a substantial trade deficit. The trade balance fluctuates widely because Kenya's main exports are primary commodities subject to the effects of both world prices and weather. Kenya had a negative trade balance

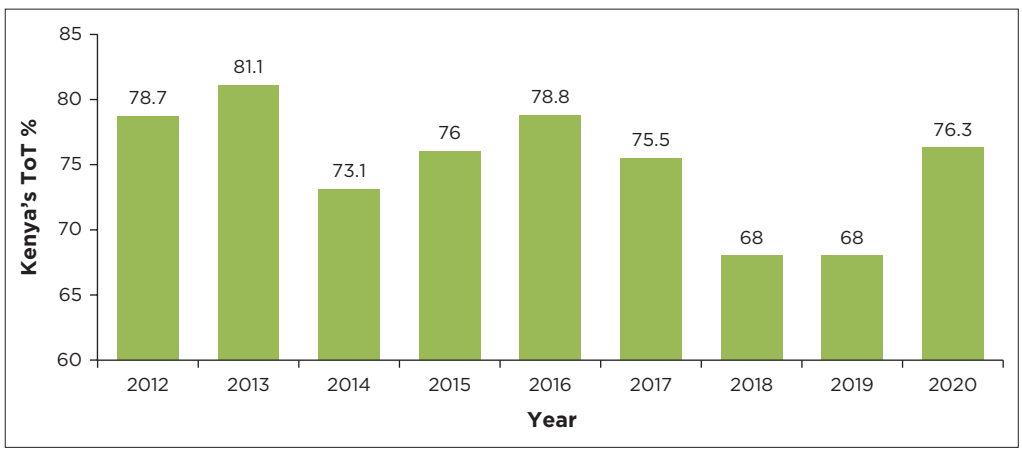
of US$11bn in net imports in 2017, compared to that of US$656m in net imports in 1995 (Kiriti-Nganga 2019).

Terms of trade

The terms of trade (ToT) are calculated as the value of its exports as a percentage of the value of its imports. An increase in the ToT means that the value of exports is increasing relative to the value of imports. Figure 1.4 portrays Kenya's ToT between 2012 and 2020.

Note that the ToT for Kenya remained unchanged at 68.0% in 2018 and 2019. However, the ToT increased to 76.3% in 2020, mainly because the introduction of international lockdown measures because of COVID-19 by Kenya's trading partners had a positive effect on exports but a negative effect on imports. Weekly imports from countries that introduced lockdown measures decreased by 23.0% on average after the measures were put in place, while exports to those countries increased by 13.0%. As a result of agricultural commodity prices falling relative to manufactured products, because of the relatively inelastic demand and the lack of differentiation among producers, there was a deterioration in the ToT.

Closure of borders to combat the deadly spread of COVID-19 in 2020 disrupted production value chains, and Kenya could no longer access the products and inputs that it previously imported, leading to shortages of supplies such as disease testing reagents, protective face masks, ventilators, pharmaceutical drugs and vaccines as the producing countries employed export restrictions to prevent shortages locally.



Source: Trading economics in the economic survey (KNBS 2021).
Key: ToT, terms of trade.

FIGURE 1.4: Kenya's terms of trade between 2012–2020.

The COVID-19 evolution and trends in Kenya

This section describes the onset of COVID-19 in Kenya and the measures the government put in place to stop the spread of the disease. It also describes the measures Kenya's trading partners in East Africa, Africa and the rest of the world took to control the spread of the disease. Some of these measures were trade-facilitative while others were trade-restrictive, hence turning into NTBs (Kiriti-Nganga 2021).

The WHO (2021) articulates that all viruses evolve over time and the virus that causes COVID-19, that is, SARS-CoV-2, has also evolved over time. The virus goes through a process of replication, making copies of itself, and during the process, it changes slightly from what it was originally. This change is called a mutation, and a virus that undergoes one or more mutations is known as a variant of the original virus strain.

The likelihood of a virus mutation is dependent on whether it is circulating widely in the community and causing a lot of infections. This gives the virus several opportunities for replication increasing its chances of undergoing changes. This mutation, depending on where the change is located in the virus's genetic material, can change the virus's rate of transmission or the severity of the disease. The mutation can also affect the performance of vaccines, diagnosis and medicines used to treat the disease caused by the virus. Other effects of the mutations could be in public health and social measures.

The WHO started labelling new variants using the Greek alphabet, starting with the Alpha variant, which emerged in 2020, which is easier to convey and more practical to be discussed by non-scientists. The earliest documented samples of SARS-CoV-2 were named as follows: the sample identified in the UK in September 2020 was labelled 'Alpha' on 18 December 2020. The sample identified in South Africa in May 2020 was labelled 'Beta' on 18 December 2020. The sample identified in Brazil in November 2020 was labelled 'Gamma' on 11 January 2021, and the sample identified in India in October 2020 was labelled 'Delta' on 11 May 2021. The 'Delta' variant was first diagnosed in Kenya in May 2021. It is highly contagious and spreads much faster than other variants, and now contributes to 96.7% of all COVID-19 reported cases.

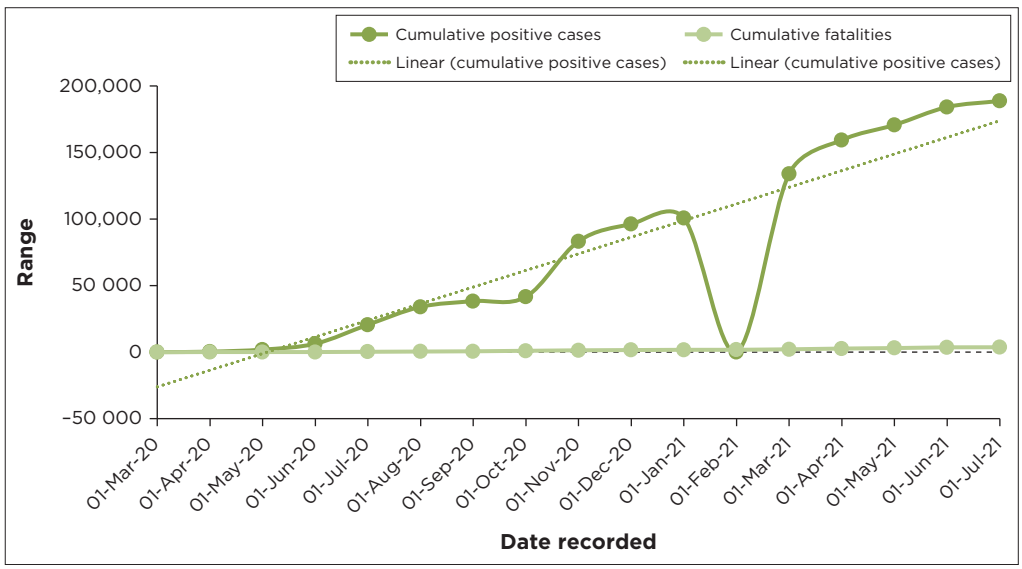
Kiriti-Nganga (2022) reports that the first COVID-19 case was reported in Kenya on 12 March 2020, and by 12 July 2021, Kenya had tested 1,183,212 people. The number of COVID-19 confirmed cases and death cases has been increasing but at a slower rate than it was in the first quarter of 2020. By 12 July 2021, the number of COVID-19 confirmed cases and fatalities was 188,754 and 3 722, respectively (Table 1.3).

The number of COVID-19 confirmed positive, fatality and health recovery cases were increasing since March 2020 (Figure 1.5). By the end of October

TABLE 1.3: COVID-19 confirmed and death cases in Kenya from March 2020–July 2021.

Months	Date recorded	Cumulative positive cases	Cumulative fatalities
March	31-03-2020	59	1
April	30-04-2020	396	17
May	31-05-2020	1 962	64
June	30-06-2020	6 366	144
July	31-07-2020	20 636	341
August	31-08-2020	34 057	574
September	30-09-2020	38 378	707
October	31-10-2020	41 619	981
November	30-11-2020	83 316	1 452
December	31-12-2020	96 251	1667
January	31-01-2021	100,773	1 755
February	28-02-2021	104,500	1 856
March	31-03-2021	134,058	2 153
April	30-04-2021	159,318	2 724
May	31-05-2021	170,735	3 172
June	30-06-2021	184,161	3 634
July	12-07-2021	188,754	3 722
Total	**-**	**1,365,244**	**24 963**

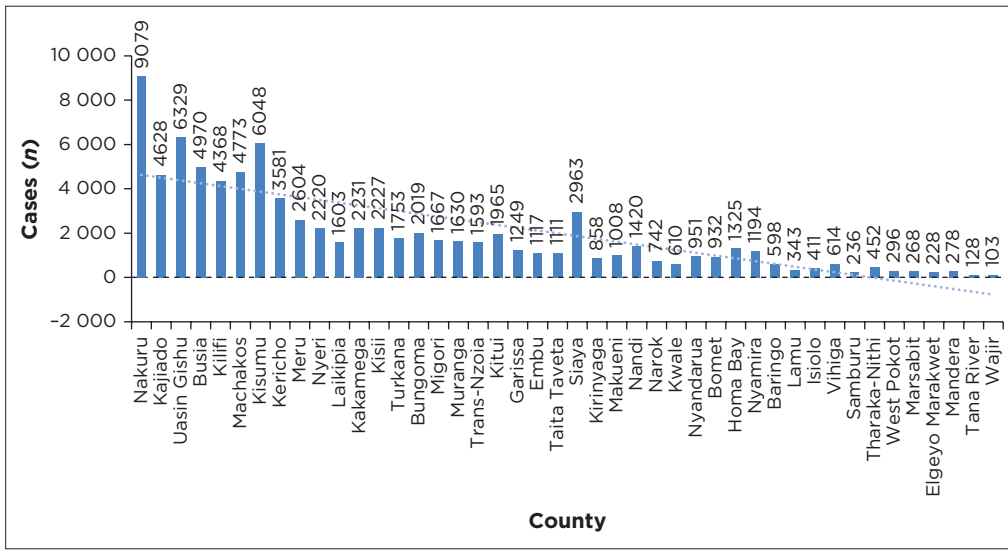
Source: WHO n.d.



Source: WHO (n.d.).

FIGURE 1.5: Cumulative positive and cumulative death cases in Kenya as of 12 July 2021.

2020, the number of COVID-19 confirmed cases and deaths was 41 619 and 981, respectively. By the end of 2020, the number of positive cases and persons who died of illness had risen to 96 251 and 1 667, respectively. This figure rose to 188,754 by 12 July 2021 with the number of deaths rising to 3 722. Figure 1.5 shows the monthly reported and confirmed cases of



Source: KNBS (2021).
Key: COVID-19, coronavirus disease 2019.
FIGURE 1.6: Distribution of COVID-19 cases by county as of 13 July 2021.

COVID-19 in Kenya, comprising cumulative positive and cumulative deaths up to 12 July 2021.

The total number of recoveries and discharges for COVID-19 was 180 000 as of 13 July 2021 (Ministry of Health [MoH] 2021). The number of COVID-19 positive cases as of 13 July 2021 differs by county, with some counties, such as Nairobi, accounting for the majority of cases at 78 593, while Wajir had the least number of positive cases at 103 (Appendix 1.1).

It is clear from Appendix 1.1 that Nairobi had the highest proportion of COVID-19 cases accounting for 42.1% of the total number of positive cases. Nairobi is followed by Mombasa and Kiambu, which accounted for 86.9% and 5.90%, respectively, of all COVID-19 cases in Kenya, while Wajir had the least proportion.

The Kenyan government's response to the COVID-19 pandemic

Many sectors have been affected in one way or another, some of them adversely since the reporting of the first COVID-19 case in Kenya and especially more by the measures the Kenyan government took to contain the spread of the pandemic (see Kiriti-Nganga 2021). One of the measures was the restriction of movement to and from certain counties, such as Nairobi and Nairobi Metropolitan, Mombasa, Kilifi and Kwale, as well as putting some estates in

Nairobi on lockdown. This disrupted the value chains of goods and services in the whole country. A nationwide curfew from 19:00 to 05:00 was imposed on people except those offering essential services, including medical services, food and drink transportation and retail medical supplies. This meant that businesses had to close their doors by 19:00 and employees had to be in their homes before curfew. Businesses could also not open their doors before 05:00, implying that night travel could not take place, resulting in delays in deliveries for both exports and imports as well as for locally produced goods. Places of work (both public and private) were closed, and workers were instructed to work from home, except for those offering essential services, such as hospitals. This closure disrupted those businesses that had not yet adopted technology to enable them to work from home, and more so those that offered personal services such as hospitality and tourism. At the same time, all vehicles offering public services were supposed to adhere to the Ministry of Health guidelines on hand washing and social distancing. All Kenyans were advised by the Ministry of Health to wear layered sanitised masks and practise good handwashing techniques. This led to an increase in the cost of doing business as this had not been planned for. Valid COVID-19 certificates were supposed to be produced at border crossings, especially for truck drivers ferrying goods throughout the East African Community member states, which led to increased costs of doing business and to delays at the borders. Other trading partners also took measures to stop the spread of the virus (Kiriti-Nganga 2021). The policy measures that the Kenyan government and its trading partners took amounted to non-tariff measures (NTMs), with some measures turning into NTBs.

Non-tariff measures and non-tariff barriers

The UNCTAD (2013) and the WTO (2012) defined NTMs as policy measures other than tariffs that can potentially have an economic effect on international trade in goods. They can change the quantity and prices of goods traded, and they can influence who trades what and at what prices they trade. For exporters, importers and policymakers, NTMs represent a major challenge. Although many NTMs aim primarily at protecting public health or the environment, they also substantially affect trade through information, compliance and procedural costs (see Kiriti-Nganga 2021).

These policy measures act as restrictions or barriers to trade, hence the term NTBs. They can be in the form of quotas, embargoes, sanitary measures, import licensing, conditions or specific market requirements that make the exportation or importation of services and goods difficult or costly. UNCTAD classifies NTMs into two categories, namely, those that are trade-facilitative and those that are trade-restrictive (Table 1.4).

TABLE 1.4: United Nations Conference on Trade and Development's classification of commonly used non-tariff measures during the COVID-19 pandemic.

License code	Trade-facilitating measures	License code	Non-tariff barriers (trade-restricting measures)
L41*	Tax and duty exemptions, reductions or other fiscal incentives that reduce burden of taxes due	P31	Export ban
G4	Regulations concerning terms of payment for imports	P33	Requirements of license, permit or registration to export
E125*	Licensing for the protection of public health	A11	Prohibitions for SPS reasons
A83*	Certification requirements for SPS reasons	E313	Temporary ban, and suspension of issuance of licenses
L11	Transfers of funds (monetary transfers) by the ruling government (to an enterprise) – grants	P32	Export quotas
D12*	Anti-dumping duties	P22	Requirements for export monitoring and surveillance
B83*	Certification requirements for technical barriers to trade for TBT reasons	E25	Prohibition for the protection of public health
L9	Support for consumers or producers not elsewhere specified	C9	Other pre-shipment inspection formalities specified elsewhere
E325	Prohibition for protection of public health	B14	Authorisation requirements for importing certain products TBT reasons
B7*	Product quality, safety, or performance requirements for TBT reasons	–	–
B14*	Authorisation requirements for importing certain products TBT reasons	–	–

Source: UNCTAD (2021).
Key: COVID-19, coronavirus disease 2019; SPS, sanitary and phytosanitary; TBT, technical barriers to trade.
*, implies that measures can be relaxed to facilitate trade.

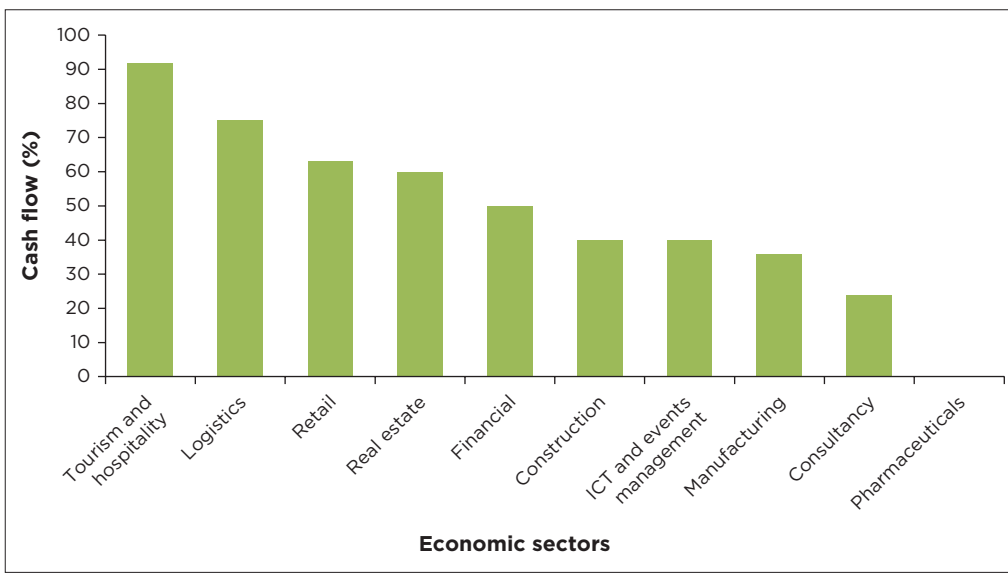
Some of the NTMs help expedite the trade of such goods, thus ensuring adequate supplies for the source-country, for example, exemptions from paying duties and taxes, relaxing sanitary and phytosanitary (SPS) requirements and easing of non-automatic licensing requirements on imported medical supplies. However, export bans; quotas; and requirements of licenses, permits or registration to export medical supplies can adversely affect trade, and in the process, they negatively impact the availability of essential goods in import-dependent countries, more so the most vulnerable ones hence amounting to NTBs. In the majority of cases, NTBs are imposed without coordination with trading partners, and they end up disrupting global value chains (GVCs), and in the process, they act as barriers to the smooth flow of trade in goods and services. Some NTBs, such as the requirement for export monitoring and surveillance, help ensure that the export product is safe and of high quality, but they end up delaying exports because of the additional inspections and checks imposed (Kiriti-Nganga 2022).

International trade flows had been on the increase before the outbreak of the COVID-19 pandemic. This was as a result of a reduction in tariff and NTBs, transport costs and transaction costs. However, the outbreak of COVID-19 led

to policy measures that were trade-restrictive or acted as barriers to trade as they restricted the free movement of goods and persons. Most countries adopted policies that were more inward-looking, and most of the NTBs were largely premised on domestic law citing public health and safety as a reason to institute measures that ended up impacting not only internal trade but also cross-border and international trade. Many countries imposed NTBs such as the closure of borders to movement of persons; banning the crossing of borders by persons using means such as bicycles, motorcycles and wheel carts; restricting border crossing to only transit cargo trucks; mandatory COVID-19 screening at the borders; fourteen-day quarantine of new arrivals; closure of non-essential businesses; curbing meetings and social gatherings; and night curfews in response to the COVID-19 pandemic. These measures acted as stumbling blocks on trade flows in both local and global economies. The additional border controls and disruption in transport and associated logistics issues led to a rise in trade costs estimated to account for up to a third of the decline in world trade from 12%–32% (Organization for Economic Co-operation and Development [OECD] 2020b).

In the EAC region, these new pandemic containment measures led to a reduction in cash flows in different sectors of the economy (Figure 1.7).

Figure 1.7 portrays that the most affected sector was tourism and hospitality, followed by logistics, while the least affected was the pharmaceutical sector as most of the EAC member states: Kenya, Burundi, Rwanda, South Sudan,



Source: EABC (2020a).
Key: ICT, information and communication technology; COVID-19, coronavirus disease 2019.

FIGURE 1.7: COVID-19 impact on cash flow by sector in the East African Community member states in 2020.

Source: EABC (2020b).
Key: COVID-19, coronavirus disease 2019.

FIGURE 1.8: Impact in percentage of COVID-19 on supply chains in the East African Community member states in 2020.

Uganda and Tanzania, facilitated trade in the pharmaceutical sector in order to cope with the pandemic.

Supply chains were also negatively affected by the restrictive measures taken by respective countries (Figure 1.8).

Figure 1.8 shows that there was a decline in trade sales of 56%, cross-border restrictions of 56%, inadequate access to raw materials of 41%, staff retrenchment of 18%, a decline in export markets of 18%, and contract delays and reduction in mobile phone transactions of 15%.

According to the East African Business Council (2020), the six EAC member states, namely Rwanda, Uganda, Tanzania, Burundi, Kenya and South Sudan, lost US$3.36bn worth of trade in 2020 because of the COVID-19 pandemic containment measures. East African Community's intra-regional exports declined by 7.37% in 2020 as the pandemic containment measures reduced manufacturing output and slowed down economic activities. On the contrary, intra-EAC imports declined by 3.71% in the same period. Total EAC imports fell by 9.77% to US$35.65bn from US$39.51bn as a result of the containment measures adopted by trading partners such as People's Republic of China (PRC), India and the European Union (EU). In total, trade in the EAC region declined by 6.08% to US$51.91bn in 2020 from a high of US$55.27bn in 2019. Kenya's total merchandise trade declined by 8.76% from US$23.48bn in 2019 to US$21.42bn in 2020. Its imports declined by 12.7% from US$17.64bn to US$15.4bn, while its exports increased by only 3.14%.

In response to the pandemic, some governments channelled traffic through fewer border crossings and even conducted at-the-border health checks. The entry of people at border posts, including airports, was subject to temperature checks and COVID-19 testing, and if a traveller tested positive, they were subjected to quarantine or hospitalisation if necessary. Most land borders were closed, and truck drivers were also subject to the above check, and this led to delays and congestion at the land borders.

The COVID-19 containment measures not only restricted the physical movement of the traders but also disenfranchised them from the business arena, eroded their capital and forced traders back into the costly informal trade (Albertoni & Wise 2021). These measures led to an escalation of NTBs, some of which had been previously addressed, and an introduction of many unprecedented ones that include the collapse of informal cross-border trade (ICBT) and an increase in transit times along the major corridors (East African Sub-regional Support Initiative [EASSI] 2020).

The six member states of the EAC failed to harmonise COVID-19 measures. These NTBs, such as COVID-19 testing at the border and failure to recognise COVID-19 test certificates from partner states placed additional demands on border control agencies that were also carrying out their usual functions while at the same time implementing containment measures such as social distancing (OECD 2020a). The measures also caused massive traffic snarl-ups at border crossings. For example, at the Kenya-Uganda border towns of Malaba and Busia during the initial stages of COVID-19, long queues of trucks stretched up to 65 km on the Kenyan side as the Ugandan authorities imposed compulsory COVID-19 tests on Kenyan truck drivers before they entered the country. At the Rwanda-Tanzania border crossing of Rusumo, the Tanzanian truck drivers were forced to hand cargo over to Rwandan counterparts, who took it onwards to Kigali.

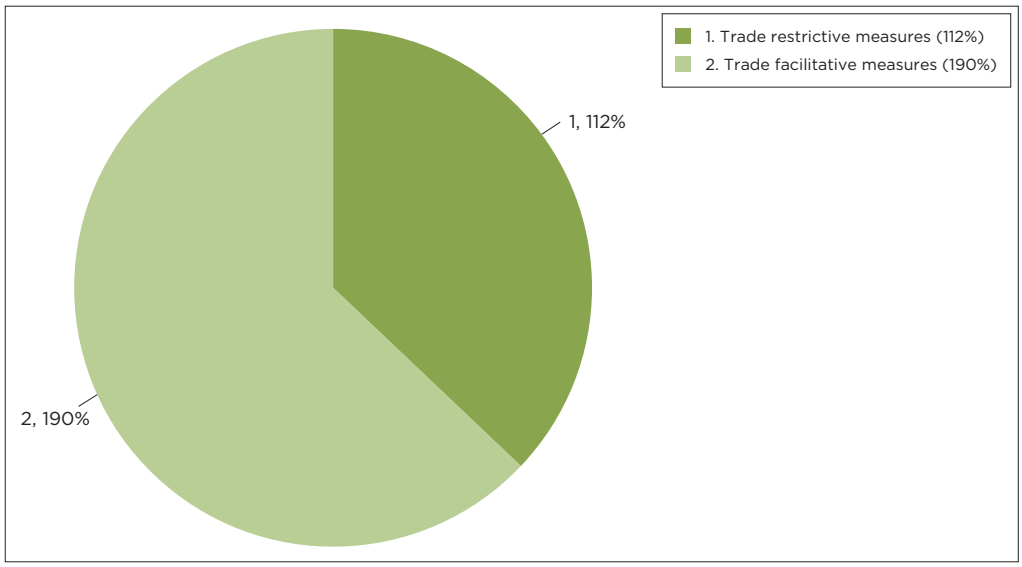
In some cases, flights were cancelled, and ships were stopped on high seas as ship and inland ports were considered super-spreaders of COVID-19 infections. While borders remained open for freight transportation, there was a slowdown in logistic flows as drivers were subjected to border controls for quarantine purposes.

The enhanced border checks led to border delays in the EAC member states. Before COVID-19, it had taken cargo around three and a half days to be transported from Mombasa to Kampala, seven days to Kigali, ten days to the Democratic Republic of the Congo and 14 days to South Sudan. The NTBs taken by the authorities more than doubled the amount of time taken to transport goods. For example, the strict border control measures such as compulsory testing for COVID-19 increased the amount of time taken to transport goods from Mombasa to Kampala from three and a half to 7–10 days, while it took 21 days to Kigali and far longer to the Democratic Republic of Congo and South Sudan leading to an increase in the cost of moving goods around the region (Collins 2020).

The closure of land borders, delays in freights, lockdowns and export restrictions of COVID-19 testing kits by international suppliers also led to a disruption in supply chains of essential commodities such as COVID-19 testing kits, personal protective equipment (PPE) and other medical equipment, leading to low testing capacities, diagnosis and treatment. For example, when COVID-19 was declared a pandemic, Kenya used to source automatic testing kits and reagents from the United States of America (USA). However, on 06 September 2020, the USA government placed an embargo on the exportation of any reagents for Roche and Abbott machines. This stoppage forced Kenya to scale down testing for COVID-19, resulting in running two systems: a manual system and an automatic polymerase chain reaction (PCR) system.

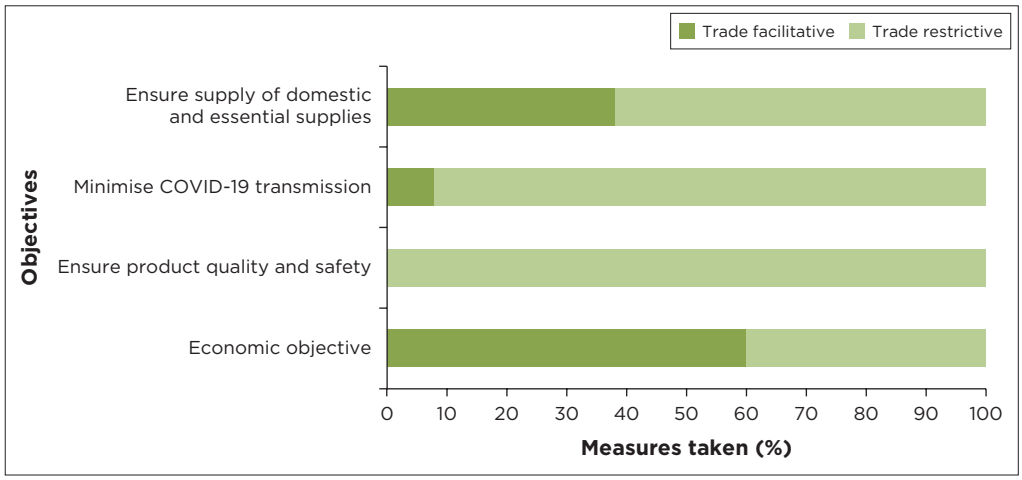
The COVID-19 pandemic containment measures also brought about disruptions in supply chains all over the world, especially pharmaceutical supplies for reproductive health, antiretroviral drugs (ARVs), hypertension, diabetes and medical equipment, including PPE, masks and vaccines, among others. The disruption led to increased demand worldwide and developing countries like Kenya found themselves cut off from their suppliers who also needed the same products, and they preferred satisfying local demand first. Developed countries also placed huge orders for these products leaving little for the poor and developing countries (Kiriti-Nganga 2022). For example, most large-scale vaccine manufacturers are in the USA, EU and the Indian sub-continent. The regions imposed restrictions on exports of vaccines as well as raw materials and equipment for their production, which disrupted the entire vaccine production and distribution process. These regions also stockpiled more than 60% of the world's vaccines before they were even approved for use (Lee & Prabhakar 2021). As shown in Figure 1.8, there was a disruption in supply chains and, more so, in access to raw materials in the EAC member states of 41%. Export restrictions were not just on vaccines. More than 80 countries placed embargoes on exports of PPE and medical goods, especially in the initial months of the COVID-19 pandemic, leading to severe supply chain disruptions. UNCTAD (2021) found that almost 40% of all trade-restrictive NTMs had been terminated by 21 March 2021, but about 60% of these measures were still in place even in 2021. Figure 1.9 shows the trade-restrictive and trade-facilitative measures between December 2019 and March 2021.

Figure 1.9 shows that there were 190 trade-restrictive (barriers) measures compared to only 112 trade-facilitative measures imposed by various countries in the world between December 2019 and March 2021. The trade-restricting measures were export prohibitions, licensing or permit requirements to export and import prohibitions for SPS reasons. The trade-facilitating measures were tax and duty exemptions, tax reductions, other fiscal incentives and relaxation of licensing requirements. According to UNCTAD (2021), the objectives of these measures are shown in Figure 1.10.



Source: UNCTAD (2021).

FIGURE 1.9: Trade-restrictive and trade-facilitative measures taken in East African Community member states between December 2019–March 2021.



Source: UNCTAD (2021).
Key: COVID-19, coronavirus disease 2019.

FIGURE 1.10: United Nations Conference on Trade and Development trade objectives and trade measures taken.

Government trade facilitation measures

The Kenyan government responded to the devastating effects of the pandemic through an economic stimulus plan that was implemented via the *Tax Amendment Act 2020*, which took effect on 01 April 2020.

For the allocation of KSh44.8bn for health care, contact tracing, monitoring expenses, food reliefs, social protection and cash transfers, the government reduced tax from 16%–14% and personal income tax rate from 30%–25%, corporate tax was reduced from 30%–25% and increased from 10%–15% for non-residents, while the tax turnover was reduced from 3.0%–1.0% and turnover thresholds increased from KSh1m to KSh500m for micro, small and medium enterprises (MSMEs). On the same breath, low-income earners of KSh2 400 and below were exempted from tax.

Similarly, to save the MSMEs from further damage, the government temporarily suspended the listing of any person or corporate entity to Credit Reference Bureau for any loan overdue or arrears. The government also promised to pay KSh13bn of the bending bills, verified value-added tax (VAT) refund claims amounting to KSh10bn and encouraged the private sector to follow suit in clearing outstanding bills. Among them, KSh1bn was to be appropriated from the universal health care coverage vote to recruit more essential health care workers.

On the contrary, the executive announced through the president to take a voluntary salary reduction, whereby the presidency reduced their salaries by 80%; the ministers, speakers of parliament and chief administrative secretaries reduced their salaries by 30%; and principal secretaries reduced their salaries by 20%.

The government also insisted on cashless payment to reduce the spread of the virus from one person to the other and allocated KSh3bn as seed capital for MSMEs credit guarantee scheme (to provide affordable credit), another KSh3bn for the supply of farm inputs to about 200,000 small-scale farmers implemented through e-vouchers and KSh1.5bn for flower and horticultural producers to access international markets.

Not to be left out is the worst-hit sector of the season – the tourism and hospitality sector, where hotels were closed because of lockdowns around the world and within. The government allocated KSh2bn to cushion the sector from collapse. The money would be taken as a soft loan to support renovations and restructuring of the business model. The government also granted KSh100m to the creative sector, that is, artists, actors and musicians, through the 'work-for-pay' initiative, while KSh1bn was given to support around 160 community conservancies.

Subsequently, the Central Bank of Kenya, on 23 March 2020, reduced the lending rate to 7.0% and continued through September 2021, reduced the cash reserve ratio also to 4.25%, increased the maximum tenure of purchase to 91 days from 28 days and waived charges on mobile money transactions.

To compound the monetary measures of the Central Bank, the IMF approved KSh79bn emergency disbursement, and the World Bank activated a facility of KSh5bn and an additional KSh1bn to support 2020–2021 fiscal budget, and in

May 2021, the IMF provided US$739m interest-free loan to help weather the initial COVID-19 shock.

On the contrary, the government embarked on a project to supply adequate water to informal settlements, schools, marketplaces and public places in order to encourage hygiene, especially washing of hands to prevent the spread of the virus. In major towns, and especially Nairobi city, the government constructed more new hospitals and refurbished others in an effort to assist those in need affected by the pandemic.

The government also supported and promoted businesses by procuring and buying goods and services from them and investing directly in the economy, channelling money locally through small businesses and ensuring that technology and know-how were made available to MSMEs and companies.

Conversely, to keep the learners home and maintain learning and continuity of education, the government facilitated learning through TV and radio, provided internet in remote areas through Google balloons (Project Loon) and adjusted the school calendar and modality of exams. It was a short-term remedial programme to help learners from idling, although nearly 400 private schools with a population of about 56 000 learners nearly closed and others closed permanently. However, the Kenyan government pledged KSh7bn as a concessional loan to private schools to help them with resumption. The loan would be availed at an interest rate of between 2.5%–3.5% and will be dependent on the absorption rate of an institution.

On mobilising local agents to safeguard livelihoods, the labour services and physical capital were redeployed – like textile businesses that started making PPE – and to restore the livelihoods of employees affected by the pandemic, the government responded through national 'cash-for-work' programmes (*kazi mtaani*), while the small-scale traders were advised to consolidate their consignments such that it can easily be moved across the border now that the movement of the people was restricted. This was done because the borders were closed and the ministry issued guidelines to facilitate small-scale traders to continue with their businesses. They would not be allowed to ferry their cargo on bicycles, motorcycles and handcarts but present their consignment in a truck for clearance under the *East African Community Simplified Trade Regime*, and the cargo proceeds to the hinterland and not at the border towns to prevent overcrowding.

On the contrary, the private sector companies like Safaricom waived charges on M-PESA, Standard Chartered Bank gave its small-business-owned customers a 'payment holiday' of 90 days, while companies like General Motors, in partnership with Ventec, ventured into producing medical technology ventilators.

Similarly, some businesses adapted and invented a new business model for survival. They started home delivery of food, medicine, consumer goods and so forth.

The Kenyan government, to avoid contamination and the spread of the virus, banned the importation of second-hand clothing until viable measures were put in place on how to disinfect and transport them. This importation ban was later lifted. The cargo crew transiting through the country were isolated and quarantined, and drivers were screened before being allowed to proceed with their journey. This caused long queues along the border points, and the cargo in transit was delayed from arriving in good time as drivers waited for COVID-19 results and certificates.

The government also, through customs, implemented the single-window system, a trade facilitation ICT system that allows and integrates international (cross-border) agencies and the business community with the Kenya Revenue Authority (KRA). Additionally, KRA familiarised the integrated customs management system (iCMS), which was more efficient than the Simba system that enabled KRA to receive the declaration of goods before the ship docks at the port. This significantly reduced the time taken to clear the goods as the goods would be verified before the ship docks. Kenya Revenue Authority made sure that clearing agents, transporters and importers are issued with Authorized Economic Operators certificate as part of the iCMS, which ensures that 70% of the cargo is cleared at the port. In addition, KRA mounted the operations of the Regional Electronic Cargo Tracking System (RECTS) to track the cargo from the port to the destination or from the manufacturer to the final terminus (KRA 2020).

Subsequently, KRA introduced online alternative dispute resolution sessions, while Kenya Plant Health Inspectorate Service (KEPHIS) waived charges on the phytosanitary certificate for exporters of coffee, tea, herbs and spices.

All these measures put and enforced by the government to a great extent reduced the spike of the virus, saved lives and ensured that the economy and economic activities continued uninterrupted.

In the face of high uncertainty during the outbreak, to minimise the loss of lives and livelihoods because of the virus and keep trade flowing and keep the economy from plummeting into a deeper recession, the government through, the Ministry of Industrialisation, Trade and Enterprise Development (MoITED), issued guidelines to facilitate the flow of trade while reducing the spread of the virus.

The State Department for Trade and Enterprise Development issued elaborate instructions on the cargo clearance process during the pandemic. The cargo destined for the Single Customs Territory (SCT) was to be processed in the respective Partner State System, including the cargo release process, and the processing of Road Manifest (C2) will be conducted in the KRA system.

On the transit cargo, the declaration was to be submitted and processed in the KRA Cargo Clearance System. This will include the issuance of the Road

Manifest (T812), but for identification and railage of containers, the manifest was to be submitted by the shipping line to KRA for approval at least 48 h before the arrival of the vessel. The Kenya Ports Authority (KPA) generates a list for all SCT and transit cargo and sends the list to the respective Revenue Authority (RA) for railage approval. After approval of the railage list, the KPA would move the identified containers directly from the vessel to Port Reitz for railage by Kenya Railways (KR) to Internal Container Depot (ICD) in Naivasha.

All identified cargo was supposed to be tagged using the Joint Monitoring Centre (JMC), which is a system used for providing real-time cargo visibility for rail cargo, and KPA was to provide adequate tracers for all cargo movement by rail. Then, KR was to prepare a train manifest in the Cargo Tracking System (CTS) which is integrated with the customs system. The train manifest details include the train number, date of departure, estimated time of arrival, bill of lading and corresponding container numbers. On arrival of the train at ICD Naivasha, the KRA/KPA/KR was supposed to physically take a tally of the actual cargo against the train manifest. These data are updated in CTS, then automatically sent to RECTS as stock, and the Port Health clears the driver for onward movement through the Port Health Module that is used by Ministries of Health across the region. A digital certificate is generated and shared with the next country of entry.

As the truck enters the ICD Naivasha to pick up the cargo, the cargo owner was supposed to have processed a KPA pick-up order to facilitate payment of port charges as well as activate the truck booking process. The truck booking system validated that:

1. The cargo has been cleared by customs.
2. The pick-up order is fully processed by KPA.
3. The driver has been cleared by Port Health for onward movement.

Thereafter, the KPA loaded cargo onto the truck as per the truck booking details, KRA then tagged and armed the containers with RECTS, and the cargo was evacuated through the Smart Gates with no human intervention. This was recorded as a gate-out process. Thereafter, the cargo was tagged with a RECTS seal and monitored up to the destination as per the declaration. The driver data were shared with the respective health stop facilities and borders for Port Health processes. The cargo clearance process was paperless. The enforcement staff validated the Road Manifest online and updated the customs system with the prescribed details, as well as the driver clearance process, and a digitised health certificate was issued. The customs office also distributed the list of essential goods as given by World Customs Organization (WCO) for quick clearance.

One of the most challenging experiences for businesses during COVID-19 involved cross-border trade along Kenya's border points in the clearance of imports and exports. Some of the key agencies implemented measures that

show a faster flow of cargo across borders, which included the reduction of custom clearance documents from 10 to 4 for imports, while for exports, the documents were reduced from nine to five. Brand-new motor vehicle spare parts for new cars were exempted from certificate of conformity requirements. Smart Gates at ICD Nairobi and Naivasha were introduced, and these reduced customs clearance time and costs in cargo clearance. There was real-time tracking of containers; KEPHIS, AFA and Port Health were all roomed into the single window, and the declaration of agro-exports was removed.

The National Committee on Trade Facilitation (NCTF)[3] was accordingly activated to expedite both domestic trade and international trade. The UNCTAD incorporation with the EAC secretariat and financed by the TradeMark East Africa trained online 130 NCTF persons from Kenya, Rwanda, Burundi, Tanzania and Uganda and equipped them with tools and experience in trade logistics and how to handle trade during the pandemic. The training was meant to strengthen their roles and focus more on simplification, transparency and streamlining of trade procedures and maintaining trade flows during the COVID-19 pandemic.

The single-window system (SWS) was launched on 31 May 2021, and all licensed shipping lines and agents started using it on 02 June 2021. It is a national electronic system that serves as a single-window entry point for parties involved in international trade and transport logistics to lodge documents electronically, process, approve and make payments electronically. The system enables a one-off submission of pre-arrival and pre-departure declarations to the agencies at the port like KRA, KPA, Kenya Maritime Authority (KMA), State Department of Immigration, National Environment Management Authority, Port Health, Kenya Coast Guard Service and KEPHIS. The system is meant to help traders substantially reduce ship turnaround time in loading and unloading cargo, making savings on demurrage charges by accelerating cargo throughput and easing the growing congestion in Mombasa port. The documents uploaded into SWS include the cargo declaration, general declaration, the ship's stores declaration, dangerous goods manifest, the crew's effects declaration, passenger list and crew list, last ports of call, waste and fuel declaration form, maritime declaration of health form, ship certificates, and International Ship and Port Facility Security and Safety of Life at Sea (SOLAS) form.

Kenya also launched a trade portal, the first one in EAC, fulfilling Article 1 of the WTO TFA, and has consolidated 125 documents (73 under exports and 52 under exports) and procedures required to import to Kenya and export from Kenya. This portal serves up to 1.5 million users per month.

3. This Committee was established in 2016 (legal notice No. 110 of 16 September 2016 published in the Kenya Gazette [Vol. CXVIII] with the aim of promoting trade facilitation in the country, in particular, by ensuring expedited movement, release and clearance of goods and transit goods.

On 21 July 2021, a memorandum of understanding to implement a digital trade corridor between Kenya and the UK was signed between Kenya and the UK, whose aim was to eliminate paperwork and introduce much better visibility up and down supply chains that flow between Kenya and the UK.

This Trade Logistic Information Pipeline (TLIP) was expected to generate a transparent, efficient and cost-effective way of managing trade information to sustain and increase trade. At the multilateral level, Kenya has been implementing various trade facilitation measures such as the Customs Valuation Agreement, Agreements on Pre-Shipment Inspection, Rules of Origin, Import Licensing Procedures, TBT, and SPS measures. As a member of WCO, Kenya has also been playing a part in the way to accession to customs agreements with the international application of Harmonised System Convention that forms the basis for tariff classification of goods traded in the international market.

Furthermore, Kenya has gone on board on a Customs Services Department Reform and Modernization Project to modernise customs administration in accordance with internationally accepted conventional standards and best practices drawn in WTO agreements and the WCO Revised Kyoto Convention, although Kenya has not ratified the Revised Kyoto Convention.

Conclusion

The measures taken by different governments to combat the spread of COVID-19 translated to NTBs, which disrupted trade not only in the East African Community member states, but also in the whole world. The measures led to declines in cash flow, with the hospitality and tourism sectors badly affected. Value chains were also disrupted, leading to shortages of supplies such as vaccines, medicines and raw materials in manufacturing. There was also a decline in trade in the East African Community member states, including Kenya. It is therefore important that the Kenyan government comes up with strategies to stop the spread of COVID-19 while at the same time protecting the lives and livelihoods of its citizens (see Kiriti-Nganga 2021).

The EAC and other African countries should prioritise vaccination in the short term to stop the spread of COVID-19.

Trade-restrictive measures that have translated into NTBs make it inevitable for Kenya and other African countries to start thinking of how they can become producers as well as consumers of their own products and, more so, those products that are essential for human life, such as pharmaceuticals and vaccines.

Government trade facilitation measures helped to an extent to keep the firm operational and ease the flow of goods and services across borders after the disruption of the supply chains. However, recovery has been quite slow and hence the need for national economic recovery strategies.

APPENDIX 1.1: Coronavirus disease 2019 cases in Kenya by county as of 13 July 2021.

Number	County	Population (2019 census)	COVID-19 cases
1.	Nairobi	4,397,073	78 953
2.	Mombasa	1,208,333	12 924
3.	Kiambu	2,417,735	11 036
4.	Nakuru	2,162,202	9 079
5.	Kajiado	1,117,840	4 628
6.	Uasin Gishu	1,163,186	6 329
7.	Busia	893,681	4 970
8.	Kilifi	1,453,787	4 368
9.	Machakos	1,421,932	4 773
10.	Kisumu	1,155,574	6 048
11.	Kericho	901,777	3 581
12.	Meru	1,545,714	2 604
13.	Nyeri	759,164	2 220
14.	Laikipia	518,560	1 603
15.	Kakamega	1,867,579	2 231
16.	Kisii	1,266,860	2 227
17.	Turkana	926,976	1 753
18.	Bungoma	1,670,570	2 019
19.	Migori	1,116,436	1 667
20.	Muranga	1,056,640	1 630
21.	Trans-Nzoia	990,341	1 593
22.	Kitui	1,136,187	1 965
23.	Garissa	841,353	1 249
24.	Embu	608,599	1 117
25.	Taita Taveta	340,671	1 111
26.	Siaya	993,183	2 963
27.	Kirinyaga	610,411	858
28.	Makueni	987,653	1 008
29.	Nandi	885,711	1 420
30.	Narok	1,157,873	742
31.	Kwale	866,820	610
32.	Nyandarua	638,289	951
33.	Bomet	875,689	932
34.	Homa Bay	1,131,950	1 325
35.	Nyamira	605,576	1 194
36.	Baringo	666,763	598
37.	Lamu	143,920	343
38.	Isiolo	268,002	411
39.	Vihiga	590,013	614
40.	Samburu	310,327	236
41.	Tharaka-Nithi	393,177	452
42.	West Pokot	621,241	296
43.	Marsabit	459,785	268
44.	Elgeyo Marakwet	454,480	228
45.	Mandera	867,457	278
46.	Tana River	315,943	128
47.	Wajir	781,263	103
48.	**Total**	**47,564,300**	**187,636**

Source: KNBS (2021).
Key: COVID-19, coronavirus disease 2019.

Chapter 2

Global macroeconomic trends in the face of COVID-19

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Introduction

We need to appreciate that macroeconomics is the study of the aggregate impact of households and enterprises and how these aggregate effects affect individual households and firms. Indeed economic output is measured by gross domestic product (GDP), employment and inflation, which are the three major components of macroeconomics. Macroeconomics aims to foresee economic situations in order to assist consumers, businesses and governments in making decisions as necessary. Therefore, it serves well to examine the recorded trends of its parameters globally with due regard to the impact of the coronavirus disease 2019 (COVID-19) pandemic. It is also important to appreciate the possible ways of transmission of the disease and the consequential effect on the macroeconomy. An understanding of the dynamics of the circular flow of goods, services, resources and money between businesses, households and government is essential in explaining the effect of the COVID-19 pandemic. Each of these players in the circular flow depicts a possible transmission mechanism through peoples' participation in the

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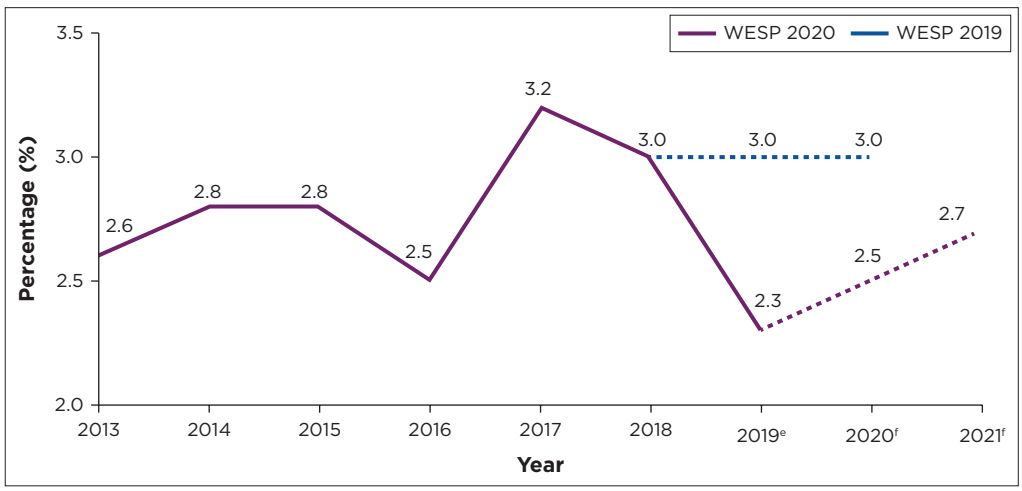
production and supply processes. Therefore, the impact of the pandemic can be felt within the broader macro parameters, such as employment, aggregate demand, supply chains and gross incomes.

Global macroeconomic trends

The *World Economic Situation and Prospect (WESP) 2019 Report* showed a declining global economy and predicted a 3% global growth rate in 2019 and 2020. However, global growth slumped to a ten-year low of 2.3% in 2019 according to the United Nations Report. It was predicted that going forward, with average global gross product growth of 2.5% in 2020 and 2.7% in 2021, a slight recovery was expected. Per capita income growth was predicted to average 1.5% in 2020 and 1.7% in 2021, with significant differences between regions. This scenario was forecast without any incidental COVID-19 pandemic effects. This implies that predictions of the global macroeconomic performance indicator were made prior to the COVID-19 pandemic effects.

The actual, estimated and forecast GDP trend globally is illustrated in Figure 2.1. In many developed countries, the growth rates had risen close to their potential in 2018, with a low record of unemployment rates. It is important to appreciate that employment levels do define aggregate demand trends and subsequent production levels. The *World Employment and Social Outlook 2020 Report* recorded a global unemployment rate of 5.4% in 2019 and was projected to remain constant for the subsequent two years. Within this perspective, one notes that any such global growth projection from 2020 when the COVID-19 pandemic struck was and is bound to change.



Source: United Nations Department of Economic and Social Affairs (UNDESA), https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/WESP2020_FullReport.pdf.
Key: WESP, World Economic Situation and Prospect.
Note: The country-level figures are aggregated using the 2010 market exchange rates where *e* = estimates and *f* = forecast.

FIGURE 2.1: Gross domestic product growth pre-pandemic projections.

As was projected rightly, the world economy was expected to decline by 3.0% in 2020 as a result of the COVID-19 epidemic, worse than the 2008/09 financial crisis. It is of interest to note that global economic progress remained uneven across regions. However, East and South Asia recorded a relatively strong growth trajectory, while several other large economies posted a decline in per capita income. This was as a result of risks that majorly included tightening of global financial conditions, escalating trade disputes mainly between the United States of America (USA) and People's Republic of China (PRC), sharp downturn in global car production and sale, slowdown in demand by PRC and global climate risks.

Rightly, the general slow trend in global growth was seen to be coupled with a sharp reduction in trading activities internationally with an equally consequential effect on manufacturing. There exist other factors that accelerated the slow growth in international trade, such as tariff and non-tariff trade barriers. This scenario further eroded business confidence across regions leading to a substantial reduction in investments.

This position on the slow growth of global macroeconomic performance does explain the United Nations (UN) projection that indicates a growth rate of 2.3% in 2019, down from 3.0% in 2018, the lowest in ten years. However, as shown in Figure 2.1, it is projected that modest growth in the GDP of 2.5% in 2020 and 2.7% in 2021 was expected to be realised. These projections are likely to be affected, taking into consideration the COVID-19 containment measures that countries adopt with appropriate policy interventions.

Trade policies shifted rapidly in 2019, leading to heightened volatility in the global financial market. The rise of trade tensions between the USA and PRC, as well as monetary policy adjustments by major central banks, primarily impacted recent movements in global financial markets. Furthermore, the gap between financial markets and real-world activity is widening.

Again, it was noted that global net capital flows to emerging economies did not vary in 2019 and were likely to pick up steam as a result of liberal monetary policies and increased investor demand. Portfolio flows, which include equities and debt flows, remained sensitive to trade tensions since 2019 in emerging economies. Despite commitments by donor countries to increase development funds, net official development assistance (ODA) flows dropped for the second year in a row in 2018.

It is of interest to note that in the year 2020, most advanced economies entered the pandemic period with historically low-interest rates and relatively higher levels of public debts. In this circumstance, it has been projected that economies would emerge from the pandemic with even higher public debts because of the need to institute economic recovery measures among countries. Low-interest rates do influence the level of investments in a country because borrowing is cheap, and under normal macroeconomic dynamics, high investments would lead to high production across sectors. However, with the

emergence of the COVID-19 pandemic, and as countries expand borrowing to mitigate the emerging challenges as a result of the pandemic, it is expected that interest rates will rise. An increase in interest rates will have a negative impact on investments across sectors. Reduction in investment will consequently lead to a reduction in production and aggregate demand.

The world public debt situation has, over time, been on an upward trajectory. The United Nations Conference on Trade and Development (UNCTAD) identified heavy indebtedness as the worldwide economy's defining feature in 2019 (UNCTAD 2019). Global debt exceeded four times the global GDP, with debt expansion being more pronounced in government and non-financial corporate sectors. In 2017, developing countries' aggregate debt rose to almost 190% of their GDP, the highest level ever recorded.

At present, the global economic recovery gained strength, with the United Nations Department of Economic and Social Affairs (UNDESA) projecting that in 2021, the global gross product is projected to grow by 5.4% and by 4.1% in 2022. The report further projects that developed countries are expected to grow by 5.0% in 2021, a percentage point greater than previously predicted. Growth in developing countries is expected to increase by 0.4% age points to 6.1% in 2021. Suggestions are that the current global recovery will be faster than any of the previous global recession recoveries since the Second World War (WWII) because of possible proactive macroeconomic policy measures that are likely to facilitate growth in aggregate demand and subsequent rise in total production.

It is also important to point out that the employment situation globally has a significant bearing on aggregate demand. Growth rates in many developed countries were observed to have risen close to their potential in 2018, with a low record of unemployment rates. The *World Employment and Social Outlook 2020 Report* recorded a global unemployment rate of 5.4% in 2019 and was projected to remain the same for the subsequent two years, but again the projections would have been affected negatively because of the COVID-19 situation.

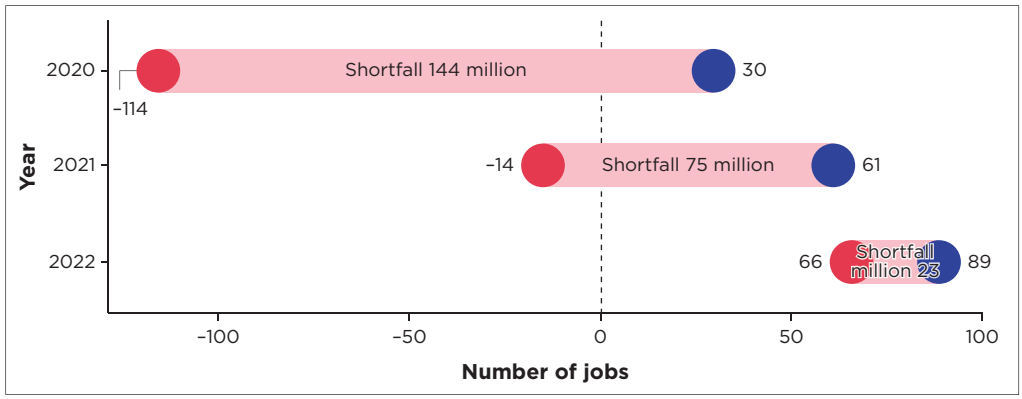
However, it is projected that in 2022, global unemployment is anticipated to reach 205 million individuals, a significant increase from 2019's figure of 187 million (International Labour Organization 2021). This translates to a 5.7% unemployment rate. A rate like this was last recorded in 2013, excluding the COVID-19 global contagion. Notwithstanding the global unemployment situation, it is expected that if the overall pandemic situation does not worsen, global job recovery will accelerate in the second half of 2021, going into 2022. But we note that because of unequal vaccine access and the limited capability of most developing countries to sustain large fiscal stimulus measures, the expected job recovery situations will be uneven across countries. The decline in employment resulted in a significant drop in labour income and, as a result,

an increase in poverty. In comparison to 2019, an additional 108 million employees around the world are now classified as poor or extremely poor, implying that they and their families subsist on less than US$3.20 per person per day (World Bank Group 2020).

Females were particularly affected by the COVID-19 crisis. In 2020, females' employment fell by 5%, compared to 3.9% for males. In addition, a higher proportion of women dropped out of the labour market and became inactive. Increased family responsibilities as a result of the COVID-19 crisis and subsequent lockdowns also increased the possibility of gender roles being 're-traditionalized'. On the contrary, adolescent employment declined by 8.7% globally in 2020, compared to 3.7% of employed adults in middle-income nations experiencing the steepest decline.

Essentially, the global employment growth perspective will continue to be dampened in the short term and even in the medium term because of the unexpected, sustained effect of the COVID-19 pandemic, as seen in Figure 2.2. However, with the notable sustained efforts to control and manage the spread of the pandemic globally, it is hoped that global employment recovery is expected to accelerate towards the second quarter of 2022. It is projected that with such effective efforts by countries, pandemic-related disruptions in various sectors will be greatly minimised.

The world macroeconomic trends, as illustrated and discussed, do point to critical facts about the immediate past, during and the short-term post-COVID-19 pandemic global performance in a number of areas. The global GDP growth pre-COVID-19 was not very active because of a number of factors, including regional trade and international trade disputes, climate change that impacted negatively on the agriculture sector, significant large fiscal deficits and hence huge public debts across nations, and high decline in global



Source: Adapted from ILO (n.d.).
Note: The red dots denote the projected difference in actual employment relative to 2019. The blue dots denote the development that would have been expected had there been no pandemic, hence showing forgone employment growth. The numbers inside the bars refer to the total pandemic-induced shortfall in jobs in a given year (i.e. the shortfall because of the combination of actual employment losses and forgone employment growth).

FIGURE 2.2: COVID-19 pandemic-induced global shortfall in jobs relative to 2019 (in millions).

financial market performance and hence reduction and largely stagnant investment initiatives across sectors and across nations.

The COVID-19 pandemic that struck countries basically exacerbated the slow global macroeconomic growth perspective, and effectively, there was stagnant employment, low or minimal international capital flows and reduction in investments, reduced international trade and trading activities, and huge public debt.

It should also be noted that in the immediate term and the post-COVID-19 period, the global macroeconomic trends in terms of the growth trajectory do not portend significant positives. This is essentially because of sustained fiscal deficits amongst countries and reduced international trading because of some evident trade disputes such as the case with the USA and PRC and the now conflict between Russia and Ukraine among the clear constraints of global macroeconomic growth. It should also be clear that the frequent regional disputes that are political and administrative in nature, especially within sub-Saharan Africa, where some countries have issues between themselves on a number of areas, do affect free trade between such countries.

Essentially, the global macroeconomic trends in terms of growth of critical variables such as employment, investments, aggregate production and demand, financial markets and GDP in the immediate and short-term planning horizon are likely to face significant constraints. Again, it should be noted that the COVID-19 variants that are evolving across nations do pose potential uncertainties to global economic planning and fiscal policy initiatives for enhanced growth. Indeed, high production costs, low production and incidental low aggregate demand globally, and high inflation (high commodity prices) coupled with huge public debt have come out clearly as the serious constraints to quick global macroeconomic recovery. This, therefore, suggests that in the immediate and short term (up to 2024), global poverty is evident as governments are unlikely to cushion, in the form of either social transfers or subsidies, their populace against the adverse effects of the COVID-19 pandemic.

Notwithstanding this scenario, countries would continue to strive to build their economies by putting in place critical macroeconomic policies for enhanced growth, with obvious moderate growth projections across sectors. This focus will be realistic with effective containment measures in place coupled with well-calculated relaxation of pandemic restriction measures. Indeed, given the serious effect of the COVID-19 pandemic on the growth processes of countries, it is projected that the global recovery process will be slow given the already experienced low living standards, high unemployment, low investments and huge fiscal deficits. This, therefore, will require cooperation amongst countries in areas of policy and resilience in addressing the macroeconomic challenges brought about by the COVID-19 pandemic.

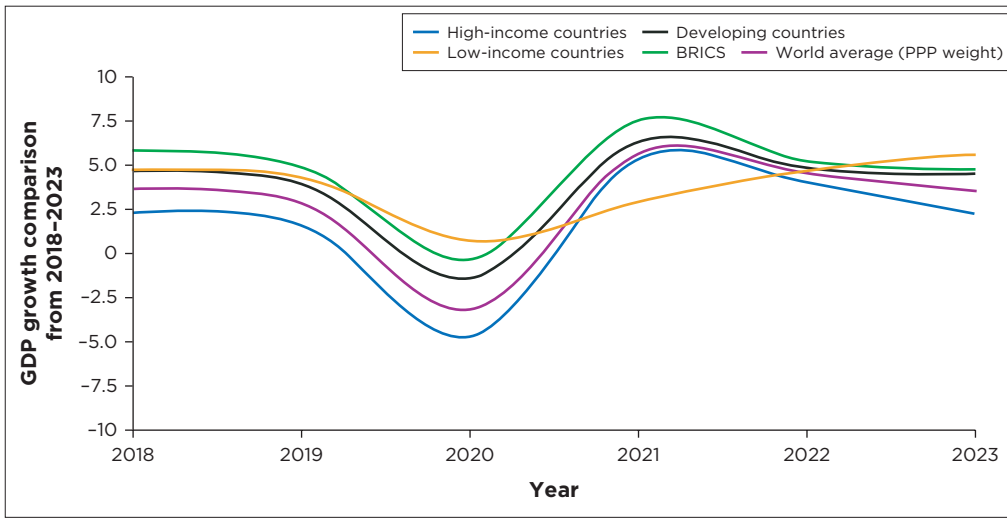
High public debt is widely experienced by countries, and rightly so, these debts cannot be avoided and should be financed, especially in poor countries, but effective debt management should be encouraged across countries.

COVID-19 and macroeconomic performance

The global economy has been hit by an unprecedented economic shock as a result of the COVID-19 epidemic. The International Monetary Fund (IMF) estimates that global output will decrease by over 3% age points in 2020, with this trend expected to be replicated across all nations regardless of their level of economic prosperity (IMF 2021). There is now a realistic route to resolving the immediate crisis by focusing on a mass vaccination programme that is unprecedented in terms of speed and scope. Nevertheless, implementation is expensive and challenging, and the pandemic's long-term repercussions on aspects such as health effects, skill development, and the rapid growth and spread of technology remain to be unknown.

In the face of the COVID-19 pandemic, global economic collaboration and partnerships can be essential in ensuring the fastest and smoothest possible recovery from the epidemic and reducing the danger of a repeat crisis. It can also help to reduce the long-term costs of the pandemic's unprecedented impact while maximising the advantages of national efforts to recover. International economic cooperation usually increases during or after a major economic crisis, most notably after WWII through the Marshall Plan and the establishment of the institutions that fall under the International Bank for Reconstruction and Development. This cooperation was also witnessed during the 2008/09 global financial crisis, resulting in the formation of an intergovernmental forum comprising 19 countries and the European Union (EU), generally referred to as the G20. The crisis also led to a number of initiatives being pronounced at the London Summit of 2009.

With the current global crisis, international cooperation is being used to underpin global liquidity, such as the global scientific effort to develop vaccines; the G20 initiative known as the Debt Service Suspension Initiative (DSSI), whose objective is to ensure the suspension of debt service payments by the poorest economies; and the Federal Reserve's establishment of 'US dollar swap lines'. For example, the World Bank recently increased its response and commitment to assist many countries and called on all official bilateral creditors, as well as the IMF, to suspend debt payments from International Development Association countries that requested deferment (Ataguba 2020). The political atmosphere of the previous four years, which has seen international disputes intensify and confidence between countries erode, has been a major element undercutting a cooperative approach. In part, this reflects the Donald Trump administration's mindset of 'America First', but there has also been a growing divide between the West and certain other big economies, most notably the PRC, over core values.



Source: Compilation from African Economic Outlook (https://www.afdb.org/en/news-keywords/african-economic-outlook) and Statista (https://www.statista.com/map/africa/branch/economy-politics).

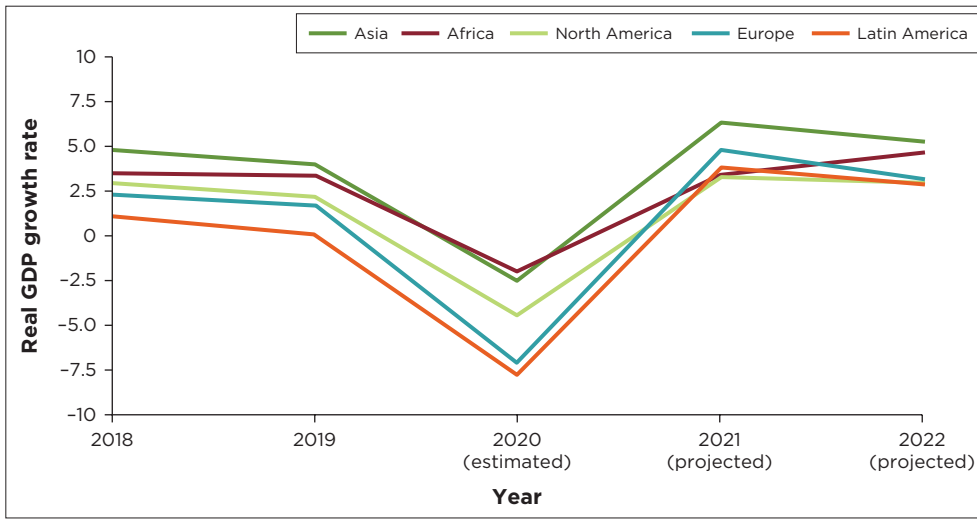
FIGURE 2.3: Gross domestic product growth rate projections from 2018–2023.

Figure 2.3 illustrates the GDP growth trend for countries in terms of the actual positions prior to 2020 when the pandemic struck and the projections after the pandemic. Countries' recovery speed will essentially be a function of the domestic policy measures, international cooperation and the efficiency of such measures that will witness a slowdown of the spread of the pandemic. Cooperation between countries in the area of vaccine availability and vaccinations will still remain very significant in the realisation of faster economic recovery.

Macroeconomic trends in Africa

In 2020, the African continent was hampered by the global epidemic with real GDP declining by 2.1% as seen in Figure 2.4, but this is expected to grow by 3.4% in 2021. Budgetary balances and debt burdens were directly impacted by the subsequent economic crisis in 2020. Africa's fiscal deficits were 4.6% in 2019 and are expected to nearly double to 8.4% in 2020.

Africa's overall current account deficit was forecast as 5.5% of GDP in 2020, with 4.1% and 2.7% projected in 2021 and 2022, respectively. Trade deficits and net factor payments overseas have been the primary drivers of current account deficits. Africa's 3.6% GDP growth in 2019 was insufficient to accelerate economic and social progress and alleviate poverty. Job creation has not kept pace with the requirement to provide possibilities to the 29 million young people who enter working age each year. Domestic demand, which accounts for 69% of Africa's total growth since 2000, largely influenced Africa's GDP growth trajectory, as opposed to productivity gains. Between 2000 and 2018, Africa's labour productivity remained unchanged. Exports of oil, minerals, and agricultural goods account for 88% of Africa's total exports.



Source: Compilation from African Development Bank Statistics (https://www.afdb.org/en/knowledge/publications/the-afdb-statistics-pocketbook) and IMF World Economic Outlook Database (https://www.imf.org/en/Publications/SPROLLs/world-economic-outlook-databases).
Key: GDP, gross domestic product.

FIGURE 2.4: Growth performance and outlook of the African continent amid COVID-19 pandemic.

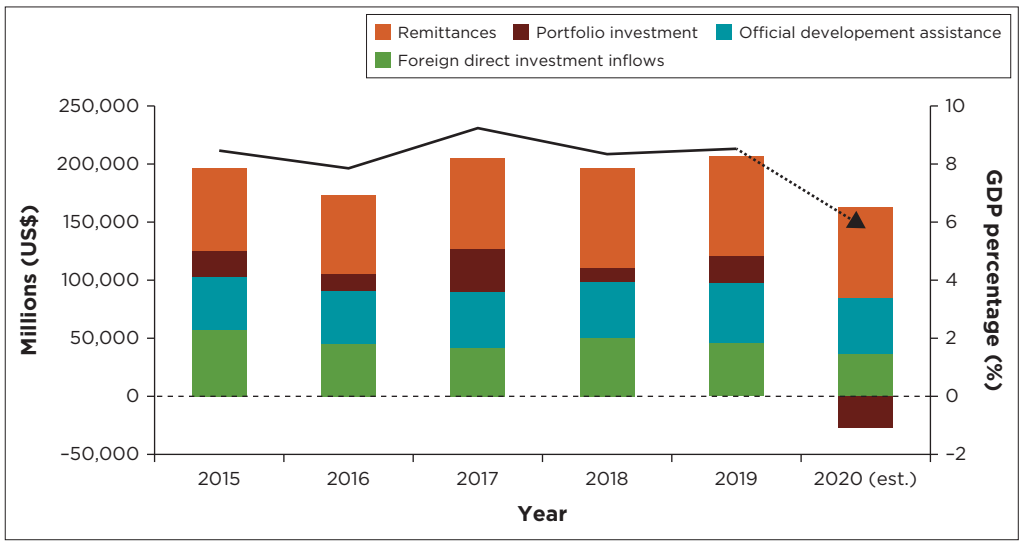
However, in the short-to-medium term, Africa's average debt-to-GDP ratio is predicted to increase by 10%–15% age points because of product diversification and value-addition ventures by governments. The COVID-19 pandemic significantly affected the production processes in the continent like other regions. Mass vaccination of the populace is indeed one of the broadly accepted measures of managing the pandemic. Effectively, it is projected that Africa would need roughly 1.5 billion vaccine doses to vaccinate 60% of its population, which is the projected minimum requirement for achieving hard immunity (Nkengasong et al. 2020). According to Africa Centres for Disease Control and Prevention (CDC), the vaccine, as well as the methods and infrastructure required for distribution, will cost between US$7bn and US$10bn. It should, however, be noted that as a result of the pandemic's impact, there was some stimulus spending in the African continent.

Africa's inflation rate stayed constant at 10.4% in 2020, with core inflation growing in many nations. Africa's currency depreciated significantly because of disruptions in external financial flows (remittances, foreign direct investment [FDI], portfolio investment and ODA. Exchange rate volatility continued to increase as a result of the reversal of external financial inflows. Exchange rate volatility wreaked havoc on tourism-dependent and resource-intensive economies the most. High inflation tends to devalue a country's currency implying that the purchasing power of money reduces. Countries experiencing high inflation do have weaker currencies in terms of value than other countries' currencies with low inflation. Africa generally experiences relatively high inflation because of low production and high aggregate demand. It can then

be implied that African countries are significantly affected whenever their currencies are devalued because of the high levels of inflation. This further has an impact on the foreign capital flows meant for investments.

The total financial flows into the African continent have averagely been declining since 2019 as seen in Figure 2.5, which has further negatively affected the growth and development process. Between 2019 and 2020, major inflows into Africa, such as FDI, portfolio investments, remittances and ODA, decreased as seen in Figure 2.5. FDI flows are expected to fall by 18% in 2020, from US$45.37bn in 2019 to US$37.20bn in 2020. Indeed, FDI, tourism, and ODA inflows to Africa all decreased as a result of COVID-19 infections and the relatively weak control measures. The immediate impact on health systems and related expenditures for most countries in the region was initially minor because of decreased infection rates. However, when the infections increased, spending on the health sector was severely impacted.

Despite the unfavourable macroeconomic trends within the African continent, it is important to note that the continent took cognisant of the negative effects of the COVID-19 pandemic and focused on post-pandemic recovery. Effectively like other global regions, Africa constituted institute appropriate measures to realise economic recovery post-COVID-19 pandemic. These measures include policy intervention for the support of the health sector, application of either expansionary or contractionary fiscal and monetary policies as appropriate to support the various sectors, effecting social transfers to support the most venerable, reduction of social inequalities to reduce poverty, support economic digitisation, encourage product



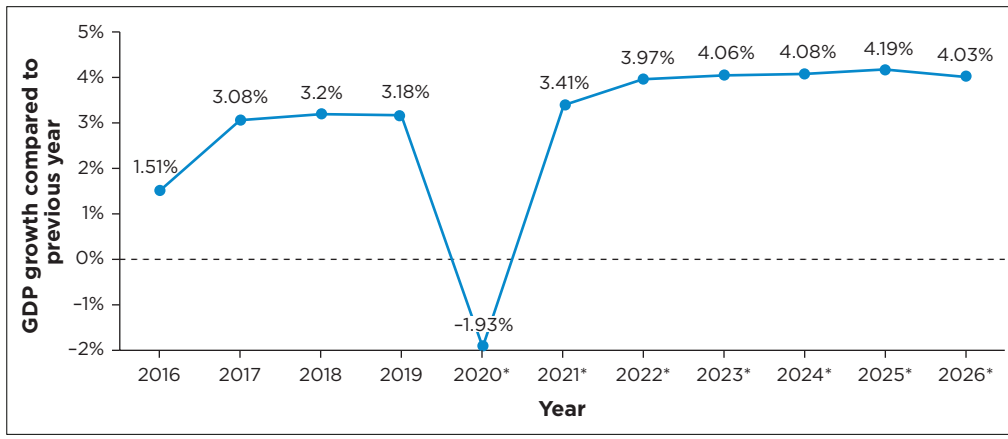
Source: Calculations from AfDB, UNCTAD, OECD, World Bank and IMF Balance-of-Payments statistics databases.
Key: GDP, gross domestic profit; AfDB, Africa Development Bank; UNCTAD, United Nations Conference on Trade and Development; OECD, Organization for Economic Co-operation and Development; IMF, International Monetary Fund.

FIGURE 2.5: Financial flows into Africa.

diversification and value-addition, and encourage and support regional economic integration with effective international cooperation.

Macroeconomic performance in sub-Saharan Africa

According to the *World Bank's Africa 2021 Report*, economic activities in sub-Saharan Africa fell by 2.0% in 2020. Despite the fact that the region's outlook improved since October 2020, the –1.9% decline in 2020 is still the lowest recorded. The drastic fall was as a result of the COVID-19 pandemic coupled with low production, high inflation, high unemployment and other socio-economic parameters including governance issues. In 2021, sub-Saharan Africa is projected to be the world's slowest-growing region, and as the global economy recovers, the region risks lagging further behind. However, because of strong agricultural growth and a faster-than-expected rebound in commodity prices, the region's resilience in the face of the global pandemic is expected to be critical in the recovery process. The epidemic, as unexpected, threw the region into its first recession in almost 25 years. On a per capita basis, the region's activities decreased by roughly 5.0%. The public debt situation worsened and continued to worsen. Sub-Saharan Africa's recovery is, however, predicted to differ from country to country, with the three largest economies, namely, Nigeria, South Africa and Angola, expected to rebound in 2021. According to current projections, many African countries' per capita GDP will not regain pre-crisis levels until the end of 2025. The lack of vaccine access and the region's fiscal constraints are projected to have an impact on the prognosis. As a result, during the next five years, the growth gap between sub-Saharan Africa and the rest of the globe is anticipated to expand even more.



Source: Compilation from IMF World Economic Outlook Database (https://www.imf.org/en/Publications/SPROLLs/world-economic-outlook-databases) and Statista (https://www.statista.com/map/africa/branch/economy-politics).

FIGURE 2.6: Growth rate of real gross domestic product for sub-Saharan Africa from 2016–2026.

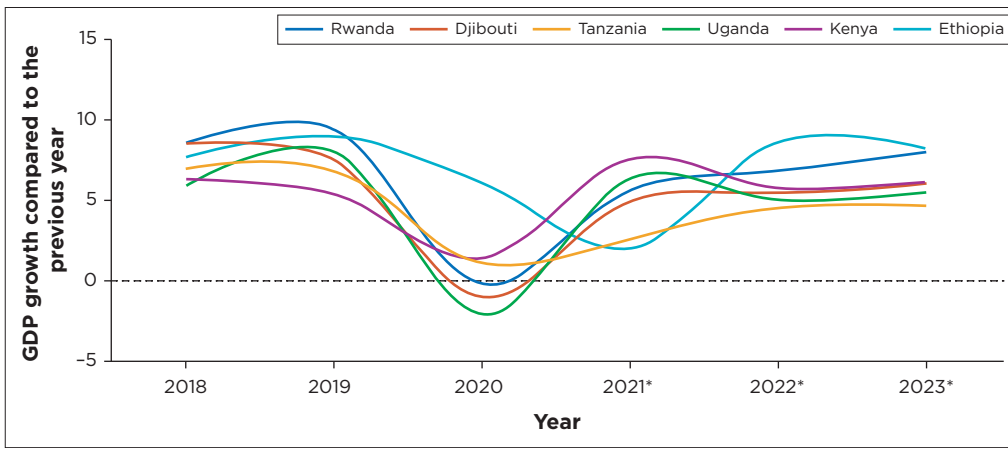
The growth trajectory illustrated in Figure 2.6 is not likely to change in the very short term because of the slow rate of management of the COVID-19 pandemic and the sustained growth of the fiscal deficits and subsequent growth of the public debts. This is likely to affect the post-COVID-19 recovery measures at least in the short- and medium-term planning horizon.

Macroeconomic performance in East Africa region

East Africa appears to have been the most resilient region during the epidemic, owing to lower reliance on primary commodities and a higher degree of diversification compared to the rest of Africa. According to the OECD, the region grew by 5.3% in 2019 and is expected to expand by 0.7% in 2020. In 2021 and 2022, real GDP growth is expected to be 3.0% and 5.6%, respectively as seen in Figure 2.7. Djibouti, Kenya, Tanzania and Rwanda are expected to expand at the fastest rates in East Africa, with 9.9%, 5.0%, 4.1%, and 3.9%, respectively.

According to the African Development Bank Report 2020, the East African Community is the fastest-growing region within the continent with Ethiopia, Djibouti, Kenya, Rwanda, Tanzania and Uganda being the drivers of the region. In 2018, the region's average growth rate was 4.9%, and in 2019, it was 5.3%, compared to 3.3% and 3.4% for Africa as a whole over the same period. The region's growth rate declined by 0.7% in 2020, but it still outperformed Africa's general decline of 2.1%.

The East African Community member states' growth and development process like other regions has been adversely affected by the COVID-19 pandemic. The projected growth trends in the region though moderate are expected to be sustainable based on the effectiveness of COVID-19 control and management measures coupled with sustainable public debt management.



Source: Compilation from African Economic Outlook (https://www.afdb.org/en/news-keywords/african-economic-outlook).

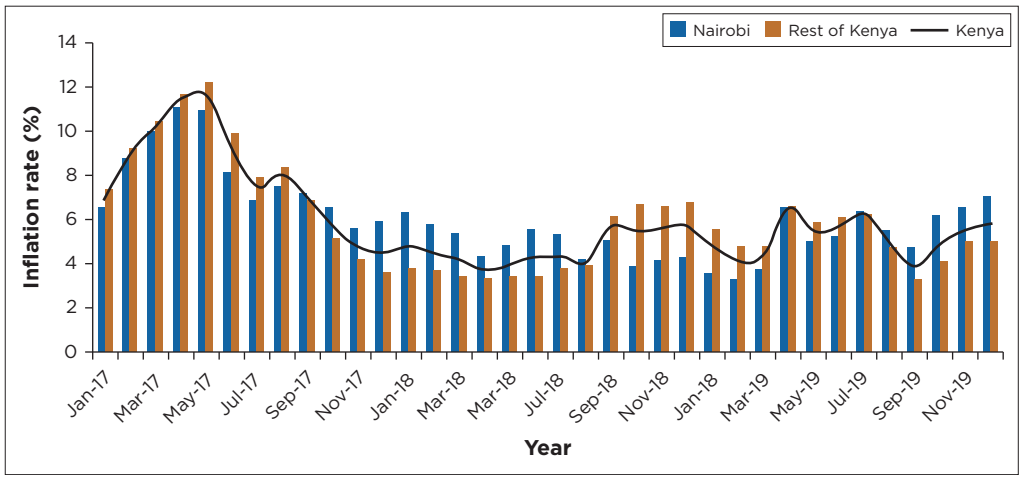
FIGURE 2.7: Real gross domestic product growth rate projections from 2018–2023.

Despite the observed scenario in the East African Community member states, the region faces challenges relating to increased poverty; low production; and especially from the manufacturing sector, high public debt, high commodity prices and slow economic growth processes. The post-COVID-19 recovery process in the region is expected to take a slow move in the immediate and short terms because of inadequate resources and widening public debt. Effectively, it is important for the region to seek short-term debt relief, whether from multilateral or bilateral organisations, and effective programme and project prioritisation in public resources allocation. However, the region does exhibit positive potential in the post-COVID-19 recovery process because of public investments in infrastructure, E-commerce, service sector, regional economic integration and value-addition to agricultural produce. The international economic recovery efforts are also significant to the East African post-COVID-19 recovery process because of the international trade and collaborations. The region also invested in peace and stability efforts for enhanced growth with a policy focus on regional cross-border trade. However, the region has to adopt a policy focus on increased COVID-19 vaccine uptake and eventual sustainable public debt management. It is also an undeniable fact that, like the international community, the rise in oil prices will continue to constrain the Community member states' COVID-19 recovery efforts.

Macroeconomic performance in Kenya

Kenya's GDP growth in 2020 was expected to drop to 1.4% from 5.4% recorded in 2019, according to Africa Economic Outlook 2021. The decline in the growth projections is as a result of the COVID-19 pandemic. The coronavirus outbreak had a significant impact on economic activities in practically every sector of Kenya's economy in 2020, with the tourist and services industries taking the brunt of the damage. However, Kenya's growth rate is projected to return to its long-term average of around 6% in 2021 and 2022. This scenario is only possible with appropriate COVID-19 containment measures and the implementation of sustainable public debt policies.

Because of weaker aggregate demand, Kenya's inflation rate is predicted to drop to 5.1%. However, year-on-year total inflation remained within the government goal range since the end of 2017, according to Kenya's National Treasury (2020). As a result of lower food costs, the inflation rate fell to 4.4% in August 2020, down from 5.0% in August 2019. Indeed, as a result of tax revenue shortages and higher health care spending, the country's fiscal deficit is forecast to rise to 8.3% of GDP. The country's current account deficit is forecast to shrink to 5.4% of GDP. This is expected to happen because of the projected rise in the country's overall earnings from exports of primary goods and services including earnings from tourism. Notably, Kenya's Foreign Exchange Reserves fell to US$7.8bn by the end of 2020, down from US$8.96bn in 2019 because of reduced net inflows as a result of international lockdowns



Source: Central Bank of Kenya (2019).

FIGURE 2.8: Inflation trend in Kenya by region.

to contain the COVID-19 pandemic. Effectively, Kenya's national currency depreciated by 8.9% to KSh110 per US$ in 2020, down from KSh101 in 2019 (see Central Bank of Kenya 2019).[4]

The country's monthly inflation during the last three years pre-COVID-19 pandemic (2017–2019) averaged at 5.1% as seen in Figure 2.8. But inflation during the partial lockdowns and minimal economic activities slightly declined because of reduced consumption as a result of reduced total incomes for the populace.

Kenya like the global community experienced the significant negative effect of the COVID-19 pandemic in terms of critical macroeconomic parameters. The consequential effect of the pandemic is high poverty because of substantial loss of employment and collapse of business with disruptions in the supply chain. The country's efforts to respond to the effects of the pandemic through macroeconomic policy interventions enhanced huge fiscal deficits. The policy intervention within the perspective of fiscal deficits implied that the country incurred huge public debt, which has an equally substantial effect on the country's budget implementation in terms of sectoral allocations. This scenario does present situations of high costs relating to public debt repayments in the form of interest and principal.

Despite this position of high public debt, the country continues to institute economic recovery strategies (ERS) post-COVID-19 pandemic. In the process, there is specific focus to strengthen key sectors of the economy such as health, education, infrastructure, manufacturing, agriculture, and micro, small

4. Central Bank of Kenya, 2019, 'Monthly economic indicators, December 2019', viewed 25 September 2022, at https://rise-afnnet.uonbi.ac.ke/news/effects-covid-19-international-trade-and-post-recovery-strategies-kenya

and medium enterprises (MSMEs) including the services sector and trade. The intervention into these sectors is by increased budgetary allocations and effective programme and project prioritisation.

Effect of COVID-19 on global labour force participation and fiscal deficits

The COVID-19 crisis indeed accelerated and continues to accelerate the unemployment situation worldwide. Effectively, the labour force participation rates across sectors significantly crashed and continue to be at low levels compared to the pre-COVID-19 situation. In this circumstance, countries have been left to make choices between ending the lockdowns that were instituted to revive people's livelihoods and risking the ravages of the COVID-19 pandemic. Governments made efforts to support economic activities so as to protect jobs but this has not yielded much results as millions of workers have lost their jobs because of the collapse of businesses and firms globally. Indeed, in an effort to support the unemployed, countries adopted various ways including cash transfers, waiver of some statutory payments such as taxes and loan repayments, and food distribution, among others.

However, given the various containment measures globally, there appears to be an exit strategy from lockdown based on the pandemic positivity rates across countries. Efforts to effectively control the virus transmission rate would, therefore, define some form of optimal work/lockdown cycle and improve the painful trade-offs faced by policy-makers. What is critical then is how to balance the COVID-19 situation and the worker's welfare in the absence of lockdowns and without containment measures. Incidentally, it would appear that the most appropriate lockdown exit strategy would be sector based (workplace risk of exposure). Some sectors are more exposed to the virus transmission than others and hence would form the basis of deciding which sector to reopen earlier and where to institute relatively strict containment measures.

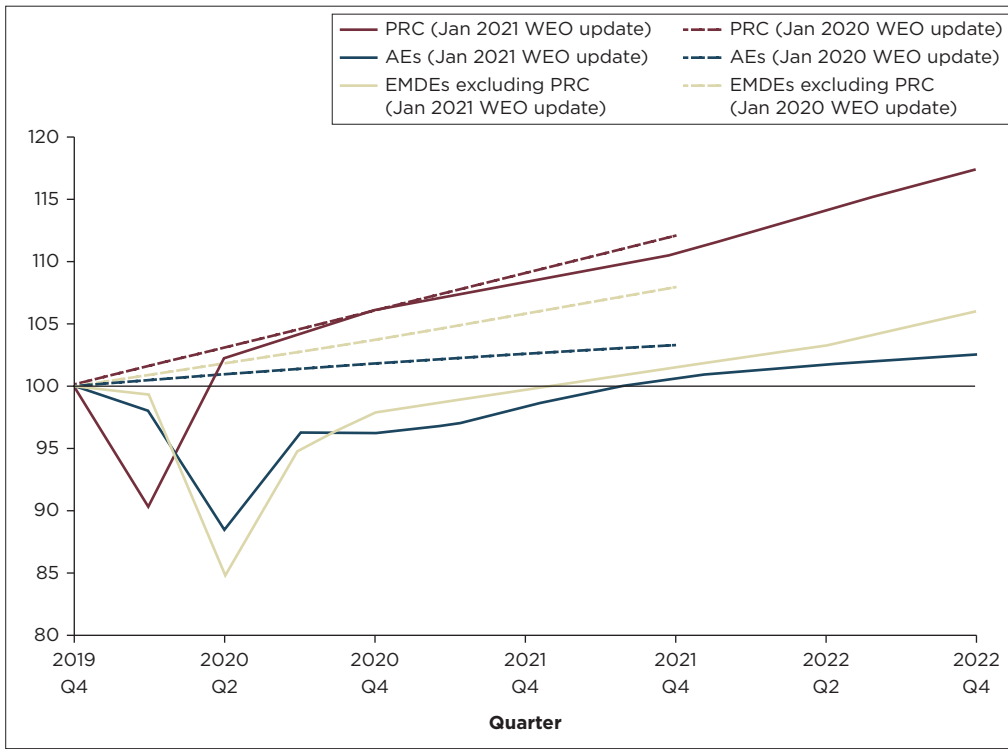
Because of the COVID-19 pandemic, budget deficits and constraints in many countries were evident from 2020–2021 and are likely to continue at different levels across countries. This scenario is as a result of a significant decline in public revenues, coupled with high costs of dealing with health and economic issues because of the pandemic. The general budget deficits, especially in developing countries, because of the negative impact of the COVID-19 pandemic, will for the unforeseeable future affect the eventual realisation of sustainable development goals (SDGs) in various countries. The sharp reduction in public revenues because of the pandemic implies that many countries will and continue to experience difficulties in financing economic and socio-recovery.

Rightly, it is observed that the COVID-19 pandemic introduced significant fiscal pressures for many countries as they needed more expenditure on health and other socio-economic issues to mitigate the impact of the pandemic. Such fiscal pressures are experienced within the background of declining government revenues. In this circumstance of fiscal pressures and deficits, governments globally are trying to address these inadequacies through a number of ways that include additional borrowing and public expenditure adjustments. Despite such measures, governments, especially developing countries and low-income countries, encountered large budget deficits and heavy public debt with the consequential effect of debt stress.

An overview of the global economic recovery

Because of notable proactive COVID-19 control and management measures globally, there are some clear positive recoveries in a few key economies. In this circumstance, the global economy is expected to rise at a rate upwards of 5% in 2021, marking the highest growth of economic resurgence in the last eight decades. Indeed, many newly industrialising countries are still dealing with the COVID-19 pandemic and its implications, according to the June 2021 Global Economic Prospects (World Bank 2021). Despite the expected recovery, the worldwide output will be around 2% lower by the end of the year than it was before the pandemic. By 2022, with economies still strained by the COVID-19 pandemic and its containment measures, over two-thirds of nations categorised as emerging market and developing countries will not be able to recover their per capita income losses that were occasioned by the pandemic. In low-income nations where vaccination lagged, the pandemic's consequences nullified poverty alleviation successes and exacerbated vulnerability and other long-standing challenges.

Rightly, large-scale government backing and the easing of pandemic restrictions are predicted to boost growth in markets such as the USA during 2021. Growth in other advanced economies is also in the upward trajectory, albeit to a lesser extent as seen in Figure 2.9. Among emerging economies and developing countries, the largest growth is expected in China which is predicted to climb to over 8% in 2021, reflecting a rise in aggregate demand. In 2021, aggregate demand, market growth and asset prices are predicted to boost emerging market and developing economies to 6% growth. In many countries, however, a resurgence of COVID-19 cases and slow vaccination efforts, coupled with the loss of governmental aid in some circumstances, are slowing recovery. Except for the PRC, these groups of economies are predicted to recover at a relatively slow rate of 4.4%. The growth of emerging market and developing countries is therefore predicted to decline to 4.7% in 2022. This effectively implies that growth in this group of economies will not be



Source: Compilation of IMF estimates (https://www.imf.org/en/Publications/SPROLLs/world-economic-outlook-databases). Key: AEs, advanced economies; EMDEs, emerging market and developing economies; WEO, World Economic Outlook; PRC, People's Republic of China.

FIGURE 2.9: World Economic Outlook Economic Forecast.

adequate to make up for losses experienced during the 2020 recession. Production in 2022 is expected to be 4.1% lower than pre-pandemic estimates, hence a significant negative impact on the aggregate demand trends. Apart from 2020, low-income economies are predicted to expand at their slowest rate in 2021 largely because of the slow pace of vaccination and ineffective management and containment measures. Low-income economies are predicted to grow at a rate below 3% in 2021, climbing to over 4.5% in 2022. The output of these countries is predicted to be 4.9% lower in 2022 than it was before the outbreak.

Even before the COVID-19 crisis, major growth drivers globally were predicted at lower rates, and the trend is likely to be accelerated by the pandemic's devastating effects on the demand and supply chains. Furthermore, the majority of emerging market and developing nations' per capita income is predicted to remain below pre-pandemic levels, resulting in worsening deprivations in health, education and general living standards.

Global Economic Prospects (World Bank 2020a) indicated that lowering trade costs, such as cumbersome logistical and customs processes, might aid

emerging market economies in their recovery by facilitating trade. Because of higher shipping and logistics costs, trade costs in these countries still presented a significant challenge to trade. This position of low trade and trading activities before the COVID-19 pandemic was pronounced with the striking of the pandemic. To reverse this situation, efforts should be in place to strengthen transportation infrastructure and governance, encourage greater information sharing, and boost competition in domestic logistics, retail and wholesale commerce effectively, resulting in significant cost reductions (Felsenthal & Young 2021).

The effect of these COVID-19 containment efforts will be the creation of jobs in the long term, increase aggregate demand, increase production across sectors through investments in such sectors, digitisation across sectors, effective international cooperations in matters of creation of sustainable value and supply chains, and overall global economic recovery. Obviously, these results would be realised when countries adopt appropriate macroeconomic policy framework to support sustainable growth and enhanced fiscal transparency in public debt management amongst countries. It is also important to appreciate that support mechanisms for skills development are critical to job creation efforts and the overall resilience of economies as a result of job adaptation in the various sectors.

Connecting emerging economies through trade and international value chains has been a crucial engine of economic growth, subsequently lifting many people out of poverty. Despite this, current trends predict that global trade growth will slow down over the next decade, according to World Bank Group vice-president for Equitable Growth and Financial Institutions (World Bank 2020b). As poor nations recover from the COVID-19 epidemic, lowering trade prices will create an environment conducive to re-engaging in global supply chains and re-igniting trade growth.

Indeed in recognition of the world trade trend, the ‘Ottawa Group’, which is a coalition of countries, regularly met and proposed actions and ideas on reforming the WTO in response to the COVID-19 pandemic. This forum discussed trade and health issues related to equitable access to vaccines, including export restrictions on essential medical goods, manufacturing capacity for vaccines, intellectual property rights (IPRs) and the transfer of technology to enhance international trading activities.

This group continues to stress the importance of addressing export restrictions that constrain the supply chain of essential medical supplies, particularly the COVID-19 vaccines. This is an effort that supports the WTO’s initiative on the acceleration of production and distribution of effective, safe and affordable COVID-19 vaccines, which is expected to speed up global economic recovery.

Conclusion

This chapter's aim was to illustrate worldwide macroeconomic trends and projections in the face of the COVID-19 pandemic, as well as the available data on a variety of potential disease-related economic implications. The focus was situations before the COVID-19 pandemic, during the breakdown and possible recovery measures. Rightly, a variety of policy solutions have been implemented to cushion economies and populations since the outbreak of the COVID-19 pandemic. In the short term, governments made conceited efforts to ensure that economies that had been damaged continue to function amid the epidemic situation. When the pandemic struck, governments reacted differently in the face of real, financial and other-related growth stress. It was indeed, and continues to be, imperative that governments play a critical role in implementing appropriate macroeconomic policies such as lowering of interest rates and expansionary fiscal policies to facilitate growth. This is particularly so because the pandemic's shock is obviously a multifaceted crisis that necessitates monetary, fiscal and health policy responses.

Quarantining people and limiting large-scale social interaction showed successful responses in many countries. Widespread adoption of appropriate hygiene practices, as described by Mckibbin et al. (2020), showed low-cost and high-effective responses, which incidentally reduced the spread of COVID-19 infections, and hence low socio-economic cost to a country. Global cooperation has also been emphasised as critical, particularly in the areas of public health and economic development. All countries, notably the world's most powerful economies, must take part actively in the attempts to control and manage the pandemic for the common good.

Effective budget policy functions of governments should be undertaken cognisant of the COVID-19 pandemic for socio-economic enhancement and sustainability. Thus, effective budget policy functions of governments should be undertaken with due regard to the pandemic and more especially the application of governments' public expenditure measures.

Wide dissemination of good hygiene practices should continuously be encouraged as it is a low-cost and highly effective endeavour.

Global cooperation, especially in the sphere of public health and economic development, should be the focus for countries now that the COVID-19 pandemic brought in a new normal globally.

Chapter 3

Trade performance of East African Community member states

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Introduction

The East African Community (EAC) member states – comprising Kenya, Uganda, Tanzania, Burundi, Rwanda, South Sudan and, recently, the Democratic Republic of Congo (DRC) – is one of the most integrated and advanced regional trading blocks in Africa. East African Community member states mostly trade with one another when intra-Africa trade in goods is considered: the average intra-EAC merchandise exports between 2018 and 2021 are about 72%. The region was initially affected by coronavirus disease 2019 (COVID-19) on 13 March 2020, when Kenya confirmed the first case of the virus. Rwanda confirmed a COVID-19 case on the following day, and all countries confirmed the existence of the virus within their borders by the end of March.

As expected, this had an impact on the international trade of EAC members. Statistics from the International Monetary Fund (IMF) show that Rwanda and Burundi had the greatest slump in the exports of goods and services in 2020 (−15%). Kenya had a 14% drop, followed by Uganda (−12%) and

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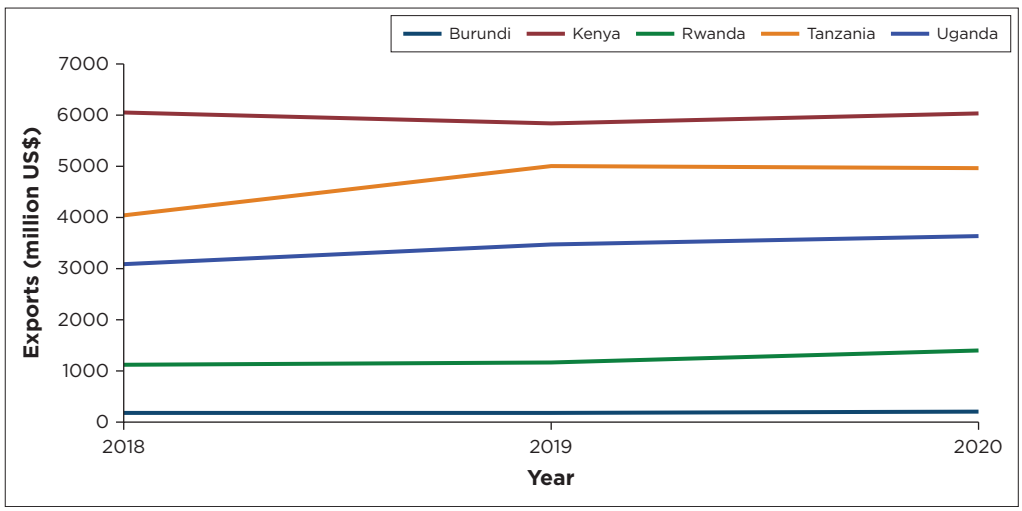
Tanzania (−0.9%). The IMF also projects that age change of the volume of imports of goods and services declined in EAC countries except for Tanzania and Rwanda. The magnitude of the collapse was highest in Burundi (18%), followed by Kenya (6%) and Uganda (2%). Imports grew by 3% and 0.7% in Rwanda and Tanzania, respectively, in 2020.

Based on this background, this chapter describes the performance of exports and imports of goods and services in EAC member states from 2018–2020. International trade is assessed by trend, products and partners. The next section starts with goods, and it is followed by services.

Trade in goods

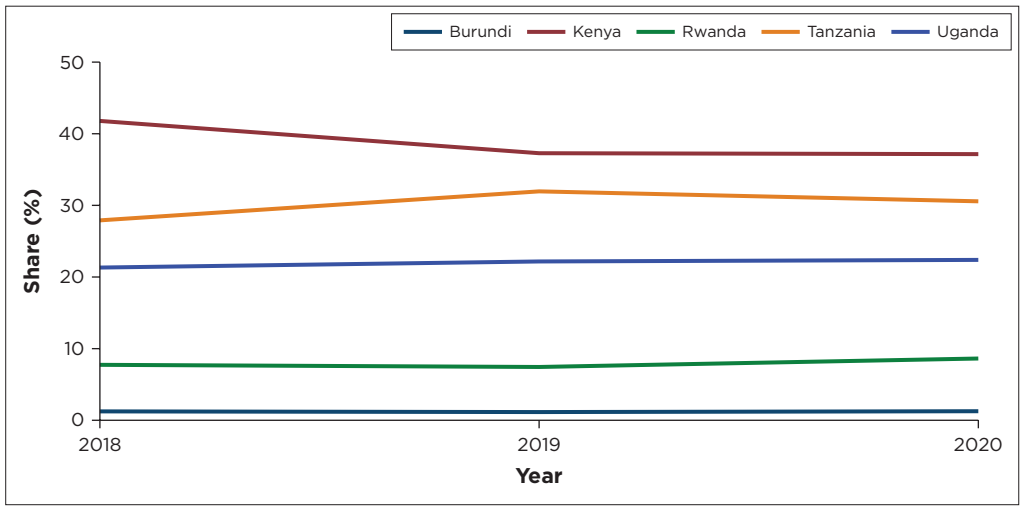
Figure 3.1 displays the trend of merchandise exports (millions in US$) from EAC member states to the world between 2018–2020. Kenya is the top exporter of goods in EAC, followed by Tanzania, Uganda, Rwanda and Burundi, respectively. Kenya exported goods worth US$6052m in 2018 but declined by about US$213m in 2019 and later increased to US$6034m in 2020. Exports from Uganda, Burundi and Rwanda have consistently grown between 2018 and 2020 despite the occurrence of COVID-19 in 2020. Tanzania's growth in exports has also been consistent, notwithstanding a US$41m drop between 2019 and 2020 because of COVID-19.

In terms of shares of total exports, Figure 3.2 shows that Kenya made up 42% of exports from EAC in 2018. However, this rate reduced to about 37% in 2019 and 2020. Tanzania had the second-highest share of exports in EAC: from 28% in 2018 to 32% in 2019 and 31% in 2020. Uganda's and Rwanda's



Source: WTO (2021).

FIGURE 3.1: Volume of goods exports in East African Community member states (2018–2020).



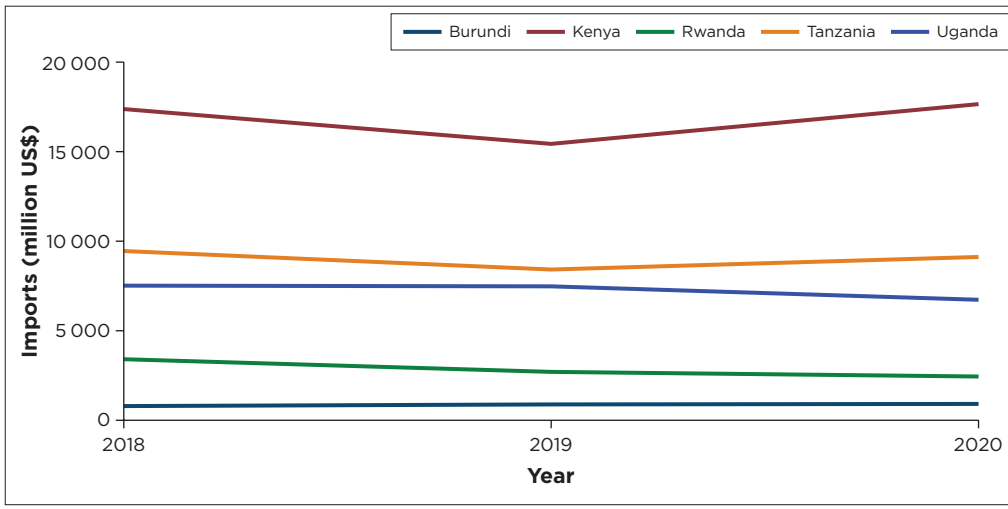
Source: WTO (2021).

FIGURE 3.2: Share of goods exports by East African Community member states (2018–2020).

shares of EAC exports have been approximately 22% and 8%, respectively, between 2018 and 2020. Burundi accounted for the least share of exports in EAC, making up about 1.2%, on average, between 2018 and 2020.

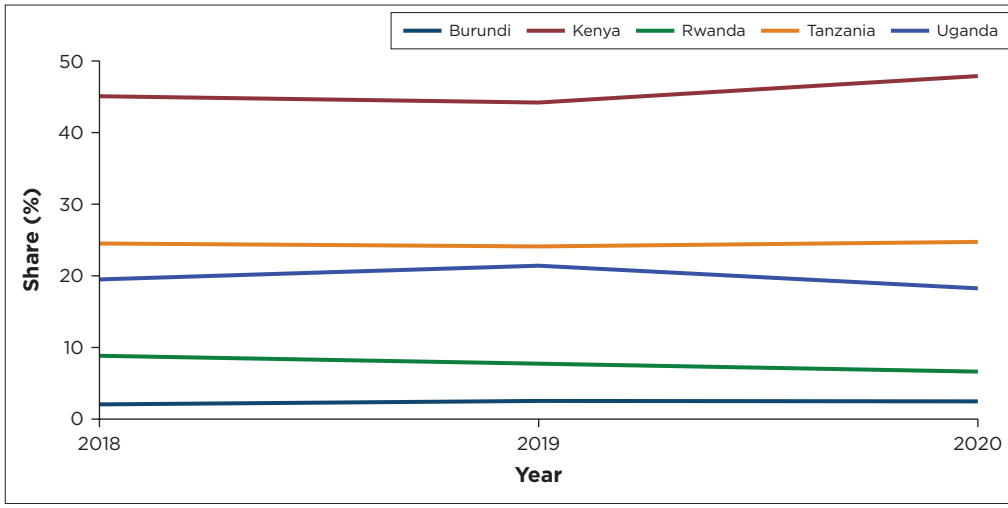
Figure 3.3 plots the trend of merchandise imports (millions of US$) by EAC countries from the world between 2018 and 2020. Kenya is the top importer of merchandise in the region, followed by Tanzania, Uganda, Rwanda and Burundi. Kenya imported goods worth US$17 378m in 2018, which dropped to US$15 435m in 2019 and later increased to US$17 655m in 2020. Tanzania's imports were US$9452m in 2018, but dropped by US$1033m in 2019 and improved by US$701m in 2020. Uganda's imports consistently grew from 2018 to 2020 with an average of US$7243m over the period. Conversely, Rwanda's imports declined between 2018 and 2020 with an average of US$2853m. Burundi's imports grew from US$793m in 2018 to US$887m and US$914m in 2019 and 2020, respectively.

Figure 3.4 shows the share of imports by EAC countries between 2018 and 2020. On average, Kenya accounted for 46% of all imports by EAC countries between 2018 and 2020. Tanzania was the second-highest importer of goods in EAC, with an average share of 24% over the three years. Uganda's share fluctuated from 20% in 2018 to 21% in 2019 and 18% in 2020. This implies that the country was negatively affected by COVID-19 in 2020. Rwanda's share of imports in EAC declined from around 9% in 2018 to 7% in 2020, possibly because of COVID-19. Burundi accounted for 2.4% of imports in EAC, on average, between 2018–2020.



Source: WTO (2021).

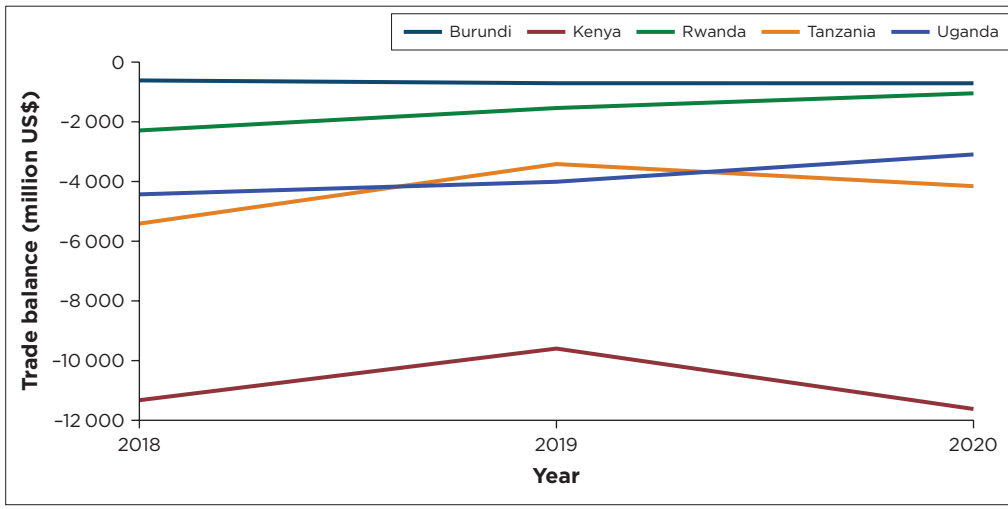
FIGURE 3.3: Volume of goods imports in East African Community member states (2018–2020).



Source: WTO (2021).

FIGURE 3.4: Share of goods imports by East African Community member states (2018–2020).

The trade balance of goods (exports minus imports) for EAC countries between 2018 and 2020 is plotted in Figure 3.5. We find that all EAC countries had a trade deficit over the three years, meaning that imports surpassed exports. Burundi had the least deficit, which was constant at around US$676m. Rwanda had the second least trade deficit that shrunk over time, suggesting growth in exports. Uganda's deficit also compressed over the years, while that of Kenya and Tanzania fluctuated. Both countries experienced a surge in the deficit in 2020, indicating that the volume of imports surpassed exports during the COVID-19 period.



Source: WTO (2021).

FIGURE 3.5: Goods trade balance among East African Community member states (2018–2020).

Table 3.1 and Table 3.2 display the share of the top 10 export and import products among EAC countries from 2018 to 2020, respectively. Apart from Tanzania, coffee, tea, matï and spices, and natural/cultured pearls, precious stones were the top two export products in EAC countries. The second column of Table 3.1 shows that these two products account for 70.1% of Burundi's exports. In Kenya, coffee, tea, matï and spices accounted for a quarter of exports between 2018 and 2020. On average, coffee, tea, matï and spices, and natural/cultured pearls, precious stones accounted for over half of exports from Rwanda and Uganda between 2018 and 2020. Other major products that were exported by Burundi, Kenya, Rwanda and Uganda were ores, slag and ash; mineral fuels, oils and products of their distillation; and iron and steel. In general, the four countries mainly exported food products, while Tanzania exported manufactured intermediate commodities such as electrical machinery, equipment, parts thereof and sound recorders.[5] This indicates that Tanzania largely participates in global value chain (GVC) trade through forward linkages.[6] According to Misati and Ngoka (2021), Tanzania's export landscape transitioned from the dominance of primary products in the 1990s to technology-intensive manufacturing. This has mainly been boosted by the growth in physical infrastructure, institutional quality and labour productivity. The top 10 export products made up at least 55% of total exports in EAC countries, with Burundi and Rwanda having the highest

5. Refer to Johnson and Noguera (2012) for the definition of intermediate goods.

6. Forward GVC participation means a country mainly exports intermediate commodities that are used in other countries' exports. Backward linkage is when a country's exports are mainly composed of imported intermediate inputs.

TABLE 3.1: Top 10 export products by East African Community member states (average between 2018–2020).

Burundi		Kenya		Rwanda		Tanzania		Uganda	
Product	**%**	**Product**	**%**	**Product**	**%**	**Product**	**%**	**Product**	**%**
Coffee, tea, matï and spices	37.2	Coffee, tea, matï and spices	25.7	Natural/cultured pearls, precious stones	31.2	Electrical machinery equipment parts thereof	9.4	Natural/cultured pearls, precious stones	32.3
Natural/cultured pearls, precious stones	32.9	Live tree and other plant; bulb, root	11.1	Coffee, tea, matï and spices	22.6	Nuclear reactors, boilers, machinery and mechanical appliances	9.0	Coffee, tea, matï and spices	15.7
Ores, slag and ash	8.0	Mineral fuels, oils and products of their distillation	5.2	Ores, slag and ash	17.1	Furniture, bedding and mattresses	7.3	Fish and crustaceans, molluscs and other aquatic invertebrates	4.1
Prod mill indust; malt starches	5.7	Edible vegetables and certain roots	4.5	Salt; sulphur; earth and stone; plaster	5.1	Articles of iron or steel	4.7	Cereals	4.1
Beverages, spirits and vinegar	2.8	Edible fruit and nuts; citrus peel	3.8	Prod mill indust; malt starches	4.7	Vehicles o/t railway/ tramway roll-stock	4.6	Mineral fuels, oils and products of their distillation	3.7
Tobacco and manufactured tobacco supply	2.5	Art of apparel and clothing access	3.8	Residues and waste from the food industries	3.0	Plastics and articles thereof	4.5	Edible vegetables and certain roots	2.7
Mineral fuels, oils and products of their distillation	1.4	Ores, slag and ash	3.6	Edible vegetables and certain roots	1.7	Salt; sulphur; earth and stone; plaster	4.3	Sugars and sugar confectionery	2.5
Iron and steel	1.3	Tobacco and manufactured tobacco supply	2.5	Miscellaneous edible preparations	1.5	Toys, games and sports requisites; parts and access thereof	4.2	Cocoa and cocoa preparations	2.3
Vehicles o/t railway/ tramway roll-stock	1.1	Animal/vegetable fats and oils and their cleavage	2.3	Mineral fuels, oils and products of their distillation	1.2	Residues and waste from the food industries	4.0	Iron and steel	2.1
Nuclear reactors, boilers, machinery and mechanical appliances	0.8	Iron and steel	2.1	Iron and steel	1.0	Fish and crustaceans, molluscs and other aquatic invertebrate	3.1	Dairy products; birds' eggs; natural honey	2.1
Total	**93.7**	**Total**	**64.6**	**Total**	**89.0**	**Total**	**55.2**	**Total**	**71.5**

Source: World Bank 2021.

TABLE 3.2: Top 10 import products by East African Community member states (average between 2018–2020).

Burundi		Kenya		Rwanda		Tanzania		Uganda	
Product	**%**	**Product**	**%**	**Product**	**%**	**Product**	**%**	**Product**	**%**
Mineral fuels, oils and products of their distillation	19.1	Mineral fuels, oils and products of their distillation	17.8	Mineral fuels, oils and products of their distillation	18.3	Mineral fuels, oils and products of their distillation	20.8	Mineral fuels, oils and products of their distillation	15.3
Vehicles o/t railway/ tramway roll-stock	8.1	Nuclear reactors, boilers, machinery and mechanical appliances	9.5	Electrical machinery equipment parts thereof	9.4	Nuclear reactors, boilers, machinery and mechanical appliances	11.8	Natural/cultured pearls, precious stones	14.5
Pharmaceutical products	7.3	Electrical machinery equipment parts thereof	7.3	Nuclear reactors, boilers, machinery and mechanical appliances	9.2	Vehicles o/t railway/ tramway roll-stock	9.7	Nuclear reactors, boilers, machinery and mechanical appliances	7.6
Iron and steel	6.5	Vehicles o/t railway/ tramway roll-stock	7.1	Cereals	5.1	Electrical machinery equipment parts thereof	6.0	Vehicles o/t railway/tramway roll-stock	7.1
Cereals	5.7	Iron and steel	5.4	Natural/cultured pearls, precious stones	4.0	Plastics and articles thereof	5.7	Electrical machinery equipment parts thereof	5.4
Nuclear reactors, boilers, machinery and mechanical appliances	5.2	Cereals	5.0	Animal/vegetable fats and oils and their cleavage	3.6	Iron and steel	5.0	Plastics and articles thereof	5.2
Electrical machinery equipment parts thereof	5.0	Plastics and articles thereof	4.5	Iron and steel	3.5	Articles of iron or steel	3.6	Iron and steel	4.9
Salt; sulphur; earth and stone; plaster	4.5	Animal/vegetable fats and oils and their cleavage	4.0	Articles of iron or steel	3.1	Pharmaceutical products	3.3	Pharmaceutical products	4.2
Fertilisers	3.8	Pharmaceutical products	3.6	Pharmaceutical products	3.1	Miscellaneous chemical products	2.9	Animal/vegetable fats and oils and their cleavage	3.6
Other made-up textile articles; sets	3.4	Paper and paperboard; art of paper pulp, paper/ paperboard	2.7	Plastics and articles thereof	2.8	Animal/vegetable fats and oils and their cleavage	2.8	Cereals	3.3
Total	**68.7**	**Total**	**66.9**	**Total**	**62.1**	**Total**	**71.5**	**Total**	**71.1**

Source: World Bank (2021).

rates (93.7% and 89%, respectively). The region's high dependence on a few products reflects low export product diversification.

All EAC countries mainly imported mineral fuels, oils and products of their distillation as shown in Table 3.2. This product comprised 20.8% of Tanzania's imports, while it makes up 19.1%, 17.8%, 18.3% and 15.3% of imports by Burundi, Kenya, Rwanda and Uganda, respectively. Other top import products by all EAC countries were pharmaceutical products; iron and steel; and nuclear reactors, boilers, machinery and mechanical appliance and their parts. Cereals and animal/vegetable fats and oils and their cleavage products were among the top food products that were imported by EAC countries between 2018 and 2020. The top ten import products account for at least 62.1% of imports by EAC countries, while the highest share was 71.5% in Tanzania. Therefore, there is little product diversification in terms of imports, just like exports by EAC countries.

Table 3.3 outlines the export shares of the top 20 goods trade partners of EAC countries between 2018–2020. The United Arab Emirates (UAE) was by far the top trading partner of most EAC countries. Over a third of Burundi's and Uganda's exports were to the UAE, while the country imported 25.4% of Rwanda's exports throughout the study period. Although the UAE appeared among the top 20 trade partners, it played a lesser role in Kenya and Tanzania, where it accounted for 5.3% and 1.3% of exports from these countries, respectively.

Table 3.3 also shows that intra-EAC export trade is strong – Kenya, Uganda, Tanzania and Rwanda appeared among the top 20 export trading partners of each EAC country. Consequently, intra-Africa export trade in goods is strong among EAC countries, especially in Tanzania, whose bulk of exports (58.1%) was to fellow African countries between 2018–2020. Uganda exported 39.3% of its products to Africa, while African countries imported 24.8%, 24.4%, and 19.9% of products from Kenya, Burundi and Rwanda. Outside Africa, People's Republic of China (PRC), the United Kingdom (UK) and the United States of America (USA) were the major trading partners of all EAC countries, particularly in Kenya, where the three countries accounted for close to 18% of total exports. Overall, there is little market diversity in exports of most EAC countries: at least 90% of exports from Burundi, Rwanda and Uganda were to the top 20 trading partners (see Table 3.3).

Table 3.4 displays the results of the shares of imports of goods by trading partners of EAC countries from 2018 to 2020. The PRC was by far the top import trading partner of EAC countries. About 21.3% of Kenya's goods imports were from the PRC. Tanzania, Rwanda, Uganda and Burundi imported 20.7%, 19.2%, 16.9% and 14.2% worth of goods, respectively, from the PRC. India, UAE and Saudi Arabia were the other top import trading partners, as they featured among the top seven for all EAC countries.

TABLE 3.3: Top 20 goods export partners for East African Community member states (average between 2018–2020).

Burundi		Kenya		Rwanda		Tanzania		Uganda	
Country	**%**	**Country**	**%**	**Country**	**%**	**Country**	**%**	**Country**	**%**
UAE	34.8	Uganda	10.3	UAE	25.4	Rwanda	18.7	UAE	33.2
DRC	10.4	Pakistan	8.8	Switzerland	9.5	Kenya	9.2	Kenya	14.4
Pakistan	7.0	USA	8.2	DRC	8.4	DRC	8.5	South Sudan	9.8
Switzerland	5.7	Netherlands	7.9	UK	5.4	Zambia	7.3	DRC	6.5
Belgium	5.3	UK	7.2	Pakistan	5.4	Uganda	5.3	Italy	3.7
Germany	4.1	UAE	5.3	Hong Kong	5.1	USA	4.1	Rwanda	3.0
Singapore	3.5	Tanzania	5.0	Singapore	4.6	PRC	3.9	Netherlands	2.7
Egypt	3.5	Rwanda	3.5	Uganda	3.9	Indonesia	3.7	Germany	2.6
PRC	3.2	Egypt	3.2	Lithuania	3.8	Malawi	3.2	Tanzania	2.2
Uganda	3.1	South Sudan	2.5	Belgium	2.7	Belgium	2.7	Belgium	2.0
UK	2.5	DRC	2.3	USA	2.5	South Africa	2.5	Sudan	2.0
Rwanda	2.1	PRC	2.2	Thailand	2.2	Australia	2.1	USA	1.4
Oman	1.8	Somalia	2.1	Burundi	2.1	Hong Kong	1.9	Burundi	1.4
Somalia	1.7	Germany	2.0	Kenya	1.9	Vietnam	1.9	India	1.4
Sudan	1.6	France	1.4	PRC	1.8	Ethiopia	1.8	Hong Kong	1.3
Tanzania	1.6	Saudi Arabia	1.3	South Sudan	1.6	Netherlands	1.7	Spain	1.2
Kenya	1.4	Sudan	1.3	Tanzania	1.2	UK	1.6	PRC	1.0
USA	1.2	Russia	1.3	India	1.1	Mozambique	1.6	Indonesia	0.8
Zambia	0.6	Belgium	1.1	Kazakhstan	1.0	India	1.3	Malaysia	0.6
Italy	0.6	India	1.1	Sudan	0.9	UAE	1.3	Turkey	0.5
Total	**95.6**	**Total**	**78.3**	**Total**	**90.4**	**Total**	**84.4**	**Total**	**91.7**

Source: World Bank (2021).
Key: DRC, Democratic Republic of the Congo; PRC, People's Republic of China; UAE, United Arab Emirates; UK, United Kingdom; USA, United States of America.

TABLE 3.4: Top 20 goods import partners for East African Community member states (average between 2018–2020).

Burundi		Kenya		Rwanda		Tanzania		Uganda	
Country	**%**	**Country**	**%**	**Country**	**%**	**Country**	**%**	**Country**	**%**
Saudi Arabia	16.1	PRC	21.3	PRC	19.2	PRC	20.7	PRC	16.9
PRC	14.2	India	10.6	India	9.4	India	14.3	India	11.9
UAE	7.8	UAE	7.9	UAE	8.7	UAE	10.2	Kenya	8.6
India	7.5	Saudi Arabia	7.2	Kenya	7.5	Saudi Arabia	6.7	UAE	8.5
Tanzania	5.9	Japan	5.5	Tanzania	6.7	South Africa	5.1	Tanzania	6.7
Kenya	5.1	South Africa	3.5	Uganda	4.7	Japan	4.7	Saudi Arabia	5.9
Uganda	4.6	USA	3.3	Saudi Arabia	4.1	Kenya	2.9	Japan	4.4
Zambia	4.1	Indonesia	3.1	Switzerland	3.2	USA	2.8	South Africa	3.6
Japan	4.0	Germany	2.5	South Africa	3.0	Germany	2.6	Indonesia	2.7
Belgium	3.7	Egypt	2.4	Germany	2.6	Turkey	2.0	Netherlands	1.9
France	2.3	Uganda	2.1	Turkey	1.9	UK	2.0	USA	1.8
Russia	2.3	Russia	2.0	Belgium	1.8	Malaysia	1.7	Germany	1.8
Germany	2.1	UK	1.8	Indonesia	1.7	Indonesia	1.6	Gambia	1.4
Denmark	2.0	Netherlands	1.8	USA	1.7	Switzerland	1.5	Egypt	1.4
South Africa	1.8	Malaysia	1.8	Russia	1.6	Thailand	1.4	Zimbabwe	1.4
UK	1.4	Tanzania	1.4	Sweden	1.6	Korea	1.3	Malaysia	1.3
USA	1.4	France	1.4	Pakistan	1.3	France	1.2	Russia	1.3
Egypt	1.2	Italy	1.3	Cameroon	1.1	Italy	1.1	UK	1.1
Netherlands	1.1	Pakistan	1.3	Egypt	1.1	Netherlands	1.0	Namibia	1.0
Hong Kong, PRC	1.0	Turkey	1.1	Thailand	1.1	Norway	1.0	Zambia	1.0
Total	**89.6**	**Total**	**83.3**	**Total**	**84**	**Total**	**85.8**	**Total**	**84.6**

Source: World Bank (2021).
Key: PRC, People's Republic of China; UAE, United Arab Emirates; UK, United Kingdom; USA, United States of America.

Kenya, Uganda and Tanzania were among the top import partners of EAC countries. As these were the original members of the EAC, this result implies their dominance and importance in trading with other countries within the EAC region. South Africa and Egypt were also top import trading partners of EAC countries from Africa. Outside Africa, EAC countries majorly imported products from Japan, Russia, Germany, the UK and the USA. Overall, the top 20 trading partners made up a significant portion of goods that were imported by EAC countries: 89.6% for Burundi, 83.3% for Kenya, 84% for Rwanda, 85.8% for Tanzania and 84.6% for Uganda.

Trade in services

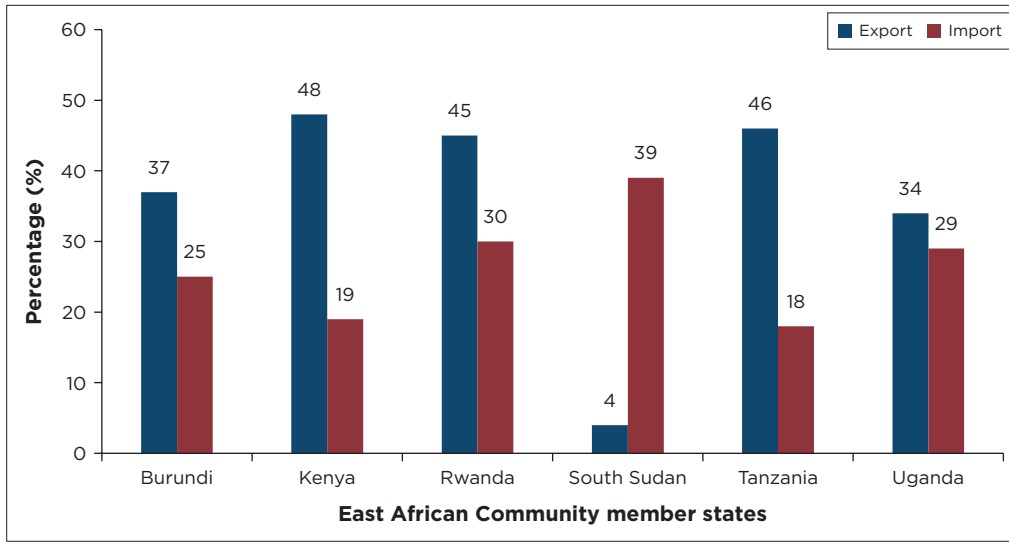
Services are defined in two ways in international trade, namely, by mode of supply and digit-level classification. According to the General Agreement on Trade in Services (GATS), services are supplied in four modes (WTO 2022). Mode 1 is cross-border service supply, where neither the supplier nor the consumer physically interacts to consume a service, for example, financial services. Mode 2 is consumption abroad, where the service consumer has to move to where the supplier is located, for example, tourism. Mode 3 is commercial presence, where legal agents (persons or firms) move to the consumer's country of residence and set up a franchise to supply services such as banks. Mode 4 involves the movement of natural persons to the consumer's residence to temporarily provide the services, such as medical officers. Mode 5, which entails services that are embodied in export/import products such as software, is under consideration (Antimiani & Cernat 2018; Cernat & Kutlina-Dimitrova 2014). The IMF, through the Extended Balance-of-Payments Services Classification of 2002 and 2010, categorises services into one-, two- and three-digit-level classifications. One-digit-level classification has twelve major service export sectors that are further disaggregated into 27 sectors at the two-digit level and 62 sectors at the three-digit level.

Trade in services is fast shaping the frontier of knowledge in international trade not only as a direct contributor to the value chain (financial and information and communication services, etc.) but also indirectly through servicification or embeddedness in high value-added manufacturing (Cernat & Kutlina-Dimitrova 2014; Visagie & Turok 2021). Previously perceived as non-tradable, most services are now tradable and significantly contribute to the trade basket of countries worldwide. For instance, the proportion of services in total world exports has risen from below 10% in the early 1970s to about 25% in 2014 (Loungani et al. 2017).

Figure 3.6 shows that in EAC, Kenya has the highest share of services in total exports. Between 2018–2020, services exports contributed to 48% of total goods and services exports in Kenya. The share was 46% in Tanzania, 45% in Rwanda, 37% in Burundi, 34% in Uganda and 4% in South Sudan.

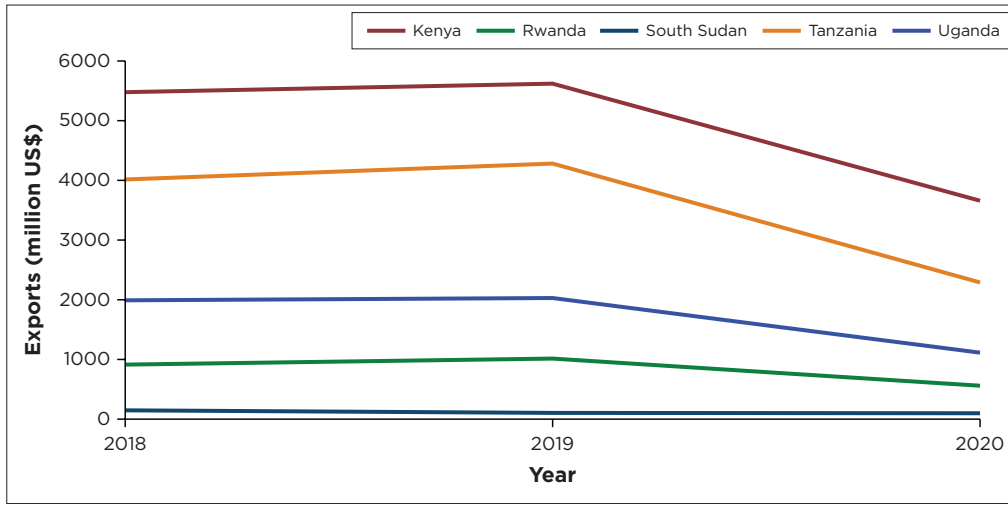
In terms of imports, the ratio of services in total goods and services imports was highest in South Sudan (39%), followed by Rwanda (30%), Uganda (29%), Burundi (25%), Kenya (19%) and Tanzania (18%).

Figure 3.7 displays the value of total service exports from EAC member states to the world between 2018–2020. Kenya was the top exporter of services in EAC, followed by Tanzania, Uganda, Rwanda and South Sudan. Kenya exported services worth US$5477m in 2018, which rose to US$5620m



Source: World Bank (2021).

FIGURE 3.6: Share of services in total exports and imports among East African Community member states (average between 2018–2020).



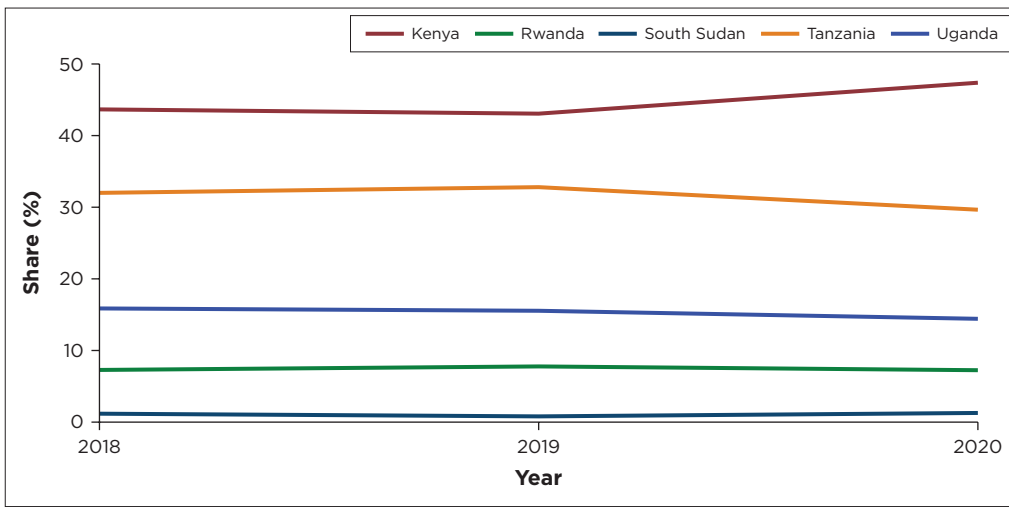
Source: WTO (2021).

FIGURE 3.7: Volume of total service exports in East African Community member states (2018–2020).

in 2019 and later dropped by US$1961m in 2020, thus indicating COVID-19 reduced exports of services in Kenya. Exports of services were also disrupted by COVID-19 in Tanzania. Figure 3.9 illustrates that Tanzania exported services worth US$4015m in 2018 and US$4281m in 2019 but declined to US$2290m in 2020. Uganda's service exports in 2018 and 2019 were US$1991m and US$2029m, respectively, but reduced by US$915m in 2020. Rwanda's service exports dropped by US$455m in 2020 after having an initial increase of US$101m between 2018 and 2019. The value of average service exports from South Sudan between 2018–2020 was US$117m, but it consistently slumped from US$148m in 2018 to US$99m in 2020.

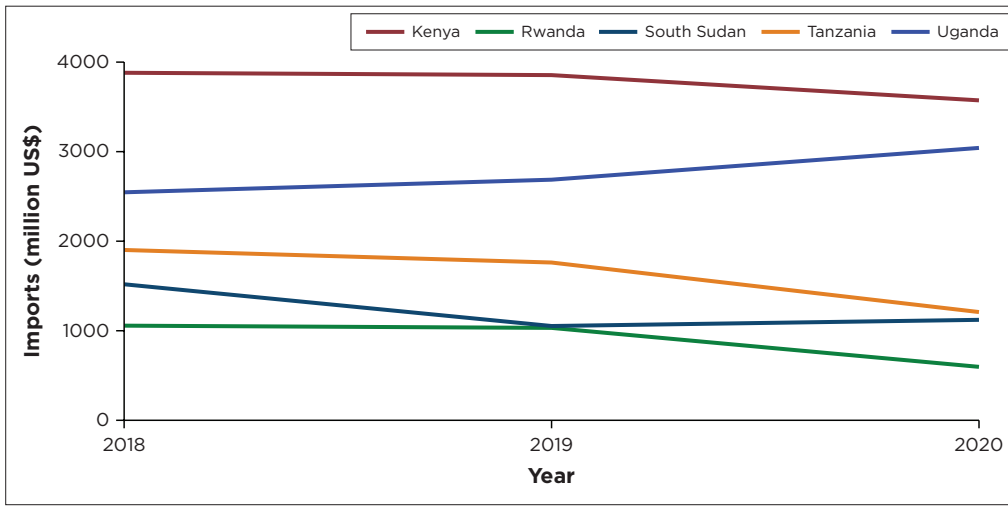
Kenya accounted for 43% and 44% of service exports from EAC countries in 2018 and 2019, respectively, as shown in Figure 3.8. The share increased to 47% in 2020 despite the COVID-19 pandemic. Tanzania, the second-highest exporter of services in EAC, accounted for a third of EAC service exports in 2018 and 2019. Nonetheless, this share declined to 30% in 2020 because of COVID-19. The share of Uganda's service exports in total EAC service exports reduced from 16% in 2018 and 2019 to 14% in 2020. The share of service exports in EAC from Rwanda declined by 1% in 2020 (from 8% to 7% of overall EAC service exports). The contribution of South Sudan service exports in total EAC service exports increased slightly between 2018 and 2020 (from 0.8% to 1.3%).

Figure 3.9 displays the volume of total service imports by EAC countries from the world between 2018 and 2020. Kenya was the top importer of services in EAC, absorbing services worth US$3881m in 2018, US$3855m in 2019 and US$3573m in 2020. This indicates that the occurrence of COVID-19 in 2020 led to a decline in service imports, by US$282m, in Kenya. Uganda



Source: WTO (2021).

FIGURE 3.8: Share of total service exports by East African Community member states (2018–2020).



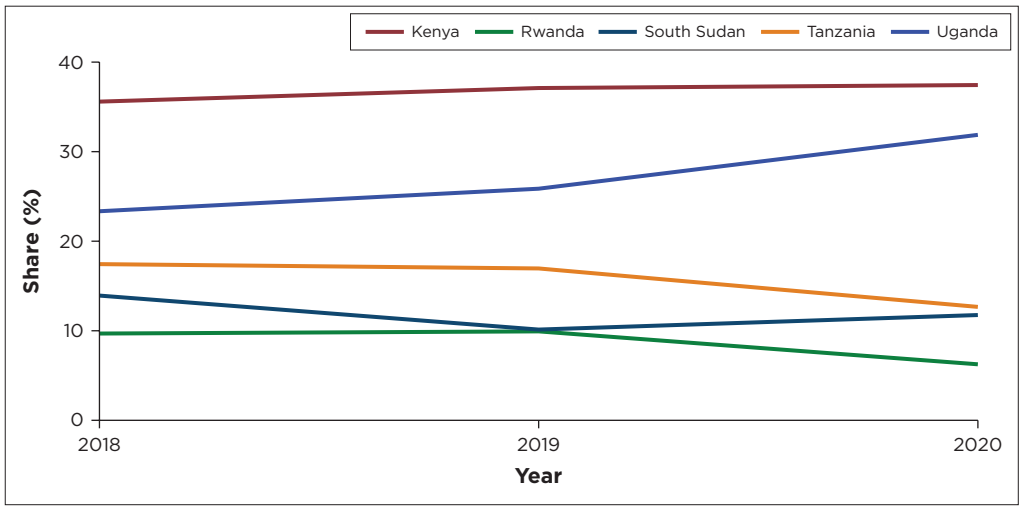
Source: WTO (2021).

FIGURE 3.9: Volume of total service imports in East African Community member states (2018–2020).

was the second-highest importer of services in EAC. Contrary to Kenya, imports of services by Uganda consistently rose from US$2546m in 2018 to US$2687m in 2019 and US$3042m in 2020. Tanzania ranked third in importing services in EAC. The value of service imports in Tanzania persistently diminished from 2018–2020: US$1902m in 2018, US$1762m in 2019 and US$1209m in 2020. Therefore, imports of services in Tanzania were on a decline even before COVID-19. South Sudan ranked fourth in the imports of services in EAC. The trend of service imports in South Sudan fluctuated between 2018–2020. It first declined by US$466m between 2018–2019 and later increased by US$69m in 2020. Rwanda was the least importer of services in EAC, ranging from US$1057m in 2018 to US$1032m in 2019 and US$597m in 2020.

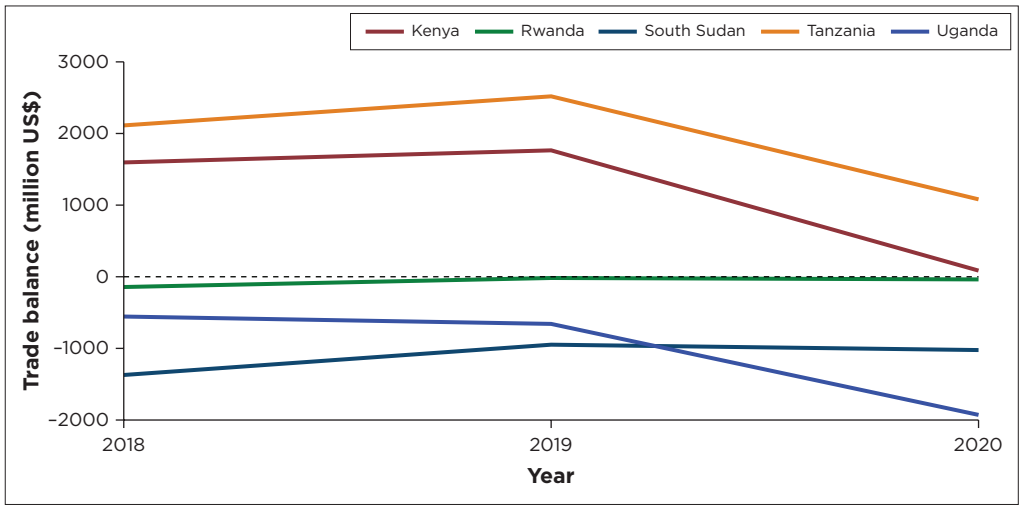
Slightly over a third of service imports in EAC in 2018 were by Kenya, as shown in Figure 3.10. The share was 36% in 2019 and 37% in 2020. Kenya was followed by Uganda, which accounted for 23% of service imports in EAC in 2018. The ratio later increased to 26% in 2019 and 32% in 2020. Hence, reinforcing the result in Figure 3.11 that Uganda's imports of services increased during the COVID-19 period. The share of services imports in EAC from Tanzania reduced from 17% in 2018 and 2019 to 13% in 2020. South Sudan's share of services imports in EAC oscillated between 14% in 2018, 10% in 2019 and 12% in 2020. Rwanda's share of services imports in EAC ranged from around 10% in 2018 and 2019 to 6% in 2020.

Figure 3.11 indicates that only Kenya and Tanzania had a trade surplus in services trade between 2018–2020. Tanzania had the greatest magnitude of the two countries. Rwanda's deficit in service trade declined over time,



Source: WTO (2021).

FIGURE 3.10: Share of total service imports by East African Community member states (2018–2020).



Source: WTO (2021).

FIGURE 3.11: Service trade balance among East African Community member states (2018–2020).

indicating an improvement in service exports. Uganda's trade deficit was lower than that of South Sudan before 2020. However, it worsened in 2020, surpassing that of South Sudan. This implies that service imports significantly increased in Uganda compared to exports during the COVID-19 period.

Table 3.5 outlines the share of service categories in total services that were exported by EAC countries to the world between 2018–2020. The first part of the table shows that travel services were the most exported service from EAC

TABLE 3.5: Share of export services in East African Community member states (average between 2018–2020).

Service	Overall EAC			Kenya			Rwanda		
	2018 (%)	2019 (%)	2020 (%)	2018 (%)	2019 (%)	2020 (%)	2018 (%)	2019 (%)	2020 (%)
Transport	32.4	34.3	49.2	42.5	47.5	73.5	28.4	28.6	42.0
Travel	45.1	45.5	36.9	23.3	21.8	26.5	60.4	61.4	41.7
Construction	1.4	1.6	2.5	-	-	-	5.5	5.2	4.4
Insurance and pension	2.7	1.8	0.4	5.4	3.6	-	0.2	0.1	0.7
Financial	5.8	4.7	2.0	12.8	10.3	-	2.0	1.9	3.7
Charges for the use of intellectual property	1.0	0.8	0.4	1.5	1.4	-	-	-	0.3
Telecommunications, computer and information	6.0	6.1	2.1	12.4	13.6	-	2.8	2.7	6.8
Other business	5.4	5.0	6.4	1.9	1.7	-	0.8	0.1	0.3
Personal, cultural and recreational	0.3	0.1	0.2	0.2	0.2	-	-	-	-

Service	South Sudan (%)			Tanzania (%)			Uganda (%)		
	2018	2019	2020	2018	2019	2020	2018	2019	2020
Transport	7.9	-	-	30.7	31.7	63.4	11.9	10.7	19.0
Travel	0.7	-	-	61.2	60.9	36.6	65.8	67.8	45.0
Construction	15.7	3.8	-	1.0	0.9	-	4.3	6.2	8.5
Insurance and pension	-	-	-	0.3	0.5	-	0.4	0.5	1.4
Financial	1.4	2.9	-	-	-	-	1.3	1.6	4.1
Charges for the use of intellectual property	17.1	8.7	-	0.6	0.7	-	0.6	0.9	1.0
Telecommunications, computer and information	0.7	-	-	6.2	5.2	-	3.2	1.3	3.5
Other business	42.1	84.6	-	0.0	0.0	-	12.1	10.8	17.1
Personal, cultural and recreational	14.3	-	-	-	-	-	0.3	0.2	0.5

Source: WTO (2021).
Note: Shares are calculated based on the value of services that were exported in a specific year in a particular country. Hence, in years where the portion of exports of a specific service increased, readers should be careful to note that it is only the share of whatever was exported in that year but the absolute values in US$ might have dropped when compared to the previous year. This explanation is appropriate for 2020 shares for Kenya and Tanzania.

in 2018 and 2019. They accounted for an average of 45.3% of total service exports by EAC countries for the two years. Travel services entail personal travel such as tourism and business travel. Transport services, which comprise air, sea and courier transport services, accounted for around a third of total EAC service exports in 2018 and 2019. Our results corroborate the findings of other studies, which show that travel and transport services are the major export services in Africa and the world (Loungani et al. 2017; Were & Odongo 2019).

The third highest service that was exported from EAC in 2018 and 2019 is telecommunications, computer and information services, whose share in total EAC service exports was around 6%. This was followed by financial services and other business services (OBS). Other business services entail professional and management consulting services; research and development services; and technical, trade-related and OBS (Loungani et al. 2017). Insurance and pension

services accounted for an average of 2.3% of total EAC service exports between 2018 and 2019. The share from construction services was 1.5%, while charges for the use of intellectual property and personal, cultural, and recreational services accounted for less than 1% of total service exports in EAC between 2018 and 2019, respectively.

The occurrence of COVID-19 in 2020 largely affected travel services in EAC. The share of travel services reduced by 8.6% between 2019–2020 and that of transport services increased by about 15%. Therefore, transport services surpassed travel service exports during the COVID-19 period. The same scenario transpired at the global level, where the fall in travel services was more than three times that of transport services in 2020 because of COVID-19, 63% against 19% (WTO 2021). Other services which declined in EAC in 2020 were financial; insurance and pension services; telecommunications; computer and information services; and charges for the use of intellectual property. Financial services contracted by over two times, while insurance and pension services declined by 4.5 times. This indicates that EAC's financial services were disrupted by COVID-19, as established by other studies such as Afreximbank (2021). Services whose exports increased in 2020 in EAC were construction; OBS; and personal, cultural and recreational services.

At the country level, Table 3.5 shows that only Kenya predominantly exports transport services in EAC. Rwanda, Tanzania and Uganda mainly export travel services, whose share was between 60.4% and 67.8% in 2018 and 2019. South Sudan majorly exports OBS. Travel services are the second most exported service by Kenya, while transport services are number two in terms of export shares in Rwanda and Tanzania. Other business services is the second most exported service in Uganda. It is closely followed by transport services. Charges for the use of intellectual property are the second-highest service exports from South Sudan. Kenya had the highest share of insurance and pension, and financial services in the EAC region in 2018 and 2019. This affirms the finding by Were and Odongo (2019) that Kenya has a comparative advantage in these services.

Table 3.5 further indicates that about three-quarters of service exports from Kenya were transport services, while the rest were travel services in 2020. The share of travel services in Rwanda and Uganda shrunk by 20% and 23%, respectively, in 2020.[7] This implies that COVID-19 restrictions, such as bans on international travel and the closure of borders, negatively impacted the tourism sector of these countries. In contrast, transport service exports

7. Kenya and Tanzania are not included in this discussion because only transport and travel services were considered in 2020, and thus, their shares could be misleading. For instance, the share of transport services in Kenya in 2020 was 73.5%, indicating a 26% increase from 2019. However, this could not be true because only two services are considered in 2020, and the real value of Kenya's transport export could have been lower than the 2019 value.

from these countries increased in 2020 – by 14% and 8% in Rwanda and Uganda, respectively. This could have been caused by measures such as the conversion of passenger planes into cargo planes which kept transport services active (Majune 2020). Of the remaining services, only construction service exports are condensed in Rwanda. Exports of all the remaining services improved in Uganda.

Table 3.6 shows the share of service categories in service imports in EAC from 2018–2020. The first section of the table shows that EAC countries mostly import transport services, followed by OBS and travel services, respectively. The EAC region imported about 46% and 52% of transport services in 2018 and 2019, respectively. The average share of OBS in 2018 and 2019 was 21%, while that of travel service was 15% over the two years. Construction services were the fourth highest import, followed by insurance, pension and financial services. All the remaining services – charges for the use of intellectual property; telecommunications, computer and information; and

TABLE 3.6: Share of import services in East African Community member states (average between 2018–2020).

Service	Overall EAC (%)			Kenya (%)			Rwanda(%)		
	2018	2019	2020	2018	2019	2020	2018	2019	2020
Transport	46.3	52.2	49.7	39.3	41.1	92.6	54.4	52.0	62.1
Travel	15.8	14.2	6.2	6.5	5.6	7.4	38.2	38.8	21.0
Construction	6.0	5.7	2.5	11.4	11.4	-	1.1	1.0	1.0
Insurance and pension	3.1	2.8	2.3	4.1	3.6	-	1.1	1.3	1.7
Financial	2.8	2.7	0.5	6.1	6.2	-	0.6	0.5	1.0
Charges for the use of intellectual property	1.6	1.7	-	3.7	3.5	-	-	-	-
Telecommunications, computer and information	2.1	1.2	1.2	1.5	1.6	-	1.7	1.8	3.3
Other business	22.1	19.2	37.1	27.4	27.1	-	3.0	4.5	8.3
Personal, cultural and recreational	0.1	0.2	0.5	0.0	0.0	-	-	0.1	1.7
Service	**South Sudan (%)**			**Tanzania (%)**			**Uganda (%)**		
	2018	**2019**	**2020**	**2018**	**2019**	**2020**	**2018**	**2019**	**2020**
Transport	72.8	97.2	-	32.2	39.6	75.8	56.1	58.2	48.3
Travel	1.2	-	-	40.1	39.0	24.2	7.4	7.4	2.0
Construction	2.4	-	-	3.4	2.2	-	3.2	4.1	2.9
Insurance and pension	0.7	0.2	-	3.0	3.7	-	3.0	2.7	2.4
Financial	3.5	1.5	-	1.2	1.0	-	0.2	0.3	0.4
Charges for the use of intellectual property	0.1	0.1	-	0.3	0.4	-	0.4	1.2	-
Telecommunications, computer and information	11.5	0.1	-	1.4	1.7	-	1.1	0.8	0.9
Other business	7.6	0.8	-	18.3	12.2	-	28.3	24.7	42.8
Personal, cultural and recreational	0.1	-	-	0.1	0.2	-	0.3	0.5	0.3

Source: WTO (2021).
Note: Shares are calculated based on the value of services that were imported in a specific year in a particular country. Hence, in years where the portion of imports of a specific service increased, readers should be careful to note that it is only the share of whatever was imported in that year, but the values in US$ might have dropped when compared to the previous year. This explanation is appropriate for 2020 shares for Kenya and Tanzania.

personal, cultural and recreational services – had an average of less than 2.0% between 2018 and 2019.

The pandemic reduced the share of transport service imports in 2020 by 2.5%. Travel services also slumped by 8.0% in 2020. This indicates that the travel restrictions that were imposed by EAC's trading partners during the COVID-19 period reduced the movement of people (for purposes of tourism and business) from the EAC region to them. Other services whose imports declined during the COVID-19 period were construction (3.2%), insurance and pension (0.5%), financial (2.2%) and charges for the use of intellectual property (1.7%). Other business services increased by 17.8% in 2020, possibly because most of these services are transacted online, yet online trading increased during the COVID-19 period (WTO 2021). Imports of personal, cultural and recreational services in EAC also increased in 2020.

Most EAC countries chiefly import transport services except Tanzania, whose import of travel services almost equals that of transport services. The average share of transport service imports in total service imports in Kenya, Rwanda, South Sudan, Tanzania and Uganda between 2018–2019 was 40%, 53%, 85%, 36%, and 57%, respectively. Only Rwanda and Tanzania exported travel services, whose share in total service imports was more than 35% in 2018 and 2019. Other business services were the third highest import in Kenya, Rwanda, Tanzania and Uganda in 2018 and 2019. Kenya had the largest share of insurance and pension, and financial services imports in the EAC region.

In 2020, imports of transport services increased in Rwanda. However, it declined by 10% in Uganda. Imports of travel services in 2020 massively declined in Rwanda (18%) and Tanzania (15%). Other business services imports improved, particularly in Uganda, whose increase was 18% compared to 2019.[8]

The USA is by far the highest service export trading partner of EAC countries, as per Table 3.7. The USA imported 17.8% of services from Burundi between 2018 and 2019. Kenya, Rwanda, Tanzania and Burundi exported 17.5%, 16%, 9.3% and 12.1% of their services to the USA. Canada was also a top 20 service export trading partner of EAC countries from North America, specifically for Burundi, Kenya and Rwanda. The remaining top trading partners were mainly spread across Europe (Germany, France, UK, etc.) and Asia (PRC, India, Japan, UAE, Saudi Arabia, etc.).

Both intra-EAC and intra-Africa service export trade are weak because Table 3.7 shows that Kenya was the only EAC country that appeared among the top 20 trading partners of EAC countries (Uganda and Tanzania).

8. Similar to exports, we do not discuss the share of imports by service categories in Kenya and Tanzania to avoid misleading the reader.

TABLE 3.7: Top 20 services export partners for East African Community member states (average between 2018–2019).

Burundi		Kenya		Rwanda		Tanzania		Uganda	
Country	**%**	**Country**	**%**	**Country**	**%**	**Country**	**%**	**Country**	**%**
USA	17.8	USA	17.5	USA	16.0	USA	9.3	USA	12.1
Germany	10.4	UK	11.9	PRC	6.3	PRC	7.8	UK	10.8
UAE	9.1	Germany	4.6	UK	5.8	India	7.3	Germany	6.1
PRC	7.0	Netherlands	4.0	Germany	5.1	Germany	5.8	Switzerland	4.6
Switzerland	6.5	PRC	3.9	Netherlands	3.9	Japan	5.7	China	4.2
France	5.2	Switzerland	3.6	India	3.6	UK	5.2	UAE	4.0
Singapore	3.9	India	3.1	Singapore	3.6	Switzerland	4.7	India	3.7
Japan	3.5	France	3.0	Belgium	3.5	France	4.3	Hong Kong, PRC	3.3
Saudi Arabia	3.5	Saudi Arabia	2.5	France	3.4	UAE	3.9	Singapore	3.1
India	3.0	UAE	2.4	Switzerland	3.4	Saudi Arabia	2.8	Netherlands	3.1
Belgium	2.6	Japan	2.3	Hong Kong, China	3.1	Italy	2.6	Saudi Arabia	2.7
Ireland	1.7	Italy	1.8	Australia	2.8	Netherlands	2.4	Denmark	2.3
Canada	1.3	Denmark	1.6	Japan	2.6	Belgium	1.8	Kenya	2.2
Netherlands	1.3	Hong Kong, PRC	1.6	Republic of Korea	1.7	Republic of Korea	1.7	Spain	2.2
Algeria	0.9	Republic of Korea	1.6	Canada	1.5	Singapore	1.7	Japan	2.2
Angola	0.9	Australia	1.6	Ireland	1.5	Hong Kong, PRC	1.7	France	2.1
Australia	0.9	Egypt	1.4	Italy	1.5	Denmark	1.5	Italy	1.9
Denmark	0.9	Ireland	1.3	Sweden	1.5	Kenya	1.5	Belgium	1.8
Egypt	0.9	Singapore	1.3	Saudi Arabia	1.2	South Africa	1.3	Nigeria	1.4
Iraq	0.9	Canada	1.2	Spain	1.2	Spain	1.3	Republic of Korea	1.3
Total	**82.2**	**Total**	**72.4**	**Total**	**73.0**	**Total**	**74.2**	**Total**	**75.1**

Source: World Bank (2021).
Key: UAE, United Arab Emirates; UK, United Kingdom; USA, United States of America; PRC, People's Republic of China.

Other African countries that appeared among the top trading partners of some EAC countries were Algeria, Angola, Egypt, South Africa and Nigeria. These countries are also among the top ten importers of services in Africa (Ayoki 2018), suggesting that EAC countries mainly export services to 'superstar' service traders in Africa. Overall, over 82% of service exports from Burundi were to their top 20 trading partners. The share for Kenya, Rwanda, Tanzania and Uganda was 72.4%, 73%, 74.2% and 75.1%, respectively. Therefore, EAC countries have weak market diversification because a bulk of their exports are absorbed by a few countries.

Table 3.8 shows that EAC countries mostly imported services from the USA between 2018 and 2019. The country accounted for 15% of Burundi's service imports. The share of imports from the USA to Kenya, Rwanda, Tanzania and Uganda between 2018 and 2019 was 17.4%, 23.8%, 13.2% and 14.6%, respectively. The remaining top import trade partners of EAC countries were majorly from Europe (the UK, Netherlands, and France) and Asia (India, PRC, Japan,

TABLE 3.8: Top 20 services import partners for East African Community member states (average between 2018–2019).

Burundi		Kenya		Rwanda		Tanzania		Uganda	
Country	**%**	**Country**	**%**	**Country**	**%**	**Country**	**%**	**Country**	**%**
USA	15.0	USA	17.4	USA	23.8	USA	13.2	USA	14.6
India	7.3	UK	10.2	UK	4.8	India	8.3	UK	10.6
UK	6.6	India	8.3	India	4.4	PRC	8.2	India	7.9
Belgium	6.3	PRC	6.0	Singapore	3.7	UK	6.2	PRC	5.3
PRC	5.9	UAE	3.6	Netherlands	3.6	UAE	5.5	Hong Kong, PRC	4.6
UAE	5.9	Singapore	3.3	PRC	3.5	Japan	3.7	UAE	4.5
Netherlands	4.5	Ireland	3.3	Belgium	3.4	Singapore	3.6	Japan	3.7
Hong Kong, China	4.1	Japan	3.3	Germany	3.1	Hong Kong, PRC	3.3	Singapore	3.3
Switzerland	4.1	France	3.1	Hong Kong, PRC	2.7	Netherlands	3.0	France	3.1
France	3.6	Netherlands	3.1	Sweden	2.5	France	2.9	Kenya	3.1
Japan	3.2	Hong Kong, PRC	2.7	France	2.5	Germany	2.6	Germany	2.5
Germany	2.5	Germany	2.3	Japan	2.4	Switzerland	2.1	Netherlands	2.3
Kenya	2.3	Egypt	1.7	Switzerland	2.4	Kenya	2.0	Switzerland	2.1
Singapore	2.3	Spain	1.6	Ireland	2.1	Spain	1.8	Egypt	1.9
Tanzania	2.3	Switzerland	1.4	Spain	2.1	Sweden	1.6	Spain	1.6
Egypt	1.8	Luxembourg	1.3	Australia	1.6	Turkey	1.6	Belgium	1.2
Canada	1.4	Republic of Korea	1.3	Republic of Korea	1.5	Australia	1.5	South Africa	1.2
Turkey	1.4	Denmark	1.3	Finland	1.4	Thailand	1.5	Denmark	1.2
Uganda	1.4	Australia	1.2	Canada	1.3	Republic of Korea	1.5	Italy	1.1
Italy	0.9	Canada	1.2	UAE	1.2	Denmark	1.3	Turkey	1.1
Total	**82.5**	**Total**	**77.7**	**Total**	**73.9**	**Total**		**Total**	**77.0**

Source: World Bank (2021).
Key: UAE, United Arab Emirates; UK, United Kingdom; USA, United States of America; PRC, People's Republic of China.

Singapore, etc.). Besides the USA, Canada was the only trading partner from North America which appeared among the top 20, albeit only for Kenya and Rwanda. At the intra-EAC level, only Burundi imported most services from fellow EAC countries – Kenya, Uganda and Tanzania. Kenya was also among the top import partners of Tanzania and Uganda. Egypt and South Africa were the only non-EAC countries from Africa to appear among the top import partners of Burundi, Kenya and Uganda. In general, the top 20 import partners accounted for 82.5% of Burundi's imports, 77.7% of Kenya's imports, 73.9% of Rwanda's imports, 75.4% of Tanzania's imports and 77% of Uganda's imports. This suggests a low market diversification by EAC countries.

Conclusion

This chapter has shown that given that both exports and imports of goods increased in EAC countries during the pandemic, EAC countries should continue implementing trade facilitation measures to boost the region's international trade. East African Community countries should consider boosting the services sector given the massive drop in exports and imports of services of most member states. Travel services were the most affected by the COVID-19 pandemic, suggesting that EAC members should continue opening up the tourism sector while applying policies that reduce the spread of the virus and enhance safe border trade. The massive increase in exports and imports of OBS, which by their nature are transacted online, implies that EAC countries should adopt and enhance the digitalisation of services. Businesses, especially micro, small and medium enterprises (MSMEs), can also be supported to transit towards digital trade. The weak intra-EAC and intra-Africa trade in services indicate a need for further prioritisation and discussion of services in the ongoing African Continental Free Trade Area (AfCFTA) negotiations. Finally, EAC countries should also pursue policies that diversify both markets and products for goods and services.

Chapter 4

Impact of COVID-19 on merchandise trade in Kenya

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Introduction

Earlier predictions of the effects of coronavirus disease 2019 (COVID-19) on global effects showed that there would be extensive effects on trade (World Trade Organization [WTO] 2020). Two reasons were attributed to this: firstly, COVID-19 was observed to be both a demand and a supply shock, and thus, the shock was likely to create potential spillover effects on the supply chains and highly affect trade-dependent countries (Fernandes & Tang 2020). Secondly, the protectionist measures adopted by countries, in response to the virus, were observed to have a direct effect on the flow of trade among countries. Some of these measures included direct bans on trade and shutting borders to prevent the movement of people, goods and services. Supply disruptions and weaker demand created by the COVID-19 crisis led to a decline in world merchandise trade in 2020 with the value of merchandise exports and imports falling by 7.4% and 7.6%, respectively (ICC 2022). Around 80% of the decline in merchandise exports and imports values in 2020 was driven by contractions in the fuel and transport sectors.

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As the virus spread internationally, many countries took actions to limit the spread through social isolation policies, such as shutting educational institutions, limiting work and restricting the mobility of people. The preventive actions had an immediate and significant impact on trade (Maliszekswa, Mattoo & Mensbrugghe 2020). Friedt (2021) showed that COVID-19 had caused one of the greatest contractions in international trade ever since the great trade collapse. Predicting the impact of COVID-19 between commonwealth countries and non-commonwealth countries, Escaith and Khorana (2021) showed that the impact of COVID-19 would have a larger impact on developed countries compared to developing countries. They also showed that the adverse effects on trade would depend on the duration and severity of the disease. Nonetheless, African trade, especially exports, was predicted to greatly decline because of COVID-19. The argument was that most of the exports from African countries, especially to developed countries like the United States of America (USA), People's Republic of China (PRC), Japan, Germany, France, Italy and the United Kingdom (UK), would greatly fall because of the strict measures taken by these nations to combat the spread of the virus (Kassa 2020). These nations form the main destinations of Africa's exports, and thus, closing their borders was expected to significantly affect Africa's merchandise trade. The effect was mainly expected to affect exports through the network of global value chains (GVCs). This was so because most industries in developed nations import raw materials from African markets.

A review by Mold and Mveyange (2020) on the impact of COVID-19 on Kenya's trade shows that the impact of COVID-19 was more observed on imports compared to exports. However, this review does not empirically analyse the impact of COVID-19, and it just generally shows the changes in trends of the values and volumes of trade. Socrates and Lashitew (2020) focused mainly on the lockdown policies. The analysis of the lockdown policies was mainly a short-run analysis that could not illuminate what happened after a prolonged period of COVID-19 and COVID-19 restrictive measures. Other studies that have followed this line are Asante-Poku and Van Huellen (2021) for Ghana; Ozili (2021) for Nigeria; and Obayelu, Edewor and Ogbe (2021) for various African countries. These studies have mainly conducted a similar short-run analysis of government restrictiveness without capturing the full period when government restrictiveness measures were imposed on these developing countries.

This study complements the string of research on COVID-19 by also analysing the impact of the spread of COVID-19 on merchandise trade while capturing a prolonged period of imposition of government restrictions that were earlier predicted to heavily affect trade in various countries. The study uses Kenya as a case study. The Kenyan government imposed strict measures to curb the spread of COVID-19 between March 2020 and March 2021. Hence, this study evaluates the repercussions of such a prolonged imposition of restrictive

measures on merchandise exports and imports in Kenya. To do this, the study first sets the stage by giving a review of the composition and geography of Kenya's merchandise trade in the section titled 'Kenya's trade: Composition and geography'. It then follows with a brief literature review on channels in which COVID-19 is likely to affect merchandise trade. Afterwards, it discusses the methodology and the data used in the analysis. Finally, it highlights the findings of the study and provides policy recommendations.

Kenya's trade: Composition and geography

Composition of Kenya's merchandise trade

As seen in Table 4.1, Kenya's merchandise imports have been increasing over years. In 2010, the value of total merchandise imports was approximately US$12 093 million, while in 2019 it was approximately US$17 655m. This represented an increase of more than 50% in nine years. Among the top imports are manufactures, machinery and transport equipment, fuels and mining products. The least of merchandise imports are clothing together with integrated circuits and electronic components.

TABLE 4.1: Kenya's merchandise imports (million US$).

Product/sector	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total merchandise	**12 093**	**14 782**	**16 290**	**16 358**	**18 396**	**16 093**	**14 107**	**16 687**	**17 378**	**17 655**
Manufactures	7 160	8 171	9 558	9 995	11 731	11 032	9 632	10 308	10 931	10 674
Machinery and transport	3 528	3 637	4 674	4 532	6 036	5 341	4 292	4 703	4 558	4 642
Fuels and mining products	2 752	4 225	4 243	3 996	4 201	2 662	2 252	2 937	3 595	3 487
Fuels	2 575	4 025	4 044	3 779	3 964	2 444	2 052	2 728	3 385	3 277
Agricultural products	1 588	2 103	2 195	2 037	2 117	2 008	1 941	3 375	2 730	2 804
Food	1 407	1 902	1 961	1 820	1 895	1 788	1 714	3 154	2 441	2 484
Chemicals	1 545	1 919	2 053	2 245	2 353	2 346	2 190	2 301	2 513	2 345
Transport equipment	1 352	1 333	1 855	1 683	2 956	2 515	1 373	1 800	1 678	1 842
Automotive products	762	803	966	1 062	1 255	1 297	941	932	1 037	1 002
Iron and steel	528	700	657	921	844	887	731	808	964	957
Office and telecom equipment	843	788	890	847	636	646	744	805	682	645
Pharmaceuticals	338	439	481	459	583	616	587	538	590	579
Textiles	277	369	324	346	405	381	341	393	461	486
Telecommunications equipment	600	511	555	571	443	462	468	443	418	398
Electronic data processing and office equipment	225	257	310	250	176	164	236	303	179	208
Clothing	64	55	64	67	65	45	71	131	165	160
Integrated circuits and electronic components	17	20	25	26	18	19	40	59	85	39

Source: WTO (2022).

TABLE 4.2: Kenya's merchandise exports (million US$).

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total merchandise	**5169**	**5756**	**6127**	**5856**	**6115**	**5906**	**5695**	**5747**	**6052**	**5839**
Agricultural products	5 169	3 129	3 227	3 157	3 105	3 134	3 175	3 470	3 568	3 251
Food	2 320	2 502	2 599	2 531	2 407	2 528	2 518	2 762	2 855	2 524
Manufactures	1 688	2 095	2 208	2 186	2 050	1 830	1 763	1 634	1 762	1 777
Fuels and mining	308	380	404	333	842	842	709	630	708	735
Chemicals	449	592	644	565	542	473	458	460	508	485
Fuels	209	250	254	218	605	603	470	354	387	447
Clothing	189	247	241	279	325	283	298	315	340	338
Machinery and transport	253	272	320	316	246	233	286	186	245	297
Iron and steel	147	202	177	189	148	124	131	119	128	151
Pharmaceutical	73	84	139	118	129	120	139	124	131	116
Transport equipment	78	83	84	96	75	69	69	59	89	97
Automotive products	49	50	46	53	43	45	50	41	67	64
Textiles	60	60	70	61	62	66	50	42	41	45
Office and telecom	69	69	96	67	26	31	84	24	21	23
Telecommunications	31	28	31	39	13	19	72	12	9	10
Electronic data equipment	37	39	63	24	10	7	7	6	7	8
Integrated circuits	1	2	3	3	3	4	5	6	5	5

Source: WTO (2022).

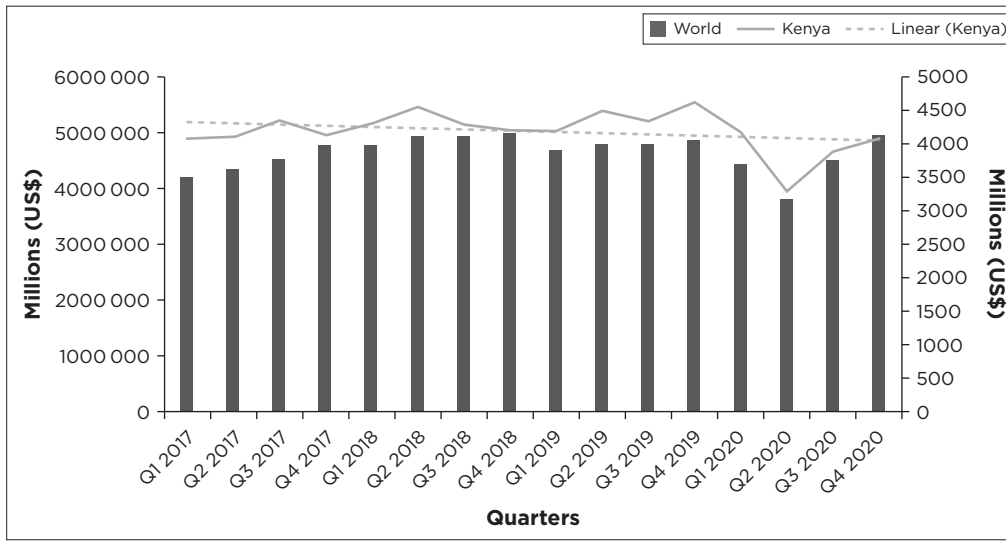
Merchandise exports have slightly remained constant over the years as seen in Table 4.2. In 2010, total exports were around US$5169m, while in 2019 they were US$5839m. This represented an increase of around 13% over nine years. Among the main merchandise, exports are agricultural products, food and manufactures, while the least exports are electronic data processing equipment together with integrated circuits and electronic components.

A comparison of Table 4.1 and Table 4.2 shows that the values of exports are lower than the values of imports in all product categories. This shows that Kenya has been incurring a trade deficit in merchandise trade. The trade deficit in 2010 was US$6924m, while in 2019 it was US$11 816m. This represented an increase in the trade deficit of more than 50% in nine years.

Kenya's merchandise trade before and during the coronavirus disease 2019 period

Kenya's merchandise imports have fairly been increasing at a similar rate to world imports as seen in Figure 4.1. A notable decline in both Kenya and world imports is observed to begin in the fourth quarter of 2019 when COVID-19 began.

The highest slump in imports was observed in the second quarter of 2020. During this period, Kenya imposed strict measures to curb the spread of the virus. Among the measures were the closure of borders and restriction of



Source: WTO (2022).

FIGURE 4.1: Kenya's merchandise imports versus world merchandise imports.

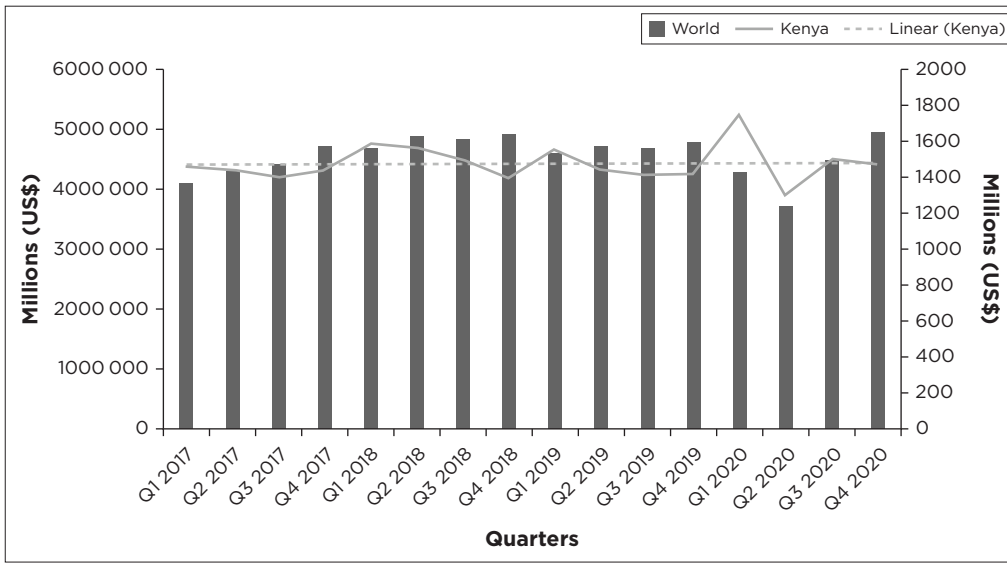
movements of people within and outside the country. During the same period, most economies in the world had also taken up similar precautionary measures. These measures are observed to have sharply affected the volume of imports in most economies of the world. The trend, however, began to change towards the third and fourth quarters of 2020. This shows that the shock of COVID-19 on imports was mainly felt in the first wave of attack; however, with time, economies began to adjust allowing imports to return to their initial levels.

Yearly data shown in Appendix 4.1 indicate that in 2019, the decline of imports of most products was average below 10%; however, in 2020, the declines were very high.

According to the WTO Stats Dashboard (2021), among the top imports, ores, slag and ash declined by 2% in 2019 and by 34.4% in 2020; articles of base metal declined by 1.5% in 2019 and by 12.7% in 2020; machinery increased by 5.1% in 2019 but decreased by 5.4% in 2020; and railway products decreased by 1.9% in 2019 and by 7.4% in 2020.

On exports, although the world saw a decline in exports between the fourth quarter of 2019 and the first quarter of 2020, Kenya's exports recorded the highest increase as seen in Figure 4.2. However, this was short-lived as the country recorded a sharp and largest decline in the second quarter of 2020. This sharp decline was mainly attributed to the closure of Kenyan borders. The trend changed in the third and fourth quarters of 2020, where volumes of exports began to record an increase, both worldwide and in Kenya.

Yearly statistics shown in Appendix 4.2 indicate that most of the exports did not decline during the period of COVID-19. Agricultural products recorded



Source: WTO (2022).
FIGURE 4.2: Kenya's merchandise exports versus world merchandise exports.

an increase in volumes between 2019 and 2020. For example, coffee and tea declined by 17% in 2019 but increased by 10% in 2020; edible vegetables declined by 10% in 2019 but increased by 31% in 2020; and edible fruits declined by 12% in 2019 but increased by 6% in 2020.

Geography of Kenya's merchandise trade

This section reviews the sources of Kenya's merchandise imports and the destination of Kenya's merchandise exports. The purpose is to understand whether there were changes in patterns of merchandise trade associated with COVID-19. Table 4.3 shows the major sources of Kenya's merchandise imports.

The main source of Kenya's imports as of 2020 was China's mainland. Although leading in terms of volume, imports from China have been showing a decline over the years. The sharp decline of 5% between 2020 and 2019 is likely attributable to a surge of COVID-19 cases among the Partner States. The two periods are also the ones in which the two states adopted stringent measures to contain the spread of the virus. Large declines of imports from other sources are observed to sharply decline for the periods 2019–2020; for example, imports from UAE, Saudi Arabia, South Africa and Uganda declined by more than 30%. However, within the same period, imports from other countries like Indonesia, Malaysia, Russia and Korea observed a significant increase compared to the periods 2018/19 and 2017/18. The large declines and increments of imports between Kenya and its major partners for the last

TABLE 4.3: Source of Kenya's imports.

Country	2018 (Million US$)	% change (2017–2018)	2019 (Million US$)	% change (2018–2019)	2020 (Million US$)	% change (2019–2020)
PRC (Mainland)	3,660,882	−3	3,590,359	−2	3,394,227	−5
India	1,827,858	10	1,706,123	−7	1,771,363	4
UAE	1,457,439	8	1,632,734	12	8,667,901	−47
Japan	9,874,881	20	9,470,436	−4	8,227,512	−13
Saudi Arabia	1,704,865	35	1,246,931	−27	6,481,223	−48
Indonesia	4,549,512	−21	4,825,836	6	5,888,569	22
USA	5,275,601	−6	5,912,528	12	5,312,036	−10
South Africa	6,398,418	6	6,880,832	8	4,299,924	−38
Malaysia	2,120,593	18	2,500,463	18	4,279,643	71
Egypt	3,586,191	5	4,167,485	16	4,212,973	1
Netherlands	1,906,435	1	3,091,224	62	3,932,764	27
Germany	4,608,351	10	4,353,637	−6	3,776,271	−13
Russian	3,041,252	−15	3,133,488	3	3,568,902	14
UK	3,111,885	7	3,174,101	2	273,116	−14
Tanzania	2,453,173	32	2,697,796	10	2,581,866	−4
Uganda	4,878,228	17	3,361,362	−31	2,251,421	−33
Italy	2,539,271	15	1,994,741	−21	2,215,464	11
France	2,367,206	−10	2,333,354	−1	218,951	−6
Pakistan	2,115,568	−17	2,433,644	15	2,014,689	−17
Korea	1,877,034	9	1,408,948	−25	1,919,541	36

Source: WTO (2022).
Key: PRC, People's Republic of China; UAE, United Arab Emirates; UK, United Kingdom; USA, United States of America.

three years reflect the significant impact of COVID-19 on the pattern of trade. The changes in the pattern of imports between Kenya and the Partner States also indicate that there was a significant change in the products being traded between the Partner States.

On exports, as seen in Table 4.4, sharp declines and increments are not observed between Kenyan and its Partner States. As of 2020, the top three destinations of Kenya's exports, namely, Uganda, Pakistan and the UK, had recorded an increment in exports compared to the periods 2018–2019 and 2017–2018.

For the subsequent major Kenyan destination markets, such as USA, Netherlands, UAE, Tanzania and Rwanda, large declines in export volumes are observed between 2019 and 2020, compared to 2018–2019 and 2017–2018. Most of these countries had imposed measures to close down their borders during the period 2019–2020. This is observed to have affected Kenya's exports. A comparison of imports and exports by Partner States shows that imports seem to have been more affected by COVID-19 compared to exports. The above analyses are, however, mainly descriptive statistics. To completely make an inference about the impact of COVID-19 on Kenya's merchandise imports and exports, a comprehensive statistical analysis is warranted.

TABLE 4.4: Destination of Kenya's exports.

Country	2018 (Million US$)	% change (2017–2018)	2019 (Million US$)	% change (2018–2019)	2020 (Million US$)	% change (2019–2020)
Uganda	610.67	2	624.15	2	673.66	8
Pakistan	585.86	−5	443.47	−24	513.57	16
UK	396.73	6	391.77	−1	469.07	20
USA	467.76	2	508.55	9	463.97	−9
Netherlands	457.73	8	470.15	3	457.95	−3
UAE	345.66	36	379.29	10	323.56	−15
Tanzania	293.61	6	329.56	12	294.94	−11
Rwanda	176.12	6	227.27	29	236.89	4
South Sudan	127.91	−21	122.93	−4	216.52	76
Egypt	198.63	8	185.61	−7	178.37	−4
PRC (Mainland)	109.88	14	148.56	35	139.01	−6
Germany	110.24	−3	110.82	1	136.56	23
Congo	149.94	−18	132.05	−12	134.35	2
Somalia	148.84	−22	116.03	−22	106.92	−8
France	80.32	3	78.73	−2	87.01	11
Saudi Arabia	98.94	30	87.27	−12	76.58	−12
Russian	84.62	9	62.22	−26	75.25	21
Ethiopia	62.63	−7	63.81	2	74.01	16
India	89.82	55	52.99	−41	72.22	36
Belgium	62.48	7	72.10	15	64.42	−11

Source: WTO (2022).
Key: UAE, United Arab Emirates; UK, United Kingdom; USA, United States of America; PRC, People's Republic of China.

Before the analysis, a brief theoretical and empirical literature review on the impact of COVID-19 is highlighted in the subsequent section.

Literature review

Theoretical review

A review of the literature shows that the impact of COVID-19 on merchandise trade manifests itself in three channels. The first is the substitution and contagion effect, the second is the demand effect and the third is the production effect.

Substitution and contagion effect

On substitution effect, trade in one country A might be affected by the burden of COVID-19 on its neighbouring country B. The effect may be positive or negative. On the positive side, a decline in exports from B because of the pandemic may create an opportunity for A to export to other 'New' Partner States who may stop importing from B. The decrease in imports from country B may lower international prices because of the decreased demand levels (Hayakawa & Mukunoki 2020). The low prices could in turn increase imports

from other countries. On the negative side, the reduction of production in country B as a result of COVID-19 could reduce the production of country A through supply chain linkages. This negative effect is called the contagion effect (Hayakawa & Mukunoki 2020).

☐ Demand effect

The demand effect of COVID-19 is observed in the import sector. Particularly, COVID-19 may cause a decrease or an increase in aggregate demand for imports. The decrease arises from two parts; the first is the reduction of income and earnings, and the second is the fear of contracting the disease. Measures taken by governments in response to COVID-19 like curfews, lockdowns, cease of movement and emphasis on working from home may reduce the earnings of businesses and cause some workers to be retained. The aggregate effect would be a reduction in earnings, which in turn leads to a decrease in aggregate demand. Although the government can provide sufficient benefits to cover the losses of earnings, the short-term effects would be high levels of decrease in demand for imports. For the second channel, people might fear contracting the disease through their visits to shops to purchase items, or to eateries and social places. In such places, people might fear getting in contact with infected people. The aggregate effect would be a decline in demand for commodities.

While aggregate demand for many commodities might decrease, for some products an increase in demand is observed. The increase arises because of two reasons: the first is the uncertainty effect, and the second is the creation of 'new' goods. Uncertainty arises because of the unpredictability of the effect of the virus on the economy and the unpredictability of possible government measures. Uncertainty results in 'panic-purchases', especially for non-durable goods (Hayakawa & Mukunoki 2020). For durable goods, the behaviour might not be observed because consumers view these goods as postponable (Baldwin & Tomiura 2020). The creation of 'new' goods is from the perspective of consumers. Before COVID-19, a large number of consumers did not perceive facemasks or hand sanitisers to be products that can be purchased/essential. However, since the invasion of COVID-19, these products are forming part of the consumer baskets of many consumers in the world. This results in increased aggregate demand for countries that are incapable of producing these commodities.

☐ Production effect

The production effect of COVID-19 mainly affects the export sector. The burden of the disease reduces the scale of production, hence reducing the export supply. Broadly, the virus led to lockdown measures and cessation of movements of people. This results in the closure of many industries and thus

a reduction of the scale of production. Death of several workforces or restricting some workers from coming to work, for example, older people who are more vulnerable to infection and death, may result in a reduction of production for some sectors. Although cessation of movements, lockdowns and deaths may affect production, the effect may not be very large for sectors or some countries that decide to shift their work or operations to remote platforms. However, this can only be observed for sectors or countries in which a shift to remote is feasible. For countries or sectors that are labour-intensive, the effect may not be very significant (Hayakawa & Mukunoki 2020).

A reduction in the production of exportable commodities causes a decrease in export supply. However, this only takes place when domestic demand for exportable products remains unchanged or increases. In such a case, shortages are created in domestic markets. Nonetheless, if domestic demand for the exportable commodity decreases, sufficiently more than production levels, then the surplus realised will see an increase in levels of exports. Thus, the impact of COVID-19 on imports and exports can depend on various factors amongst them: the demand function of an importing country, the government response to the pandemic, and the production capacities of sectors and countries. The empirical review in the subsequent section reveals the various case scenarios of the impact of COVID-19 on trade.

Empirical literature review

Ever since the onset of COVID-19, several empirical studies have been conducted to either predict the impact of the virus or measure the actualised impact. For predictive studies, most were of the view that COVID-19 would have very serious consequences on the merchandise trade of countries. However, those who measure the actualised impact observe a mixed picture of the impact of the virus. A brief discussion of both approaches is highlighted in the following sections.

In response to the virus, various countries imposed restrictions on the movement of people and goods. The restrictions significantly slowed down regional trade. As of May 2020, close to all African countries had imposed serious measures to control the disease. Some of the measures like the closing of borders, imposition of national curfews and restrictions on the movement of people both within the country and outside were predicted to have serious consequences on trade, businesses, labour and transport systems. As most of the intra-regional trade in Africa is dominated by manufacturing exports, lockdown measures were predicted to significantly affect the manufacturing sector of African economies (Wanjala 2020).

Cao et al. (2020) showed that China's agricultural exports would experience a significant negative impact in the short run mostly because of the disruption of the supply chain. In the long run, the disruption of world trade was expected

to be the greatest adverse factor to China's agricultural exports. Projections from the simulated data indicate that against a base scenario, a 0.5%–3% decrease in the world's economic growth would result in a 0.38%–4.52% decrease in China's agricultural exports. On agricultural imports, the analysis indicated that there is a relative possibility of an increase. This was mainly because of the availability in the world food market.

A study by Hayakawa (2020) for both exporting and importing countries showed that COVID-19 had a significant effect on trade for exporters but not importers. Further, the negative effects were more pronounced in exports from developing countries but not from developed countries. On products, importers' COVID-19 burden has positive effects on trade in the agricultural industry and negative effects on trade in the paper and machinery industries. On the contrary, exporters' COVID-19 burden has negative effects, particularly in the textile, footwear and plastic industries. In Nigeria, night curfews and inter-state travel restrictions were introduced. This brought about the loss of jobs and hence a decrease in incomes resulting in a decrease in demand for goods and services. Among the most hit sectors were the manufacturing sector and the service sector such as the education and distribution sectors (Farayibi & Asongu 2020).

Mold and Mveyange (2020) found that landlocked EAC countries are more vulnerable to the overall trade impact. Figures for re-exports and intra-regional export indicate worrying disruption to intra-regional commerce. However, the shock from the pandemic is less alarming when seasonality is taken into account. According to Lin and Zhang (2020), smaller firms were more vulnerable to the effects of the pandemic as compared to larger firms. Although on average agricultural businesses experienced a decline in their agricultural exports, other agricultural exports increased like grains and oil implying the essential demand for staple food.

Socrates and Lashitew (2020) observed that the introduction of lockdown policies by Kenya's trading partners led to an increase in export trade by an average rate of 12% and a subsequent decrease in imports by an average rate of 28%. The decrease in imports was mainly because of the disruption of the imports by sea from the countries that introduced lockdown policies. In addition, the study reveals that the import and export of food commodities increased in response to the lockdown measures at an average of 18% and 25%, respectively. Finally, the study reveals that the lockdown measures did not affect the exports from the Organization for Economic Co-operation and Development (OECD) countries but led to an increase in imports from them.

In a review of African countries, in terms of the impact and response to COVID-19 on merchandise trade, Obayelu et al. (2021) showed that the main channels by which African countries were affected were through lockdowns, oil price shocks and global shortages. In terms of lockdowns, the pandemic caused disruptions in terms of the flow of labour to unload ships at ports,

especially in countries where their systems are not automated. On oil shocks, countries that mainly depend on oil exports like Nigeria, Algeria, Ghana, Gabon, Chad, Cameroon, Congo and Equatorial Guinea were adversely affected by a fall in oil prices and disruptions of exports because of lockdowns of importing countries. In terms of global shortages, countries in Africa shifted their production patterns and decided to produce basic protective equipment.

Wemesa et al. (2021) showed that the balance of trade in Uganda was disrupted by COVID-19. However, the containment measures adopted by the government to curb the spread moderately affected Uganda's balance of trade in goods and services. The disruptions of COVID-19 mainly affected the top exporters in the country. In the case of Rwanda, merchandise trade was more affected by COVID-19 compared to agricultural trade (Bizoza & Sibomana 2020). This was because the country mainly imports manufactured goods, which were more exposed to global shocks as compared to agricultural goods in the country.

In Ghana, Asante-Poku and Van Huellen (2021) found that COVID-19 resulted in adverse effects in Ghana because of being over-dependent on exports of goods. The effect manifested itself through two channels: the first was a reduction of productive capacity because of a lack of investments and key inputs, resulting in a reduction of future revenue streams, and the second, an increase in c debt burdens, resulting in an increasing outflow of revenue dedicated to debt servicing. For Nigeria, COVID-19 led to shortages of crucial supplies of pharmaceutical supplies, spare parts and finished goods from China (Ozili 2021). In terms of lockdown measures, prices of consumer goods generally increased in the country as trade borders were closed and inter-state travels were banned. This disrupted the distribution of consumer goods across the country. However, the government took domestic measures that led to the enhancement of online delivery services that provided virtual assistants to ensure goods purchased from online groceries were delivered to consumers.

Analysing how COVID-19 deaths and lockdown policies affected countries' imports from China in 2020, Liu et al. (2021) showed that a particular country's own COVID-19 deaths and lockdowns significantly reduced its imports from China. This was an indication that the negative demand effects prevailed over the negative supply effects of the pandemic. In Spain, Minondo (2021) found that COVID-19 led to a devastating impact on the trade of both goods and services in the country. The largest impact on merchandise trade was observed in transport equipment, capital goods and products that are consumed outdoors. The impact on these merchandise goods was mainly on the intensive margin and affected top exporters. The country felt the large negative impact of COVID-19 because the domestic capacity could not respond to the increase in demand for medical materials and equipment.

Using a gravity model for 68 countries exporting across 222 destinations, Barbero, De Lucio and Rodríguez-Crespo (2021) found that the greater negative impact of COVID-19 on bilateral trade occurred for those countries that were members of regional trade agreements before the pandemic. This was because these countries mainly excel in intra-regional trade. Hence, closing down their border to contain the spread of the pandemic placed a great negative effect on their trade levels. Using a similar approach of the gravity model with 28 countries, Espitia et al. (2022) show that COVID-19 affected sectoral trade growth negatively by decreasing countries' participation in GVCs. Extending the number of countries to 35 and only focusing on medical products, Hayakawa and Imai (2022) find that an increase in COVID-19 stringency led to lower exports of medical products for most countries in the world.

Methodology

An empirical quasi-experiment is used to check the impact of COVID-19 on the merchandise trade in Kenya. A difference in difference (DID) technique is adopted. The approach followed is to assess the levels of trade before and during the COVID-19 period. The following Equation (1) is estimated:

$$\ln Z_{it} = \beta_0 + \beta_1 t + \beta_2 Covid + \beta_3 (DID) + \sum_{k=1}^{n} \beta_k \left(X_{it} \right) + \varepsilon_{it} \qquad \text{[EQN 1]}$$

Where Z_{it} Z_{it} is a set of trade parameters; *Covid* is a dummy with 1 for periods during COVID-19 and 0 otherwise. The variable *DID* measures the impact of COVID-19 on the trade parameters, and it is computed as:

$$DID = Covid * Time \qquad \text{[EQN 2]}$$

Time is all the months included in the analysis, particularly the time before and during the invasion of COVID-19. The coefficient $\beta_3 \beta_3$ is interpreted as the impact of COVID-19 on the trade parameters. The term $X_{it} X_{it}$ is the set of the other control variables that would affect the trade parameters. To increase the levels of attrition, COVID-19 is analysed in two forms: the first is a measure of the *spread* and the second is a measure of government response to curb the spread of the disease. In terms of measure, a dummy of the following form is specified:

$$s\_Covid-19 = \begin{cases} 1 \; outbreak \\ 0 \; otherwise \end{cases} \qquad \text{[EQN 3]}$$

Indicator 1 In Equation (3) is the period since World Health Organization (WHO) declared an outbreak of COVID-19 in January 2020 in China. Since this

period, economies in the world began to adjust to this disease. Cases of the spread of the disease began to be announced in various parts of the World. Thus, this dummy captures the impact of the response of world economies to the disease and how this affected Kenya's exports and imports. The second measure is specified as follows:

$$g\_Covid-19 = \begin{cases} 1\, response \\ 0\, otherwise \end{cases} \qquad \text{[EQN 4]}$$

In this specification, indicator 1 in Equation (4) is the period since the Kenyan government began to adopt measures to curb the spread of COVID-19. The government began imposing strict measures at the end of March 2020. Thus, 1 captures this period up to December 2020. This dummy aims to capture the effect of exports and imports on the restrictive measures imposed by the government.

Data and variables

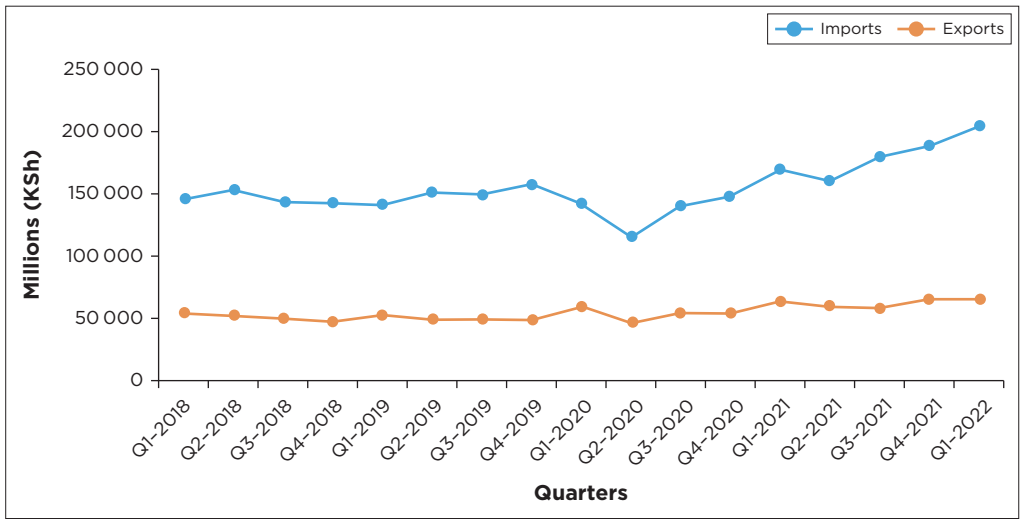
The analysis was conducted using quarterly data between January 2018 and March 2022. The data on imports and exports together with data on exchange rates were obtained from the Central Bank of Kenya (CBK) website.[9] Data on particular categories of imports and exports, together with gross domestic profit (GDP) and Consumer Price Index (CPI) data, were obtained from the Kenyan National Bureau of Statistics (KNBS) website.[10] As seen in Figure 4.3, both imports and exports sharply surged between Q4 of 2019 when COVID-19 began, and Q2 of 2020 when governments globally began imposing and adopting measures to combat the spread of the pandemic. The trends of imports sharply increased since the Q4 of 2020, while exports were mainly constant.

In terms of specific products categorised and analysed, the main exports from Kenya are mainly food and beverages as shown in Figure 4.4. The other exports that form large components of Kenya's exports are industrial supplies and consumer goods.

Industrial supplies and consumer goods exports are observed to have sharply surged in Q2 of 2020 when the Kenyan government announced the first cases of COVID-19 and instituted measures to combat the spread of the disease. In terms of imports, the larger components of Kenya's imports

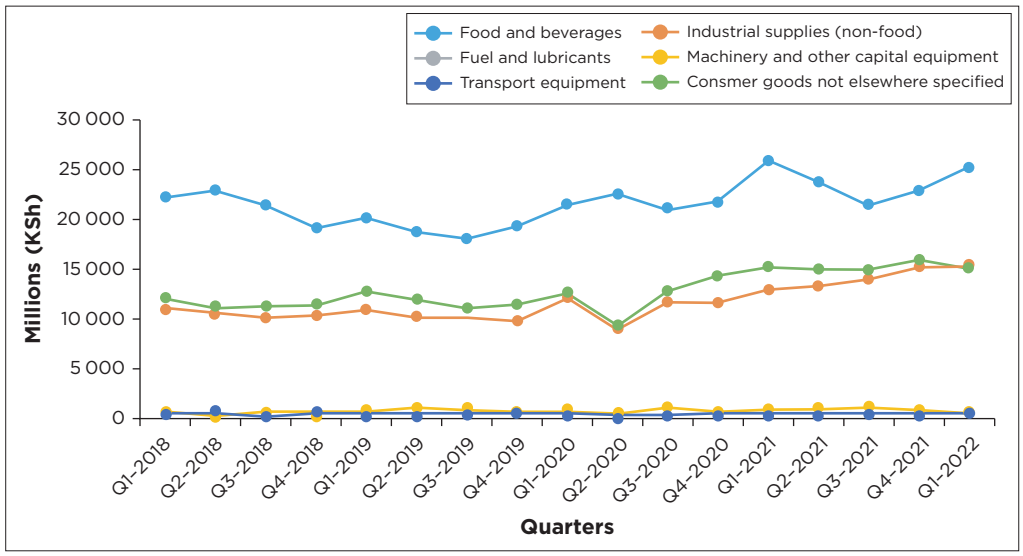
9. Data can be accessed at https://www.centralbank.go.ke/statistics/#

10. Data can be accessed at https://www.knbs.or.ke/data-releases/



Source: WTO (2022).

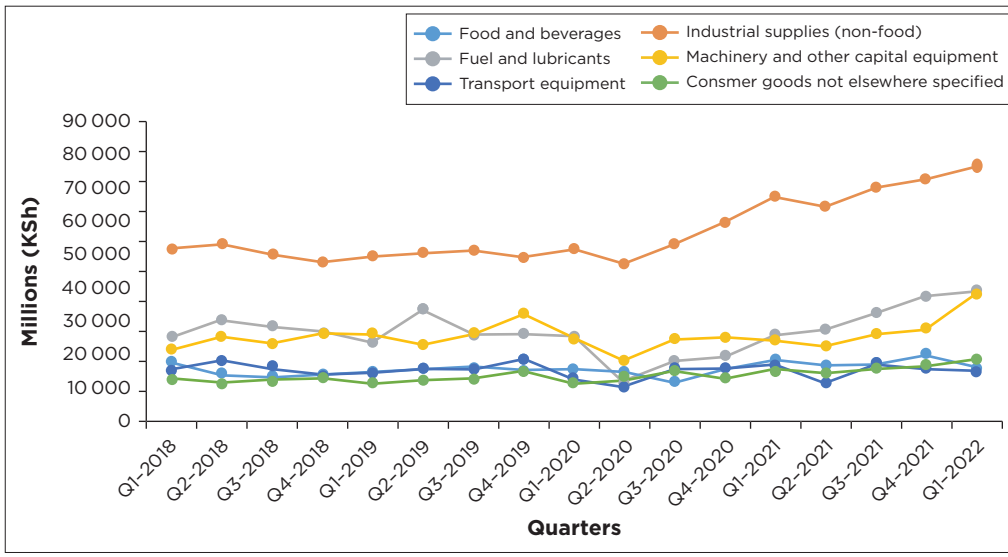
FIGURE 4.3: Imports and export volumes.



Source: WTO (2022).

FIGURE 4.4: Exports of product categories.

are industrial supplies followed by fuel, lubricants, machinery equipment and other capital equipment as shown in Figure 4.5. Imports of all the product categories are seen to have surged between the Q1 of 2020 and Q2 of 2020. However, they have progressively grown since Q4 of 2020.



Source: WTO (2022).

FIGURE 4.5: Imports of product categories.

Empirical findings

The spread of COVID-19 had a negative and statistical significance on exports in Kenya as shown in Table 4.5. Exports were reduced by close to 30%. The impact on imports was, however, not significant. The coefficient of the interaction term for exports is positive and statistically significant. This coefficient can be viewed as the exporters' response to the spread of COVID-19 over time. Specifically, exporters are observed to adjust their reactions over time, thus exerting upward pressure on exports.

A disaggregate analysis of the impact of COVID-19 on merchandise exports shows that the greatest significant negative impact was on industrial supplies as seen in Table 4.6. Exports of these commodities dropped by over 60% after the invasion of COVID-19. The interaction dummy DID was positive and statistically significant. This shows that, though exports of industrial supplies were negatively affected by COVID-19, exporters began to adjust their reactions over time, which led to upward pressure on exports of these products.

The coefficients for food and beverages together with consumer goods show that the impact of the spread of COVID-19 on exports of these products was negative, although non-significant. The interaction terms were positive for these models, which implies that exporters adjusted their reactions over time, hence leading to upward pressure on exports of these commodities. The coefficients of fuel and lubricants, together with machinery, capital and

TABLE 4.5: Impact of the spread of COVID-19 pandemic on trade in Kenya.

	Imports	Exports
Exchange rates	−0.140	−1.399
	(1.940)	(1.402)
CPI	−1.747	−1.641
	(3.734)	(2.699)
GDP	1.447	1.095
	(0.907)	(0.656)
Time	−0.008	−0.015
	(0.042)	(0.030)
COVID-19 spread	−0.358	−0.313*
	(0.207)	(0.150)
DID	0.038	0.052**
	(0.026)	(0.019)
Constant	−0.650	8.806
	(19.574)	(14.148)
Observations	17	17
R^2	0.732	0.808

Key: DID, difference in difference; CPI, Consumer Price Index; GDP, gross domestic product; COVID-19, coronavirus disease 2019.
Standard errors in parentheses: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

TABLE 4.6: Impact of the spread of COVID-19 pandemic on merchandise exports.

	Food and beverages	Industrial supplies	Fuel and lubricants	Machinery and capital	Transport equipment	Consumer goods
Exchange rate	1.003	−2.671*	3.570	−4.689	−1.499	−1.532
	(1.257)	(1.365)	(7.885)	(4.348)	(5.695)	(2.114)
Inflation rate	2.605	−3.448	6.571	4.863	−5.859	−5.676
	(2.419)	(2.628)	(15.176)	(8.370)	(10.962)	(4.070)
GDP	0.563	0.816	−2.013	−2.069	4.249	1.225
	(0.588)	(0.638)	(3.686)	(2.033)	(2.662)	(0.988)
Time	−0.084**	0.019	0.000	0.083	−0.022	0.048
	(0.027)	(0.030)	(0.171)	(0.094)	(0.124)	(0.046)
COVID-19 spread	−0.169	−0.614***	0.172	−0.165	−0.243	−0.402
	(0.134)	(0.146)	(0.842)	(0.464)	(0.608)	(0.226)
DID	0.043**	0.082***	−0.050	−0.021	0.035	0.054*
	(0.017)	(0.018)	(0.107)	(0.059)	(0.077)	(0.029)
Constant	−14.647	25.411*	−11.152	35.873	−22.253	24.374
	(12.682)	(13.775)	(79.550)	(43.872)	(57.458)	(21.331)
Observations	17	17	17	17	17	17
R^2	0.804	0.905	0.203	0.576	0.341	0.751

Key: DID, difference in difference; GDP, gross domestic product; COVID-19, coronavirus disease 2019.
Standard errors in parentheses: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

transport equipment were not statistically significant. All these products contribute less than 10% of merchandise exports in Kenya. In terms of imports, Table 4.7 shows that there were significant variations in the impact of COVID-19 on groups of products.

The largest negative impact of the spread of COVID-19 was observed on imports of fuel and lubricants. The imports of fuel dropped by more than a 100%.

TABLE 4.7: Impact of the spread of COVID-19 pandemic on merchandise imports.

	Food and beverages	Industrial supplies	Fuel and lubricants	Machinery and capital	Transport equipment	Consumer goods
Exchange rate	1.315	0.303	−6.856	1.486	2.533	1.801
	(2.503)	(0.961)	(4.468)	(3.531)	(3.871)	(2.124)
Inflation rate	−0.009	1.366	−4.785	−10.827	3.847	−3.665
	(4.819)	(1.851)	(8.600)	(6.795)	(7.450)	(4.087)
GDP	2.039	0.643	3.250	2.838	−0.149	0.226
	(1.170)	(0.449)	(2.089)	(1.650)	(1.809)	(0.993)
Time	−0.042	−0.036	0.006	0.087	−0.064	0.040
	(0.054)	(0.021)	(0.097)	(0.077)	(0.084)	(0.046)
COVID-19 spread	0.024	−0.439***	−1.225**	0.095	−0.052	−0.100
	(0.267)	(0.103)	(0.477)	(0.377)	(0.413)	(0.227)
DID	−0.002	0.051***	0.119*	−0.009	−0.000	0.017
	(0.034)	(0.013)	(0.061)	(0.048)	(0.052)	(0.029)
Constant	−26.230	−6.166	16.134	11.017	−17.324	14.487
	(25.258)	(9.700)	(45.081)	(35.620)	(39.050)	(21.425)
Observations	17	17	17	17	17	17
R^2	0.488	0.954	0.687	0.383	0.120	0.729

Key: DID, difference in difference; GDP, gross domestic product; COVID-19, coronavirus disease 2019.
Standard errors in parentheses: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

According to KNBS (2021), products in this category form 16% of the share of merchandise imports. The largest share of imports is industrial supplies (41%) whose imports were significantly reduced by more than 40%.

Government response to COVID-19 is observed to have had a statistically significant negative impact on imports. Table 4.8 shows that imports reduced by close to 100% during the period when the government imposed measures to combat the spread of COVID-19. The interaction term for imports is positive and statistically significant, an implication that over time, importers adjusted their reactions towards government restrictions. These adjustments are seen to trigger a rise in imports over time.

On specific products, government measures as shown in Table 4.9 are seen to have negatively affected all types of import products except for food and beverages together with machinery equipment. The largest negative impact of government measures to COVID-19 on imports is observed on fuel and lubricants whose imports were reduced by more than 200%, while imports of industrial supplies, which form the largest share of imports, were reduced by close to 70%. Consumer goods recorded an average decline of 6%. Notably, the interaction term for consumer goods is negative and statistically significant. Imports of transport equipment reduced by more than 100%. These reductions in imports are attributed to the closure of borders by the government and other lockdown measures implemented between March 2020 and March 2021.

TABLE 4.8: Government response to COVID-19 pandemic and impact on trade in Kenya.

	Imports	Exports
Exchange rates	3.225***	1.307
	(0.665)	(1.342)
CPI	2.232	0.225
	(1.902)	(3.838)
GDP	−0.167	0.989
	(0.523)	(1.055)
Time	−0.029	−0.018
	(0.020)	(0.040)
COVID-19 measure	−1.007***	−0.290
	(0.147)	(0.297)
DID	0.067***	0.022
	(0.011)	(0.022)
Constant	−10.707	−10.702
	(7.292)	(14.711)
Observations	17	17
R^2	0.943	0.684

Key: CPI, Consumer Price Index; DID, difference in difference; GDP, gross domestic product; COVID-19, coronavirus disease 2019.
Standard errors in parentheses: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

TABLE 4.9: Government response to COVID-19 pandemic and impact on merchandise imports.

	Food and beverages	Industrial supplies	Fuel and lubricants	Machinery and capital	Transport equipment	Consumer goods
Exchange rate	1.530	3.819***	3.421*	2.055	4.111	3.371**
	(1.800)	(0.682)	(1.880)	(1.977)	(2.279)	(1.234)
Inflation rate	0.410	2.009	4.437	−2.224	8.682	0.816
	(5.146)	(1.949)	(5.374)	(5.654)	(6.516)	(3.527)
GDP	1.555	0.559	−0.210	−0.686	−2.772	−1.520
	(1.415)	(0.536)	(1.478)	(1.555)	(1.792)	(0.970)
Time	−0.039	−0.041*	−0.056	0.053	−0.083	0.024
	(0.054)	(0.020)	(0.056)	(0.059)	(0.068)	(0.037)
COVID-19 measure	−0.343	−0.691***	−2.577***	−0.759	−1.199**	−0.632**
	(0.399)	(0.151)	(0.417)	(0.438)	(0.505)	(0.273)
DID	0.026	0.052***	0.170***	0.038	0.080*	0.039*
	(0.030)	(0.011)	(0.031)	(0.033)	(0.038)	(0.020)
Constant	−22.036	−24.111***	−22.698	20.737	−8.221	12.345
	(19.727)	(7.470)	(20.603)	(21.673)	(24.980)	(13.521)
Observations	17	17	17	17	17	17
R^2	0.525	0.959	0.901	0.653	0.452	0.836

Key: DID, difference in difference; GDP, gross domestic product; COVID-19, coronavirus disease 2019.
Standard errors in parentheses: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

For merchandise exports, Table 4.10 shows that government measures to combat the spread of COVID-19 had a negative impact on industrial supplies, transport equipment and consumer goods. Specifically, the measures led to a decline in exports of transport equipment by more than 100%, followed by industrial supplies at more than 70% and finally consumer goods at close to 70%.

TABLE 4.10: Government response to COVID-19 pandemic and impact on merchandise exports.

	Food and beverages	Industrial supplies	Fuel and lubricants	Machinery and capital	Transport equipment	Consumer goods
Exchange rate	2.374*	2.340	4.048	−4.015	1.959	1.795
	(1.267)	(1.412)	(5.071)	(3.338)	(3.524)	(1.343)
Inflation rate	2.791	−0.993	17.014	−1.118	−3.022	−7.086*
	(3.621)	(4.036)	(14.498)	(9.544)	(10.077)	(3.840)
GDP	1.308	0.561	−7.639*	−1.184	2.279	1.808
	(0.996)	(1.110)	(3.987)	(2.625)	(2.771)	(1.056)
Time	−0.076*	0.009	−0.053	0.093	−0.020	0.059
	(0.038)	(0.042)	(0.152)	(0.100)	(0.106)	(0.040)
COVID-19 measure	0.222	−0.749**	−1.798	−0.783	−1.691*	−0.688**
	(0.281)	(0.313)	(1.124)	(0.740)	(0.781)	(0.298)
DID	−0.012	0.055**	0.106	0.066	0.128*	0.059**
	(0.021)	(0.023)	(0.084)	(0.055)	(0.058)	(0.022)
Constant	−32.813**	−5.258	21.482	47.227	−22.322	6.890
	(13.882)	(15.474)	(55.577)	(36.587)	(38.629)	(14.719)
Observations	17	17	17	17	17	17
R^2	0.642	0.817	0.408	0.551	0.547	0.820

Key: DID, difference in difference; GDP, gross domestic product; COVID-19, coronavirus disease 2019.
Standard errors in parentheses: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The interaction terms for industrial supplies, transport equipment and consumer goods are all positive and statistically significant. The implication is that, although government measures led to a decline in these exports, over time, exporters began to adjust their reactions. These adjustments are seen to cause upward pressure on the levels of these exports.

Generally, in the positive phase, COVID-19 led to a significant increase in government spending on the health sector. From the Kenya National Budget 2021/22, the government allocated KSh121bn to the health sector, of which KSh3.9bn was for the procurement of COVID-19 vaccines, and KSh9.5bn was for the engagement of COVID-19 specialists and the supply of hospitals with equipment. Finally, the finance bill proposed VAT exemptions for various medical inputs like ventilators, physiotherapy accessories, treadmills for cardiology therapy, diagnostic or laboratory reagents, electro-diagnostic apparatus, instruments, and appliances used in dental sciences, categories of medical instruments and appliances including breathing appliances. All these exemptions are expected to result in increased affordability of medical services in Kenya. Further, the measures are expected to increase investments in the health sector of the country.

Conclusion

Several findings are found from this study on the impact of COVID-19 on merchandise trade in Kenya. First, in terms of magnitudes of the impact,

a large impact is observed on the government response to COVID-19 concerning the general spread of the disease. The strict measures placed by the government, like the closing of its borders, are observed to affect both volumes of imports and exports in the country. The negative impact was large on imports compared to exports. However, the interaction terms show that, over time, both exporters and importers began to adjust their importing and exporting reactions. These adjustments are seen to exert positive and upward pressure on both imports and exports in the country.

Secondly, a large negative impact of COVID-19 is observed on imports and exports of industrial supplies. This shows that the manufacturing sectors that are dependent on these industrial supplies were the most affected by COVID-19. Specifically, the results reflect a situation where COVID-19 led to a shutdown of some manufacturing industries. This led to a decline in the demand and supply of industrial supplies in the country. Thirdly, imports of consumer goods recorded an increase of between 17% and 23%. Fourthly, specifically on imports, a large negative impact is observed on fuel and lubricants. Imports of these products were mainly affected because of the global response to COVID-19.

These findings advise policy in two forms: Firstly, on industrial supplies, the government might consider providing alternative incentives to promote imports and exports of these products. Continuous deep of these products could adversely affect the economy in the long run. Some industries that depend on the supply of these products would end up shutting down and causing massive unemployment in the country. One of the practical incentives to promote imports would be a reduction of import tariffs on these products. As some of them could already be attracting zero tariffs and reduction of alternative taxes like excise, the government may consider duties.

Secondly, the current government measures to combat the spread of COVID-19 need to be reviewed to try to create a balance between promotions of trade and combating the spread of the virus. Rather than shutting borders and preventing the movement of goods, the government may consider emphasising on proper packaging and handling of exports and imports. By ensuring that imports and exports are well packaged and safe for consumption, the government would create consumer confidence. This would in turn lead to an increase in demand for commodities. Thirdly, the surge in imports because of COVID-19 shows that there is a risk of an economy being over-dependent on imports. There is thus a need for the government to create a conducive environment that promotes the domestic production of commodities.

Appendix 4.1: Kenyan imports by 2020 ranking

HS code	Product label	Value in 2017	% change	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
'26	Ores, slag and ash	2,741,353	29.8	3,390,680	23.7	3,323,546	−2.0	2,180,570	−34.4
'83	Miscellaneous articles of base metal	1,827,966	15.2	1,665,389	−8.9	1,641,144	−1.5	1,433,106	−12.7
'84	Machinery, mechanical appliances, nuclear reactors, boilers	1,121,414	−21.7	1,205,747	7.5	1,267,776	5.1	1,198,722	−5.4
'86	Railway or tramway locomotives	1,114,067	−2.2	1,232,271	10.6	1,209,441	−1.9	1,119,908	−7.4
'71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals	734,482	21.5	860,321	17.1	916,691	6.6	931,636	1.6
'14	Vegetable planting materials	656,914	26.2	567,596	−13.6	561,223	−1.1	864,367	54.0
'09	Coffee, tea, mate and spices	1,111,324	124.7	843,038	−24.1	857,990	1.8	796,848	−7.1
'38	Miscellaneous chemical products	673,901	1.7	769,302	14.2	734,449	−4.5	726,644	−1.1
'29	Organic chemicals	518,383	−9.8	558,493	7.7	557,246	−0.2	690,138	23.8
'37	Photographic or cinematographic goods	317,204	9.5	353,269	11.4	285,740	−19.1	382,569	33.9
'47	Pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap)	328,210	7.4	424,656	29.4	388,836	−8.4	321,507	−17.3
'72	Iron and steel	317,954	−31.6	398,667	25.4	308,700	−22.6	295,166	−4.4
'30	Pharmaceutical products	283,433	24.2	233,063	−17.8	258,172	10.8	259,167	0.4
'16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	594,827	175.3	221,304	−62.8	325,070	46.9	252,057	−22.5
'89	Ships, boats and floating structures	261,999	4.9	291,452	11.2	219,213	−24.8	216,812	−1.1
'39	Plastics and articles thereof	186,680	−4.3	216,081	15.7	222,082	2.8	200,555	−9.7
'62	Articles of apparel and clothing accessories, not knitted or crocheted	215,540	14.6	234,927	9.0	235,837	0.4	196,726	−16.6

Appendix 4.1 Table continues on next page→

Appendix 4.1 (cont.)

HS code	Product label	Value in 2017	% change	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
'93	Arms and ammunition; parts and accessories thereof	183,877	5.5	205,257	11.6	177,431	−13.6	174,623	−1.6
'54	Man-made filaments; strip and the like of man-made textile materials	123,703	−6.1	156,817	26.8	157,647	0.5	170,267	8.0
'28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals	153,945	9.1	203,127	31.9	154,812	−23.8	168,535	8.9
'85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television	500,520	256.1	258,227	−48.4	111,158	−57.0	149,728	34.7
'43	Fur skins and artificial fur; manufactures thereof	52 758	−4.6	86 337	63.6	113,028	30.9	139,728	23.6
'32	Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other	139,679	10.9	158,076	13.2	145,472	−8.0	129,236	−11.2
'24	Tobacco and manufactured tobacco substitutes	81 556	−21.8	118,468	45.3	102,878	−13.2	120,008	16.7
'20	Preparations of vegetables, fruit, nuts or other parts of plants	57 226	−21.6	70 761	23.7	76 865	8.6	118,954	54.8
'75	Nickel and articles thereof	137,723	−12.8	150,964	9.6	125,970	−16.6	110,439	−12.3
'31	Fertilisers	97 182	5.7	112,296	15.6	105,391	−6.1	106,141	0.7
'95	Toys, games and sports requisites; parts and accessories thereof	90 954	−2.3	92 551	1.8	100,196	8.3	102,615	2.4
'61	Articles of apparel and clothing accessories, knitted or crocheted	82 931	137.6	94 083	13.4	92 748	−1.4	100,740	8.6
'27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral	90 852	4.0	105,208	15.8	106,931	1.6	98 864	−7.5

Appendix 4.1 Table continues on next page→

Appendix 4.1 (cont.)

HS code	Product label	Value in 2017	% change	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
’21	Miscellaneous edible preparations	84 603	21.1	97 368	15.1	106,595	9.5	98 690	−7.4
’87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	109,422	43.2	161,503	47.6	216,938	34.3	87 658	−59.6
’03	Fish and crustaceans, molluscs and other aquatic invertebrates	108,188	270.6	108,842	0.6	144,897	33.1	84 484	−41.7
’68	Articles of stone, plaster, cement, asbestos, mica or similar materials	82 298	−13.0	85 857	4.3	87 948	2.4	82 713	−6.0
’59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable	78 458	17.7	85 347	8.8	101,881	19.4	79 809	−21.7
’53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	48 093	10.3	79 552	65.4	90 589	13.9	77 061	−14.9
’33	Essential oils and; perfumery, cosmetic or toilet preparations	78 324	10.9	73 680	−5.9	71 835	−2.5	74 326	3.5
’69	Ceramic products	67 842	−4.6	71 033	4.7	77 762	9.5	67 130	−13.7
’51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	61 124	−8.2	80 934	32.4	88 164	8.9	63 743	−27.7
’22	Beverages, spirits and vinegar	120,296	197.9	102,479	−14.8	85 856	−16.2	62 763	−26.9
’18	Cocoa and cocoa preparations	117,331	62.9	83 577	−28.8	81 602	−2.4	61 023	−25.2
’73	Articles of iron or steel	39 729	−4.7	46 292	16.5	47 717	3.1	54 202	13.6
’11	Products of the milling industry; malt; starches; inulin; wheat gluten	31 147	31.4	30 656	−1.6	39 230	28.0	53 727	37.0
’82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal	53 451	24.1	60 478	13.1	50 934	−15.8	49 188	−3.4

Appendix 4.1 Table continues on next page→

Appendix 4.1 (cont.)

HS code	Product label	Value in 2017	% change	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
'06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	120,711	115.9	115,773	−4.1	48 926	−57.7	48 140	−1.6
'63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags	43 675	−9.5	51 506	17.9	60 585	17.6	45 064	−25.6
'81	Other base metals; cermet; articles thereof	31 115	−6.0	34 369	10.5	36 426	6.0	37 195	2.1
'48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	77 161	62.4	64 838	−16.0	63 780	−1.6	36 912	−42.1
'07	Edible vegetables and certain roots and tubers	29 383	23.6	32 884	11.9	28 563	−13.1	32 044	12.2
'67	Prepared feathers and down and articles made of feathers or of down; artificial flowers; articles	30 788	7.0	31 085	1.0	30 421	−2.1	31 872	4.8
'78	Lead and articles thereof	39 655	60.0	46 675	17.7	24 115	−48.3	31 248	29.6
'60	Knitted or crocheted fabrics	28 933	35.4	47 878	65.5	39 907	−16.6	31 069	−22.1
'19	Preparations of cereals, flour, starch or milk; pastry cooks' products	19 708	33.9	25 238	28.1	26 786	6.1	29 829	11.4
'08	Edible fruit and nuts; peel of citrus fruit or melons	21 317	20.8	28 052	31.6	19 802	−29.4	28 663	44.7
'92	Musical instruments; parts and accessories of such articles	58 829	196.2	97 463	65.7	71 509	−26.6	22 992	−67.8
'94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings	12 838	−13.9	16 767	30.6	21 558	28.6	20 485	−5.0
'34	Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial	18 334	0.6	21 448	17.0	20 572	−4.1	20 406	−0.8

Appendix 4.1 Table continues on next page→

Appendix 4.1 (cont.)

HS code	Product label	Value in 2017	% change	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
'02	Meat and edible meat offal	23 958	15.0	28 660	19.6	26 014	−9.2	19 820	−23.8
'41	Raw hides and skins (other than fur skins) and leather	19 683	7.4	25 745	30.8	26 828	4.2	17 348	−35.3
'23	Residues and waste from the food industries; prepared animal fodder	38 212	−28.4	51 996	36.1	49 468	−4.9	16 598	−66.4
'88	Aircraft, spacecraft, and parts thereof	41 659	148.6	19 489	−53.2	246 426	1 164.4	16 408	−93.3
'55	Man-made staple fibres	14 881	26.3	18 607	25.0	16 324	−12.3	16 110	−1.3
'17	Sugars and sugar confectionery	15 627	4.4	20 477	31.0	22 585	10.3	15 965	−29.3
'10	Cereals	18 025	−7.0	22 217	23.3	15 133	−31.9	14 772	−2.4
'57	Carpets and other textile floor coverings	10 585	20.6	11 866	12.1	13 345	12.5	12 615	−5.5
'58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery	9 470	−9.7	12 557	32.6	13 299	5.9	11 267	−15.3
'56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	7 872	15.7	9 989	26.9	9 950	−0.4	10 188	2.4
'46	Manufactures of straw, of esparto or of other plaiting materials; basket ware and wickerwork	863	−24.0	2 036	135.9	7 796	282.9	10 018	28.5
'64	Footwear, gaiters and the like; parts of such articles	10 103	111.4	7 941	−21.4	10 127	27.5	7 128	−29.6
'01	Live animals	3 143	−2.0	5 265	67.5	3 954	−24.9	7 014	77.4
'35	Albuminoidal substances; modified starches; glues; enzymes	8 871	−27.3	17 806	100.7	7 202	−59.6	6 787	−5.8
'05	Products of animal origin, not elsewhere specified or included	6 153	0.7	6 198	0.7	4 339	−30.0	6 159	41.9

Appendix 4.1 Table continues on next page→

Appendix 4.1 (cont.)

HS code	Product label	Value in 2017	% change	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
’36	Explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations	5 923	−22.2	7 153	20.8	7 018	−1.9	5 596	−20.3
’25	Salt; sulphur; earths and stone; plastering materials, lime and cement	11 851	−15.5	12 245	3.3	1 6450	34.3	4 898	−70.2
’66	Umbrellas, sun umbrellas, walking sticks, seat-sticks, whips, riding-crops and parts thereof	1 911	139.5	6 454	237.7	5 921	−8.3	4 707	−20.5
’12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal	3 432	9.1	3 204	−6.6	3 686	15.0	2 710	−26.5
’65	Headgear and parts thereof	2 238	−19.9	3 317	48.2	3 015	−9.1	2 421	−19.7
’40	Rubber and articles thereof	5 772	−5.5	4 813	−16.6	2 511	−47.8	2 290	−8.8
’76	Aluminium and articles thereof	1 554	8.0	1 206	−22.4	795	−34.1	2 040	156.6
’15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal	2 084	97.2	1 801	−13.6	2 065	14.7	2 032	−1.6
’90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical	2 203	−22.9	2 947	33.8	2 988	1.4	1 707	−42.9
’91	Clocks and watches and parts thereof	1 134	−16.6	2 220	95.8	3 068	38.2	1 682	−45.2
’04	Dairy produce; birds’ eggs; natural honey; edible products of animal origin, not elsewhere	1 101	−22.7	1 404	27.5	1 037	−26.1	1 304	25.7
’13	Lac; gums, resins and other vegetable saps and extracts	1 108	27.9	1 772	59.9	1 157	−34.7	1 135	−1.9
’45	Cork and articles of cork	151	10.2	561	271.5	668	19.1	1 103	65.1

Appendix 4.1 Table continues on next page→

Appendix 4.1 (cont.)

HS code	Product label	Value in 2017	% change	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
’70	Glass and glassware	2 879	122.3	2 762	−4.1	11 709	323.9	1 097	−90.6
’96	Miscellaneous manufactured articles	412	−35.6	562	36.4	491	−12.6	590	20.2
’79	Zinc and articles thereof	473	8.2	528	11.6	488	−7.6	584	19.7
’52	Cotton	634	−50.1	835	31.7	1 041	24.7	559	−46.3
’74	Copper and articles thereof	212	−12.4	253	19.3	223	−11.9	346	55.2
’80	Tin and articles thereof	202	−22.0	295	46.0	256	−13.2	117	−54.3
’50	Silk	128	23.1	187	46.1	132	−29.4	90	−31.8
’44	Wood and articles of wood; wood charcoal	12	−81.8	33	175.0	39	18.2	28	−28.2
’49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts	43	−53.3	98	127.9	89	−9.2	28	−68.5

Appendix 4.2: Kenyan exports by 2020 ranking

HS code	Product label	Value in 2017	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
’09	Coffee, tea, mate and spices	1,667,485	1,617,230	−3	1,338,500	−17	1,469,454	10
’06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	595,590	625,711	5	643,973	3	635,239	−1
’27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral	353,681	386,699	9	451,733	17	406,491	−10
’07	Edible vegetables and certain roots and tubers	209,156	250,085	20	224,647	−10	295,384	31

Appendix 4.2 Table continues on next page→

Appendix 4.2 (cont.)

HS code	Product label	Value in 2017	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
’08	Edible fruit and nuts; peel of citrus fruit or melons	180,779	232,517	29	204,428	–12	216,294	6
’26	Ores, slag and ash	177,288	212,526	20	195,292	–8	206,407	6
’62	Articles of apparel and clothing accessories, not knitted or crocheted	190,319	218,262	15	231,122	6	198,602	–14
’15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal	95,767	115,424	21	137,840	19	189,005	37
’24	Tobacco and manufactured tobacco substitutes	134,202	139,658	4	129,343	–7	154,688	20
’20	Preparations of vegetables, fruit, nuts or other parts of plants	110,405	108,094	–2	121,424	12	137,631	13
’30	Pharmaceutical products	124,186	130,143	5	116,528	–10	128,519	10
’72	Iron and steel	107,114	112,736	5	134,919	20	126,343	–6
’39	Plastics and articles thereof	129,534	117,668	–9	110,308	–6	117,965	7
’21	Miscellaneous edible preparations	70,316	92,688	32	95,344	3	114,933	21
’34	Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial	82,671	96,690	17	103,228	7	114,499	11
’61	Articles of apparel and clothing accessories, knitted or crocheted	123,271	120,903	–2	109,673	–9	108,436	–1
’25	Salt; sulphur; earths and stone; plastering materials, lime and cement	89 088	75 602	–15	62 237	–18	84 371	36
’84	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	68 116	98 896	45	131 959	33	81 742	–38
’28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals	90 351	87 862	–3	81 685	–7	72 529	–11
’02	Meat and edible meat offal	49 767	54 189	9	68 799	27	65 402	–5

Appendix 4.2 Table continues on next page→

Appendix 4.2 (cont.)

HS code	Product label	Value in 2017	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
’48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	56 127	66 437	18	69 086	4	60 846	–12
’85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television	59 112	56 762	–4	69 925	23	59 667	–15
’17	Sugars and sugar confectionery	52 284	52 918	1	49 394	–7	55 350	12
’38	Miscellaneous chemical products	33 659	42 871	27	41 983	–2	51 543	23
’19	Preparations of cereals, flour, starch or milk; pastrycooks’ products	53 027	29 860	–44	19 671	–34	50 159	155
’49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts	50 793	63 595	25	25 769	–59	45 213	75
’73	Articles of iron or steel	44 524	45 446	2	46 427	2	44 082	–5
’87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	54 541	83 992	54	84 494	1	43 688	–48
’53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	37 845	40 299	6	38 203	–5	42 960	12
’10	Cereals	34 132	33 259	–3	30 407	–9	42 627	40
’64	Footwear, gaiters and the like; parts of such articles	31 783	34 569	9	38 154	10	39 823	4
’33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	22 464	29 324	31	37 161	27	38 620	4
’22	Beverages, spirits and vinegar	52 023	51 444	–1	42 428	–18	34 410	–19
’74	Copper and articles thereof	34 017	41 210	21	35 011	–15	31 760	–9
’63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags	26 852	27 969	4	28 752	3	31 322	9

Appendix 4.2 Table continues on next page→

Appendix 4.2 (cont.)

HS code	Product label	Value in 2017	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
’12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal	13 455	19 160	42	21 076	10	26 221	24
’31	Fertilisers	23 123	35 252	52	27 881	−21	26 081	−6
’32	Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other colouring	25 895	32 007	24	28 318	−12	25 877	−9
’03	Fish and crustaceans, molluscs and other aquatic invertebrates	20 596	29 376	43	33 147	13	25 562	−23
’94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings	27 743	26 072	−6	32 848	26	22 866	−30
’23	Residues and waste from the food industries; prepared animal fodder	11 784	21 485	82	23 436	9	22 023	−6
’96	Miscellaneous manufactured articles	20 929	14 639	−30	22 141	51	21 228	−4
’76	Aluminium and articles thereof	27 809	17 870	−36	19 480	9	21 097	8
’41	Raw hides and skins (other than furskins) and leather	49 711	44 287	−11	30 399	−31	20 165	−34
’95	Toys, games and sports requisites; parts and accessories thereof	11 149	12 496	12	11 746	−6	18 900	61
’90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical	12 458	20 889	68	18 027	−14	18 422	2
’83	Miscellaneous articles of base metal	20 983	20 652	−2	21 721	5	15 442	−29
’71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad	18 823	17 980	−4	25 010	39	15 084	−40
’70	Glass and glassware	11 996	12 221	2	14 126	16	13 558	−4
’55	Man-made staple fibres	9 039	10 349	14	10 277	−1	11 497	12

Appendix 4.2 Table continues on next page→

Appendix 4.2 (cont.)

HS code	Product label	Value in 2017	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
'67	Prepared feathers and down and articles made of feathers or of down; artificial flowers; articles	8 931	7 176	−20	11 737	64	11 356	−3
'69	Ceramic products	5 950	7 362	24	10 967	49	10 252	−7
'13	Lac; gums, resins and other vegetable saps and extracts	4 065	4 489	10	10 273	129	9 467	−8
'01	Live animals	6 418	6 585	3	10 293	56	8 932	−13
'29	Organic chemicals	7 635	6 790	−11	6 207	−9	8 615	39
'56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	2 097	2 292	9	4 667	104	8 366	79
'36	Explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations	1 332	3 511	164	5 753	64	7 485	30
'35	Albuminoidal substances; modified starches; glues; enzymes	6 808	6 837	0	7 239	6	6 859	−5
'89	Ships, boats and floating structures	3 949	1 695	−57	11 453	576	5 026	−56
'44	Wood and articles of wood; wood charcoal	4 079	4 692	15	5 064	8	5 007	−1
'40	Rubber and articles thereof	7 201	5 965	−17	5 464	−8	4 581	−16
'16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	3 083	3 557	15	3 459	−3	3 973	15
'11	Products of the milling industry; malt; starches; inulin; wheat gluten	2 921	2 463	−16	2 951	20	2 945	0
'68	Articles of stone, plaster, cement, asbestos, mica or similar materials	2 505	8 475	238	5 864	−31	2 469	−58
'88	Aircraft, spacecraft, and parts thereof	1 061	1 527	44	2 948	93	2 183	−26
'79	Zinc and articles thereof	1 980	2 445	23	1 843	−25	2 159	17

Appendix 4.2 Table continues on next page→

Appendix 4.2 (cont.)

HS code	Product label	Value in 2017	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
’46	Manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	1 113	1 363	22	1 339	−2	2 154	61
’05	Products of animal origin, not elsewhere specified or included	3 859	2 549	−34	3 196	25	2 119	−34
’86	Railway or tramway locomotives, rolling stock and parts thereof; railway or tramway track fixtures	415	3 258	685	1 338	−59	1 997	49
’82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal	3 293	3 574	9	2 913	−18	1 973	−32
’04	Dairy produce; birds’ eggs; natural honey; edible products of animal origin, not elsewhere	2 995	2 109	−30	2 227	6	1 853	−17
’52	Cotton	2 003	1 356	−32	1 810	33	1 688	−7
’18	Cocoa and cocoa preparations	2 853	2 492	−13	2 630	6	1 612	−39
’42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles	1 906	1 874	−2	2 208	18	1 491	−32
’51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	3 905	4 440	14	2 753	−38	1 443	−48
’14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	48 317	15 546	−68	13 064	−16	1 300	−90
’78	Lead and articles thereof	6	0	−100	1 696	#DIV/0!	1 277	−25
’97	Works of art, collectors’ pieces and antiques	1 126	1 797	60	800	−55	628	−22
’60	Knitted or crocheted fabrics	502	440	−12	430	−2	583	36
’54	Man-made filaments; strip and the like of man-made textile materials	328	601	83	337	−44	468	39

Appendix 4.2 Table continues on next page→

Appendix 4.2 (cont.)

HS code	Product label	Value in 2017	Value in 2018	% change	Value in 2019	% change	Value in 2020	% change
'93	Arms and ammunition; parts and accessories thereof	198	13	−93	26	100	420	1 515
'65	Headgear and parts thereof	363	267	−26	311	16	387	24
'80	Tin and articles thereof	255	385	51	415	8	385	−7
'47	Pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap) paper or	1 355	1 050	−23	562	−46	374	−33
'91	Clocks and watches and parts thereof	392	427	9	674	58	290	−57
'58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery	304	326	7	365	12	280	−23
'37	Photographic or cinematographic goods	245	176	−28	149	−15	278	87
'59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable	357	365	2	452	24	277	−39
'57	Carpets and other textile floor coverings	1 836	214	−88	266	24	211	−21
'66	Umbrellas, sun umbrellas, walking sticks, seat-sticks, whips, riding-crops and parts thereof	750	226	−70	135	−40	162	20
'81	Other base metals; cermets; articles thereof	50	73	46	148	103	49	−67
'92	Musical instruments; parts and accessories of such articles	81	76	−6	90	18	42	−53

Chapter 5

Impact of COVID-19 on the services sector and direct foreign investments in Kenya

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Introduction[11]

The type of services in Kenya, for the most part, require person-to-person contact, and it is this feature that led to a severe decline in the period of the coronavirus disease 2019 (COVID-19) pandemic. A World Bank Kenya Economic Update (KEU) indicates that the services sector was one of the most affected sectors by the advent of the pandemic (World Bank 2020). Kenya's economy had been changing even before the pandemic. The services sector has been becoming more central to the economy, though there is still considerable scope to accelerate the transformation. The services sector contributed over half of the value added in 2019, making it the largest contributor and its growth (see Table 5.1)

The service sector in Kenya has a crucial key role both directly and indirectly through job creation and revenue generation and indirectly through fostering forward and backward linkages to other sectors in the economy, thereby

11. Sections in this chapter represents a substantial reworking of Amutabi 2019.

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TABLE 5.1: Employment creation as represented as percentage of total employment.

Sector	%
Agriculture	57.03
Services	35.30
Industry and manufacturing	7.67
Total	**100**

Source: KNBS (2019).

contributing both to job creation and to the gross domestic product (GDP). The service sector is the main source of new employment in Kenya, as shown in Table 5.1.

The agricultural sector is still the largest employer, followed by the service sector, with the manufacturing sector creating only a few jobs at 7.67%.

The private sector provided more jobs in its service sector, and the number of employees in the service industry has been progressively increasing across both the public and private sectors from 1990 to the present. The private sector created more job opportunities than its public counterpart over the period (KNBS 2016). The wholesale, retail trade and education are the largest employers for the private sector, while education and public administration employ the largest number in the public sector.

The service sector is a major driver of Kenya's economy. The sector's contribution has been increasing since the 1980s when it accounted for 47%, and by 1990 it was responsible for about 51%, which increased to 62.5% by 2016. The sector has continued to play a crucial role in the economy, with a number of its knowledge-based subsectors, such as telecommunications, finance, insurance and tourism, showing continued prosperity over recent decades. In the period 2006–2013, 73% of the increase in Kenya's GDP was derived from the sector (World Bank 2015).

The Kenyan service sector has grown fairly quickly over the last decade. Tourism and transport have been the two largest contributors. Services exports have also grown faster than goods exports in the last five years, being responsible for about half of the increase in overall exports (World Bank 2015). Table 5.2 indicates that the main services sectors, including tourism, are responsible for over 50.7% of the country's GDP.

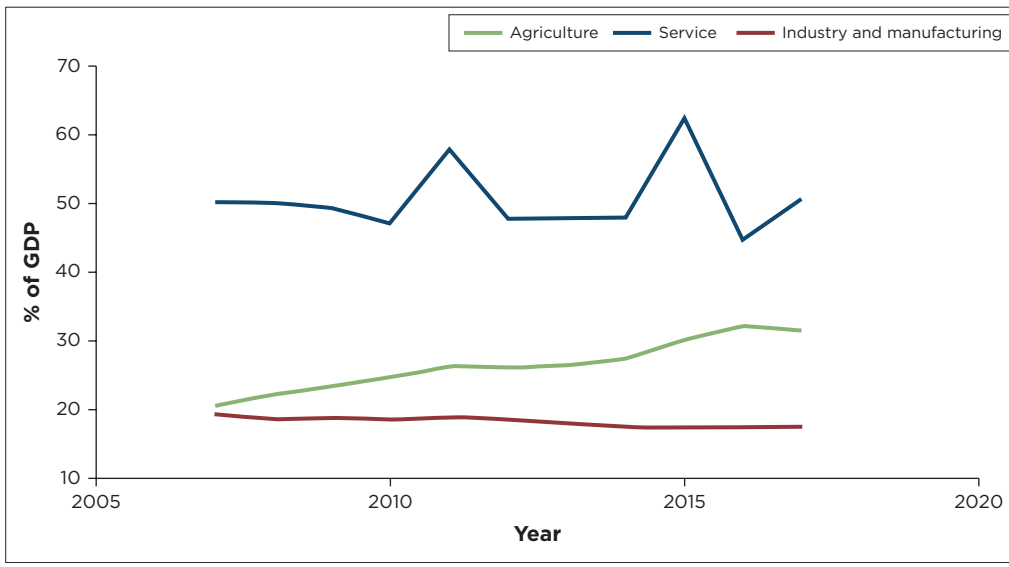
The World Bank and Kenya National Bureau of Statistics (KNBS) data show that the service sector has outperformed the industry, manufacturing and agricultural sectors.

Figure 5.1 shows that the service sector is the largest contributor to GDP compared to the agricultural, manufacturing and industrial sectors.

TABLE 5.2: The service subsector contribution gross domestic product represented as percentage.

Subsector	% contribution to GDP
Real estate	8.9
Wholesale and retail	8.8
Travel and tourism	8.2
Finance	7.4
Education	6.1
Public administration	5.4
Liberal professions	2.5
Health	1.8
Information and communication technology	1.6
Total	**50.7**

Source: KNBS (2017).
Key: GDP, Gross domestic product.



Source: World Bank (2015); KNBS (2007–2010, 2017).
FIGURE 5.1: Service sector, agriculture, industry and manufacturing gross domestic product represented as percentage.

However, it is also true that this share has not reached its maximum potential. It is still possible for the service industry to hit 70% contribution to Kenyan GDP (World Bank CEM Report of 2016). This, according to the report, could be achieved through value-addition to the service industry.

The service sector composition shows real estate as the largest single contributor to GDP at some 8.9% and is followed closely by the wholesale and retail subsectors at 8.8%, while information and communication technology (ICT) and the health subsectors contribute about 1.6% and 1.8% to the GDP.

Effect of the COVID-19 pandemic on the services sector in Kenya

The effect of the pandemic on the sector has been severe, thereby threatening businesses and their employees, especially with respect to their livelihoods. The nature of the service sector is that most activities are interactive. When responding to the COVID-19 pandemic, the transmission mechanism is varied. Public health measures limit the operations of service firms. The demand from their customers becomes lower and the supply chains get disrupted. This is then followed by difficulties in accessing finance as firms are faced with prolonged uncertainty.

The World Bank's KEU for November 2020 argues that the pandemic affected some sectors of the economy more than others. The services sector has been one of the most severely affected. The services sector firms have large differences in their operating status of firms. In the case of the education sector, when schools closed, most enterprises in education shut down. The firms in the accommodation and food services sector were severely impacted and often closed. The KEU November 2020 reports that transportation and storage as well as accommodation and food services have a relatively large share of firms closed. This was because of curfews and lockdown restrictions primarily affecting firms in these sectors. It should be noted that technological innovations like M-PESA have enabled some sectors, like the restaurant sector, to continue their businesses even during the COVID-19 pandemic, especially because mobile money transfers and deliveries could be carried out without risking the spread of COVID-19. This explains why some hotels and restaurants could still operate even at the height of government containment measures.

Most of the service sector firms experienced a decline in their sales and underwent labour adjustments, both extensive (layoffs) and intensive (reduced wages and hours), as a result of the COVID-19 pandemic. This, however, has been relatively modest given the large decreases in revenue occasioned by the government measures in response to the pandemic (KEU 2020).

Most businesses that closed permanently were in wholesale and retail subsectors (38%), education (36%) and other services (15%). The majority of the closures were caused by government containment measures.

The latest World Bank's KEU of June 2021 indicates that the GDP contracted by some 0.4% year-on-year in the first nine months of 2020, mainly because of the COVID-19 pandemic's serious effects on the sector. The report further details that the sector's output contributed about 2.5 percentage points to the year-on-year GDP between January and march 2020 but was reduced by 5.5 percentage points from overall growth between April and June when the impact of COVID-19 came to the fore. Further, the July-September period saw output rise from the previous levels but still remained lower than the same

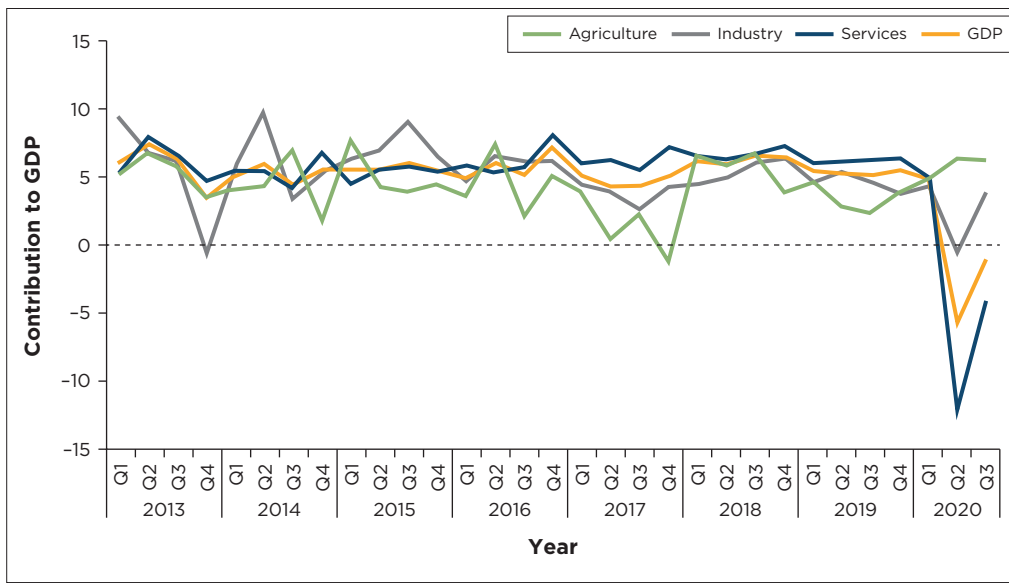
period in the previous year and this reduced the year-on-year growth of GDP by about 2.7 percentage points. It is reported that the main culprit in the services sector growth was the education subsector because of the closure of most learning institutions as a containment measure by the government which has resulted in significant losses. Figure 5.2 shows the sharp drop in services after the first quarter of 2020 when the pandemic hit the economy.

Activity in the accommodation sector and the restaurant subsector was severely impacted by the pandemic as international travel was suspended for much of 2020. Hotels closed or significantly scaled down their operations since movement restrictions were imposed in most countries.

The economic update for June 2021 shows that receipts from services exports fell sharply, reflecting the collapse of international travel and transport. There was a reduction in the subsector of about 57.9 percentage points year-on-year between July and September which lessened the overall GDP by some 0.8 percentage points.

A Central Bank of Kenya (CBK 2021) analysis of the hotel industry in mid-March 2021 indicated a sluggish and uneven recovery from the serious disruption of mid-2020. The analysis noted that most of the hotels are presently open. However, the average rate of occupancy has improved only modestly to 27% by March 2021.

The Kenyan economy staged a recovery in the third quarter of 2020 and the services sector increased by 2.9% year-on-year, contributing some



Source: KNBS (2021), Quarterly Gross Domestic Report.

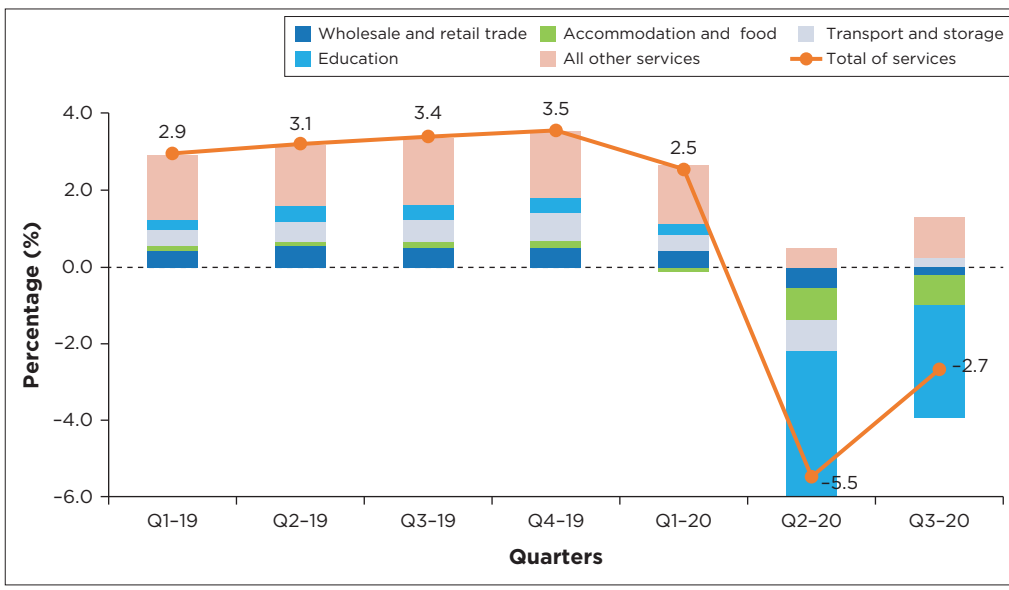
FIGURE 5.2: Sector contribution to gross domestic product (2013–2020).

0.2 percentage points to GDP. The other service subsectors like finance, communications and information, including insurance and real estate, ticked in the latter part of 2020. There was a strengthening of growth in business services, real estate renting, ICT, insurance and finance ranging between 5.3% and 7.3% year-on-year in the July-September period of 2020. It is noted that continued credit growth following government policy actions did support the financial sector's performance. The government measures with regard to the facilitation of digital money transactions benefited the ICT sector and promoted e-commerce.

Figure 5.3 shows the impact of the pandemic on the services sector from the first quarter of 2019 to third quarter of 2020. It shows how serious the impact was on the subsectors and the severe impact overall from the end of first quarter of 2020 to the start of the recovery in the middle of the second quarter of 2020 (See Table 5.3).

Note that from the second quarter of 2020, the services sector was severely impacted by the COVID-19 pandemic and had a negative effect on the contribution to GDP.

The World Bank Kenya update reiterates that services will recover gradually, albeit with large differences across the subsectors. They further submit that the subsectors that were resilient at the most intensive time of the pandemic are likely to keep up the momentum. The subsectors include health, public administration, financial services and ICT. A moderate recovery is envisaged for some of the subsectors which contracted because of the containment measures in 2020, which include retail trade, transportation and storage.



Source: KNBS and World Bank staff calculations.

FIGURE 5.3: Service sector affected by COVID-19 pandemic.

TABLE 5.3: Contribution by broad subsectors (percentage points).

Year	Quarterly	Agriculture contribution to GDP	Industry by sub sector contribution				Industries	Service by sub-sector contribution						Service
			Mining and quarrying	Manufacturing	Electricity water supply	Construction		Accommodation and restaurant	Transport and storage	Real estate	Information and communication	Financial and insurance	Other	
2015	Q1	2.0	0.1	0.3	0.2	0.6	1.2	-0.1	0.5	0.5	0.3	0.6	0.6	23
	Q2	1.1	0.1	0.3	0.3	0.6	1.3	0.0	0.6	0.5	0.2	0.5	1.0	2.9
	Q3	0.8	0.2	0.5	0.2	0.8	1.7	0.0	0.7	0.6	0.2	0.7	1.1	3.4
	Q4	0.8	0.1	0.4	0.1	0.7	1.3	0.1	0.4	0.7	0.3	0.4	0.8	2.7
2016	Q1	1.0	0.1	0.2	0.2	0.4	0.9	0.1	0.5	0.7	0.4	0.5	0.8	3.0
	Q2	1.8	0.1	0.5	03	0.4	1.3	0.1	0.4	0.7	0.2	0.4	1.0	2.9
	Q3	0.4	0.1	0.4	02	0.5	1.2	0.1	0.3	0.7	0.3	0.4	1.3	3.1
	Q4	1.0	0.2	0.2	0.1	0.7	1.2	0.2	0.6	0.7	0.5	0.4	1.4	3.3
2017	Q1	1.1	0.1	0.2	02	0.4	0.8	0.3	0.5	0.5	0.5	0.2	0.9	2.9
	Q2	0.1	0.0	0.0	02	0.5	0.8	0.1	0.5	0.5	0.3	0.2	1.2	2.9
	Q3	0.4	0.0	0.0	02	0.3	0.5	0.1	0.4	0.5	0.4	0.1	1.3	2.9
	Q4	-0.2	0.0	0.0	0.1	0.7	0.8	0.1	0.7	05	0.5	0.1	1.8	3.6
2018	Q1	1.8	0.0	0.4	03	0.2	0.9	0.2	0.4	0.4	0.5	0.2	1.2	3.0
	Q2	1.4	0.0	0.5	03	0.2	1.0	0.1	0.4	0.4	0.4	0.2	1.4	3.0
	Q3	1.2	0.0	0.5	0.4	0.2	1.2	0.2	0.6	0.3	0.4	0.3	1.6	3.4
	Q4	0.6	0.0	0.4	05	0.2	1.1	0.3	0.9	0.3	06	0.5	1.5	4.1
2019	Q2	O.5	0.0	0.4	0.2	0.4	1.0	0.1	0.5	0.5	0.3	0.3	1.5	3.1
	Q3	0.9	0.0	0.4	0.2	0.4	1.0	0.1	0.6	0.5	0.3	0.5	1.4	3.4
	Q4	0.6	0.0	0.2	0.2	0.4	0.8	0.2	0.3	0.4	0.5	0.4	1.3	3.5
2020	Q1	1.5	0.1	0.3	0.2	0.3	0.3	-0.1	0.4	0.4	0.4	0.4	1.1	2. 5
	Q2	1.7	0.1	-0.4	0.0	0.2	-0.1	-0.9	-0.8	0.2	0.2	0.2	-4.4	-5.5
	Q3	1.1	0.2	-0.3	0.1	0.9	0.9	-0.8	0.2	0.5	0.3	0.3	-3.2	-2.7

Source: CBK 2021.
Key: GDP, gross domestic profit.

A more gradual recovery is projected for the hotel and restaurants subsectors, where the future outlook could depend on the progress of the vaccination rollout and containment of the infections both domestically and globally. The availability of international transport and cost improvement will also matter.

In the final analysis services sector would recover only at a slow pace in the medium term. This informs the reported GDP growth rate projection for the country, which they put at 5% through 2023 and is lower than the pre-COVID-19 rate. The future is uncertain, leading to elevated risk and dependence on the evolution of the COVID-19 pandemic both locally and internationally.

The future economic outlook remains unpredictable and highly correlated to the evolution of the pandemic, both locally and internationally. However, despite this, the African continent in general is experiencing major and worsening economic hardships; the major drawback being a lack of essential structural and institutional capabilities as well as policies to deal with possible fallout.

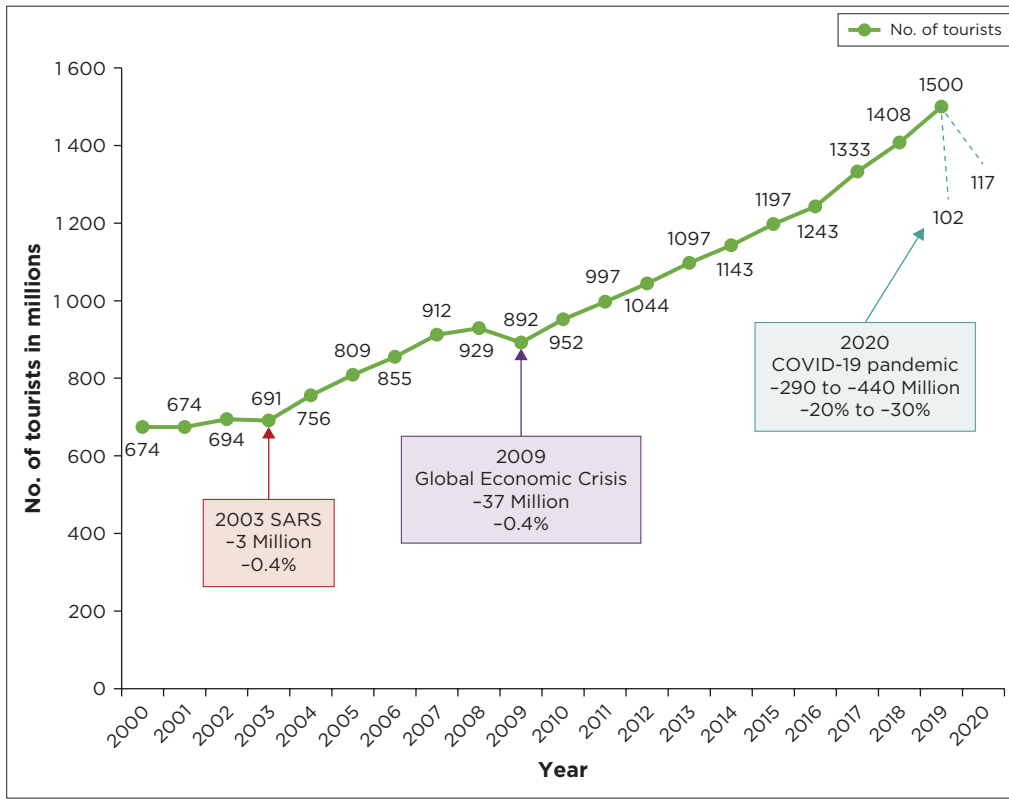
The continent still has to grapple with major uncertainty on both financial and logistical problems that come with massive vaccination campaigns (Arzeki, Djankovic & Panizza 2021).

The Kenyan economy is evolving and the services sector is becoming more significant. Some leeway and opportunity exist to grow the sector. The economy is increasingly reliant on the services sector, which is the largest GDP contributor and likely to relegate agriculture and industry to less significant contributors of GDP. However, even though the services sector did contribute considerably in 2019, agriculture's share of the value added still remains the highest among both regional and sub-Saharan Africa as well as the low- and middle-income country (LMIC) peers and is still more than twice the average sub-Saharan and LMICs.

COVID-19 impact on the Kenyan tourism sector

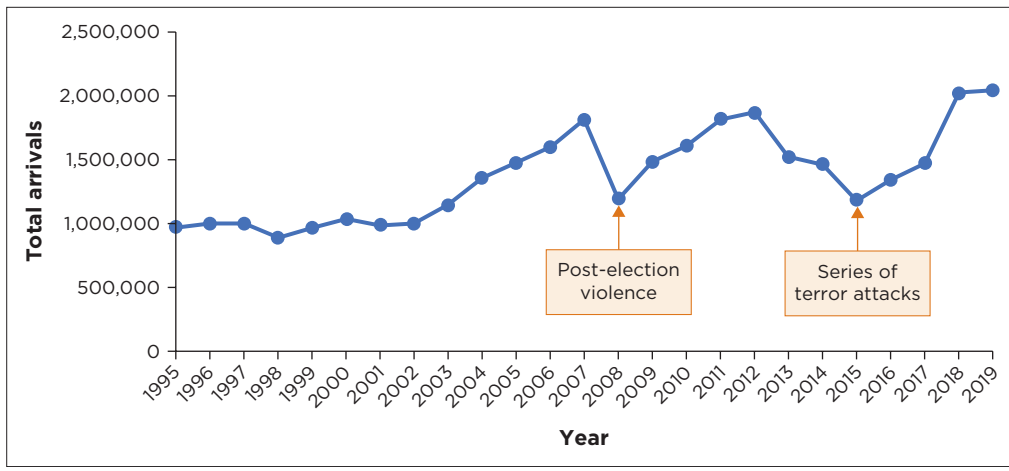
Tourism is a very important sector in the Kenyan economy. It contributes greatly to the economy in terms of GDP as well as providing employment in the hotel subsector and a host of the tourist value chain. The problem with the sector is that it is very sensitive to any form of upheaval, as has been demonstrated at the national and international levels. These include episodes like terror attacks, wars and pandemics (see Figure 5.4 and Figure 5.5).

Tourism and travel are major components of the services sector, especially in some developing countries where they contribute a big proportion to foreign exchange earnings as well as being a major contributor to employment creation. This subsector is also a major contributor to these countries' GDP.



Source: UNWTO (2020).

FIGURE 5.4: Effect of the COVID-19 pandemic on world tourist numbers.



Source: Adapted from KNBS (2011) and Government of Kenya (2018).

FIGURE 5.5: Tourist sensitivity to violence.

Globally there has been an extraordinary rise in the twin sectors of tourism and travel in the last six decades. The industry has grown in leaps and bounds as a result of multiple factors, such as increasing incomes in the West as well as technological developments in both communications and transportation.

According to UNWTO (2020) and WTTC (2020a), international tourist travel numbers have grown impressively from 25 million in 1950, 278 million in 1980, 528 million in 1995, 952 million in 2010, 997 million in 2011 and 1044 million in 2012 to 1.5 billion in 2019. The statistics show that between 2009 and 2019, tourism and travel industries had grown for ten years without breaking stride, at an average of 3.9% annually, even though lower in comparison to the very high rates recorded in 2017 and 2018.

In terms of Africa, the WTTC reports that tourism is one of the major driving industries in the continent and added 8.5% of Africa's GDP IN 2018. The African Travel and Tourism Association (ATTA) 2019 credits the sector with contributing 24.3 million jobs, equivalent to 6.7% of total employment.

In Kenya, tourism has had an impressive performance since 2015, growing at 3.9% in terms of arrivals from 2.02m in 2018 to 2.05 in 2019. This was 37.33% up from 1.47 million visitors recorded in 2017. The Kenyan ministry of tourism notes that domestic tourism has also been growing and accounted for more than 50% before the pandemic.

Tourism was the worst-hit sector in the overall economy by COVID-19. The sector is a significant contributor to the country's GDP. Kenya's statistical agency has estimated the sector to contribute upwards of 15% of the nation's export value translating to about 9% of wage employment through its many value chain activities. The KNBS estimates that about 3.5% of the country's total employment is attributable to tourism and related activities.

The advent of the pandemic resulted in a deep fall in travel and tourism activities in Kenya. The externalities reverberated across the related subsectors such as transport, real estate and agro-processing.

The situation was worsened by the attendant recession that affected source-country economies leading to a loss of disposable income.

Tourism is very sensitive to any form of upheaval. The 2015 terror attacks in Kenya and the resultant travel advisories negatively impacted international tourist arrivals. The industry eventually recovered thereafter, but the emergence of the COVID-19 pandemic seems to have halted the process. It is among the most volatile and vulnerable and is very susceptible to exogenous shocks such as the 2007/08 post-election violence and the 2008/09 financial crisis, both of which led to a fall in tourist numbers, as Figure 5.5 shows.

A Kenya Institute for Public Policy Research and Analysis (KIPPRA) study in July 2021 indicates that total shutdowns on international flights in most western European countries, which are key source-countries of tourists to

Kenya, denied the country's tourist supply and led to a dramatic collapse of the industry in the second quarter of 2020. Flights to and from Kenya were grounded besides there being a travel aversion at that stage of the pandemic.

Tourism employment and the effect of the COVID-19 pandemic

In terms of employment, the tourism sector value chain does generate direct employment in services. These include accommodation, transportation, food and beverages services, as well as travel (tour services). The sector also generates indirect employment through forward and backward linkages in other sectors, the most prominent of these being conferences, events, management and construction (MICE). Also included in the linkages of the tourism sector are communications, agriculture and utilities.

When the pandemic emerged in 2020 and the resultant drop in travel, a study by KIPPRA (forthcoming) estimates that employment in the sectors value chain activities fell by a sizable 72%. The most notable declines were recorded in accommodation (70%), while food and beverages dropped by a staggering 70%. Entertainment dropped by a massive 90%. Railway and air transport were temporarily wiped out at 100% while tour and travel services plunged by 70%. It is observed that following the government's easing of the COVID-19 restrictions in August 2020, the sector experienced a boost. The MICE subsector, in particular, rebounded strongly and presently seems set for a full recovery.

A study by KIPPRA based on two rounds of surveys in May and June 2020 in which tourism was proxied by accommodation, including food and beverages services, concluded that the sector was the worst affected of all, averaging a loss of 30 h per week per worker. The encouraging side of it was that the sector is more likely to have a quick rebound going by the transitory nature of the impact of the pandemic on employment in general. The reason behind this optimism is attributed to the pent-up demand from domestic tourism. It is, however, clear that the COVID-19 pandemic continues to unfold and its evolution and duration are still uncertain.

Tourism is a major part of the services sector in Kenya which, as stated, declined sharply in the face of the COVID-19 outbreak. The employment value chain activities have been estimated to decline by upwards of 72% in 2020.

Though tourism has shown impressive performance in the past few years, it is considered to be one of the most vulnerable industries which is easily impacted by external shocks such as the COVID-19 pandemic.

In a new study by KIPPRA in July 2021, a number of policies were recommended to help the sector recover. The policies included enhancing innovation and focusing on emphasising serious promotion campaigns

targeted at domestic tourism, which they argued has proven to be resilient in the face of several shocks, including the COVID-19 pandemic. Along with these, the study recommends the incentivisation of local tourism firms to design products and adjust their pricing strategies with a view to catering to domestic tourists.

The study also emphasised the need for social protection programmes to cushion sector employees from shocks brought about by pandemics and other exogenous factors. The adoption and enforcement of COVID-19 containment protocols was strongly recommended. Finally, there was an emphasis on the need to prioritise policies intended to achieve critical levels of immunisations against COVID-19 with a view to boosting Kenya as an attractive and safe tourist destination.

In Kenya, tourism is among the strongest economic pillars of the country, ranking as the third largest tourism destination in sub-Saharan Africa, following South Africa and Nigeria (Government of Kenya 2019). It is imperative that good and effective tourism policies are needed to strengthen the sector. The sector is now the second largest contributor of foreign exchange earnings of over US$1.57bn. The massive number of people involved and the associated spending on goods and services has to have a major impact on local, national and even regional economies.

The spending by tourists on facilities and activities as well as on shopping, accommodation, restaurants and conferences does provide a major boost to local economies and employment (Deegan 2020).

The industry has in the past shown great staying power over the years, but COVID-19 has emerged as one of the most complex challenges facing the

TABLE 5.4: Impact of COVID-19 pandemic on employment in tourism subsectors.

Key value chain activities	No. of establishments	Estimated number employed before the COVID-19 pandemic			No. employed during COVID-19 (%)
		Formal	Informal	Total	
Accommodation (hotels, resorts, guesthouses, lodges, etc.)	2 336	21,614	281,841	303,455	91,037 (30)
Food and beverage	811	7 508	97,902	105,710	31,713 (30)
Entertainment (souvenir, shops, craftsmen, festivals, theme parks)	2 250	2 500	23,000	25,500	2 550 (10)
Transportation	-	-	-	-	-
Railway	1	252	1 072	1 324	0 (0)
Road	551	21,101	275,150	296,251	148,126 (50)
Water	22	845	11,021	11,866	5 933 (50)
Air	443	16,942	220,919	237,861	0 (0)
Guides, tour operators and travel agencies	112	1 368	1 368	2 736	821 (30)
Total	**-**	**72,130**	**912,573**	**984,703**	**280,180 (28)**

Sources: World Tourism Organization and Kenya Transportation Security Administration; KNBS (see https://www.knbs.or.ke).

tourism world today. The pandemic has presented the sector with a significant challenge. This has caused a global panic whose duration and extent are still unpredictable.

Tourism at present ranks as one of the most affected sectors worldwide, and the spread of COVID-19 has focused attention on the globalised nature of international tourism and how the sector has been affected by its spread (Deegan 2020). The WTTC estimates that the COVID-19 pandemic could cut up a large number of jobs and it could take a long time to recover (WTTC 2020b). It is important to note that the evolution and trajectory of the disease are still unpredictable.

At present, Africa is still the least affected continent (in terms of documented infections) by COVID-19. Most governments have been taking unprecedented steps to slow the spread, such as by stopping international travel. This can be seen in the cancellation of major international conferences in early 2020, which dealt a major blow to the sector. There has been a similarly serious adverse effect on the aviation subsector when, for example, Kenya banned all international air travel in March 2020.

In Africa, airlines had incurred a combined loss of US$4.4bn by March 2020. The passenger volumes were reduced by a massive 622,000, with the associated revenue losses of US$125m in the East African Community member states alone. This development put some 36 800 jobs at risk. The escalation of the crisis could push passenger volumes to fall by an estimated 1.6 million with an attendant loss of US$320m in revenue. If the crisis persists, a world recession cannot be ruled out as well.

COVID-19 and the hotel subsector in Kenya

In this section, we look specifically at the hotel subsector, which is very much dependent on tourism.

The pandemic initially affected the tourist destinations of the north coast, comprising Malindi and Watamu areas in Kilifi County. This led to the cancellation of a number of flights. Despite the fact that the pandemic arrived during the slump season in Kenya, the sector experienced a sudden massive fall in demand leading to some of them being closed. This was intensified by government containment measures such as border closures in an attempt to slow down the spread and transmission of COVID-19. The implication was that a sizable number of hotel staff members were sent on unpaid leave or laid-off permanently.

The MICE subsector had been on the rise in the pre-COVID-19 period. MICE had made a significant contribution to the subsector. The MICE was pivotal in the growth by 3.9% of the tourism sector as a whole and earned KSh163.56bn.

In this situation, non-essential travel was restricted in March 2020, especially to countries considered to be high-risk – that is, with high incidences of

COVID-19 infections. Tourism is a particularly interactive economic activity based on people and the United Nations agency responsible for it has outlined some guidelines to help the sector survive this pandemic, cooperating closely with the WHO to ensure the implementation of health measures and stands ready to support eventual recovery.

In Kenya, the government did respond fairly quickly to try and contain the spread by sensitisation of the public, suspension of international travel and engaging with UNWTO, WHO and other allied tourism organisations to try and mitigate the impact of COVID-19 on tourism. The government also kept up continuous monitoring and response through an integrated approach. There is a need for innovation and supply of updated information to customers while sharing lessons learnt and setting aside funds for post-COVID-19 recovery initiatives.

The pandemic has had a severe impact on tourism employment. The pandemic has brought most of the world to a screeching halt with its impact on international arrivals, domestic tourism, the tourism sector business in general and employment in the tourism sector. There have been significant reductions in employment in tourism organisations.

In Kenya, the pandemic has led to a decline in park visitation from March 2020 by a massive 87% in the first quarter of 2020, and visitation to Kenya Wildlife Service national parks and reserves is a good indicator of the performance of the tourism sector where wildlife tourism is a key component of the tourism industry.

COVID-19 pandemic impact on Kenya's education sector

The advent of COVID-19 in Kenya impacted the education sector severely, leading to an abrupt closure of all learning institutions. The closures affected learners, instructors and households. There were significant social and economic consequences associated with the closures. The government applied a three-pronged approach to try and aid the continuation of learning during the pandemic while adhering to the necessary protocols of social distancing, quarantine and self-isolation. The education ministry had earlier developed some content that some school-going children could access through various channels to continue learning, but this was fraught with numerous challenges, most of which were technical, like lack of electricity and internet access, thereby raising issues of equity. There have been long-term ramifications with regard to education and COVID-19, especially for marginalised and most vulnerable children with a heightened risk of being excluded from education for a variety of reasons. These were mainly learners from urban slums, those with disabilities, those from remote locations,

refugees, as well as those whose families lost livelihoods as a result of job cuts and business closures associated with the COVID-19 pandemic. The introduction of technology was seen as the only possible remedy to the impact of the pandemic, especially in a sector relying heavily on direct contact.

One of the major impacts of COVID-19, especially during the school closures on the learners' side, was the absence of physical contact with their teachers for content delivery because of social distancing and other spread mitigation protocols. The substitute for this was to be digital learning, but it was also riddled with issues of inaccessibility of technology and a lack of dependable internet access, especially in rural areas and those from underprivileged families. The major problem that emerged was the so-called digital gap, that is, the unequal access to digital educational resources and learning material.

The private school subsector did suffer greatly because of the emergence of COVID-19 and the subsequent closure of schools. This was mainly because of their dependence on school fees and other charges as the main source of their revenues to run their institutions. In some cases, their teachers lost their jobs and some of the institutions lost on enrolment of learners and could not resume even when the schools were eventually re-opened. There was a policy suggestion that the government could offer them some financial assistance, but we have not seen any evidence to indicate that this was done. The private schools are essentially private businesses providing a social service at a fee.

Along with the direct impact on the learners and their teachers, these institutions also have significant economic activities associated with their operations and these were seriously affected during the prolonged learning institution closures following the advent of COVID-19. The support employees in these institutions were also severely impacted and did lose their livelihoods in some cases.

COVID-19 and its impact on the health sector in Kenya

The COVID-19 pandemic and the containment measures instituted by the government to combat the spread of the virus did impact people's health-seeking behaviour. Measures in the form of lockdowns, curfews and the fear of infection prevented people from accessing health facilities, a phenomenon observed across the globe. So-called non-essential medical procedures were abandoned, especially during the period in which the virus was prolific in certain parts of the republic. Kiriti-Nganga (2021) found that 39.3% of the respondents changed their health-seeking behaviour because of COVID-19 impacting access to a variety of medical interventions. The COVID-19 pandemic found the country woefully unprepared in terms of funding and physical facilities, including intensive care units (ICUs), isolation rooms and personal

protective equipment (PPE), and was well below the WHO standards (Kiriti-Nganga 2021).

The pandemic also negatively impacted the health worker population in the country, with deaths in this sector relatively elevated.

The pandemic laid bare the utter unpreparedness of the health sector to deal with a pandemic or any other major health emergency. It was reported that the entire country had only some 200 equipped ICU beds and dangerously few ventilators for severe cases of COVID-19 infections.

The advent of COVID-19 has made it clear to the policy-makers as well as the decision-makers at the unit levels that the entire health care system needs a major overhaul with a view to making the system responsive to the needs of the citizens. It is also crystal clear that major resource investments will have to be put in the sector if there is to be a change in service delivery levels in the health sector.

The pandemic also brought to the fore the immediate need for some form of universal health care insurance coverage to bring about some semblance of medical cover for the majority of the residents. The imbalance between the rural and urban areas has also been shown to need some attention.

However, we must also make it clear that Kenya is not alone among its African peers in having this poorly managed health system. The World Health Organization (2013) reported that most health systems in Africa are generally underfunded and understaffed, while access to specialised care is highly unequal. In the era of COVID-19, the WHO Africa office (2020) gave a score of 66% in terms of national preparedness for the whole continent but indicated that there are serious variations from country to country. Kiriti-Nganga's (2021) study also reports on the bad state of insurance coverage in Africa, where few countries have national medical insurance schemes, and even then, the existing ones only cover a minuscule proportion of the population. The study further cites a study by Tafirenyika (2016), showing that in Ghana, for example, only a third of the population receives medical insurance under the country's national insurance scheme, while Nigeria was even worse at less than 3% of the population covered. In Kenya and Africa in general, there is a lot of work to be done in this important sector if major improvements are to be realised.

The following section looks at how the COVID-19 pandemic has impacted the foreign direct investment (FDI) flows into Africa and Kenya in particular.

COVID-19 pandemic and foreign direct investments

The COVID-19 pandemic caused a dramatic fall in global FDIs in 2020 and has brought FDI flows to a level last seen in 2005. It has been an immense negative

impact, especially on the most productive of investments, the greenfield investment in industrial and infrastructure projects. According to a United Nations Conference on Trade and Development (UNCTAD) (2021) report, the implication of this is that international production, the engine of global economic growth and development has been seriously affected (UNCTAD 2021).

The UNCTAD's World investment report of 2020 shows that FDI fell by one-third to US$1tn, which is well below the low point reached after the global financial crisis of 2008/09. The report further points out that the greenfield investments in industry and new infrastructure investment projects in developing countries were especially hard hit.

FDI inflows to developing economies were not as hard hit as the ones to developed countries. There was an 8% fall versus 58% for developed countries. The UNCTAD 2021 report indicates that the modest decrease in developing countries was mostly helped by Asia, where flows indeed increased by some 4%. Patrick Tryba, commenting on the UNTAD 2021 investment report, argues that while Asia has been able to apply FDI in its advancement, Africa has not been so lucky. The observation here is that between 2000 and 2018, Africa's share of world FDI inflows increased from 1% to 3% but its share of global value chain (GVC) participation remained a modest 2%. In the same period the Asia- Pacific region realised global inflows rising from 10% to 31%.

The COVID-19 pandemic reduced Africa's FDI inflows due in part to her severe dependence on commodity trade. Africa's greenfield projects also saw sizable declines. The concept of the FDI paradox was also in play where investments, in theory, should flow to where returns are highest, but though Africa had the highest returns on FDI between 2006 and 2011, the inflows did not follow as expected. The reasons for this included less developed infrastructure, insufficient human capital, lack of judicial protection for foreign investments, weak property rights laws and disjointed investment policies.

FDIs are a major channel through which the continent receives external finance. The advent of COVID-19 meant a considerable fall in Africa's FDI inflows. This was accentuated by lockdowns which considerably and negatively impacted both the existing and prospective new investments. This brought to the fore the possibility of a major recession making investors unwilling to venture into new investments, especially the green field type. It is argued that because of the heterogeneity existing among both African countries and their economic sectors, the pandemic's unexpected advantage could well be to direct policy initiatives towards unlocking the potential of regional value chains (RVC) that promote growth.

The pandemic caused a serious drop in FDI to Kenya as it muzzled trade arrangements across the world. The UNCTAD (2021) investment report on FDI shows that Kenya attracted US$717m worth of FDI investments in 2020

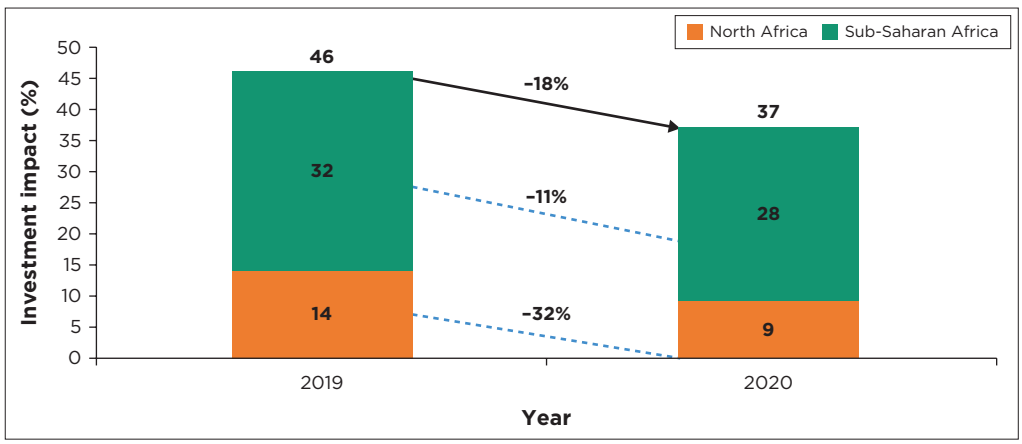
compared to US$1.3bn in 2019. This was the second straight drop considering that US$1.6bn was attracted in 2018. Kenya, considered to be the East Africa region's powerhouse, lagged behind its neighbours Uganda (at US$823m) and (Tanzania at US$1.013bn). The world investment report projects a better performance on the eased COVID-19 restrictions.

It is noted that as part of the COVID-19-related restrictions, the country introduced local participation requirements in various industries, which included insurance, telecommunications and ICT services which may disadvantage them in competing to attract FDI.

The drop in FDI was not unique to Kenya as FDI inflows to the whole of sub-Saharan Africa decreased by 12% to US$30bn, with investment growing only in a few countries. In Nigeria, for example, inflows increased slightly from US$2.3bn in 2019 to US$2.4bn. Globally, FDI fell by a third to US$1tn in 2020 compared to US$1.5tn in 2019.

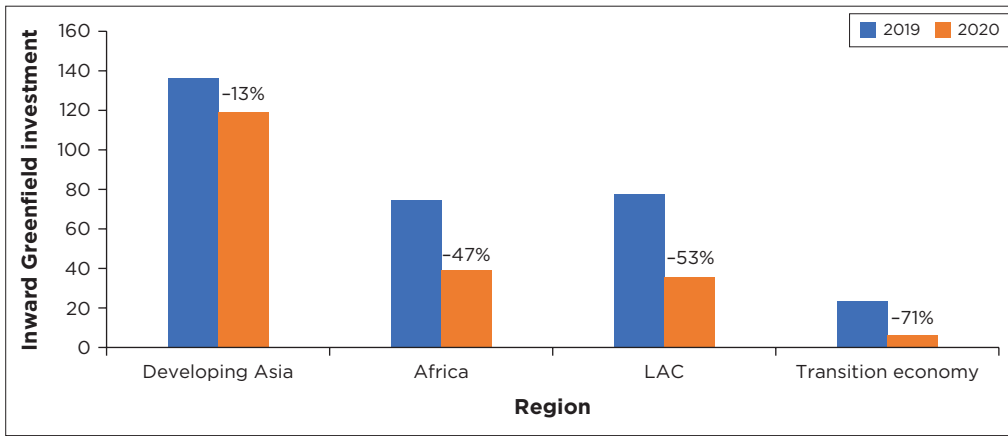
It is projected that FDI will recover this year (2021) after an almost 35% drop in 2020 because of the COVID-19 crisis. According to the UNCTAD 2021 report, the global FDI is projected to increase by between 10% and 15% in 2021 and will still be below the pre-pandemic levels. The lockdowns witnessed worldwide led investors to pause investment projects and made multinational enterprises (MNEs) shy away from new projects. Investment flows to Africa are unlikely to fully recover in the near term.

Figure 5.6 shows the negative impact on FDI on the African continent. The figures for 2020 confirmed the instantaneousness of the COVID-19 effect with a drop in FDI flows into the continent, exceeding the average for developing countries. Also working against the African continent has been the age-long issue of the structure and nature of African exports characterised by primary



Source: UNCTAD (2021).
Note: 2020 trends based on preliminary date. Expected to change when full data is available which will be published in the World Inverstment Report.

FIGURE 5.6: Impact of COVID-19 on foreign direct investments across African regions.



Source: UNCTAD, World Investment Report 2021, https://unctad.org/system/files/official-document/wir2021_en.pdf.
Note: For 2020, For figure shows annualised data based on nine months data.

FIGURE 5.7: Inward Greenfield investment across developing regions pre- and post-COVID-19 (2019–2020).

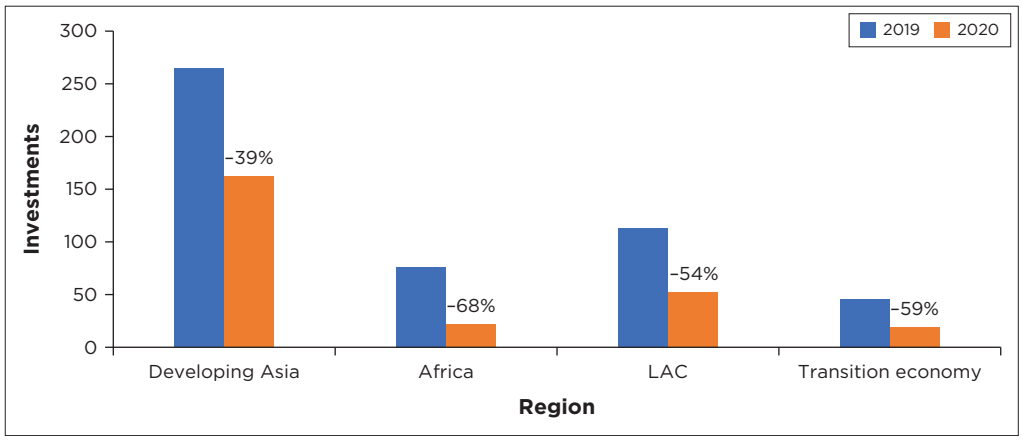
products and commodities which command low prices in the international marketplace and whose demands tend to trend downwards. This further negatively impacted Africa's natural-resource-seeking FDIs, a major component of the inflows to the continent (Chaudhary, Santos-Salinas & Trentini 2021).

The pandemic severely affected both sources of FDI into Africa, with greenfield almost halved while project finance is down 68% (Figure 5.7). These are significant effects.

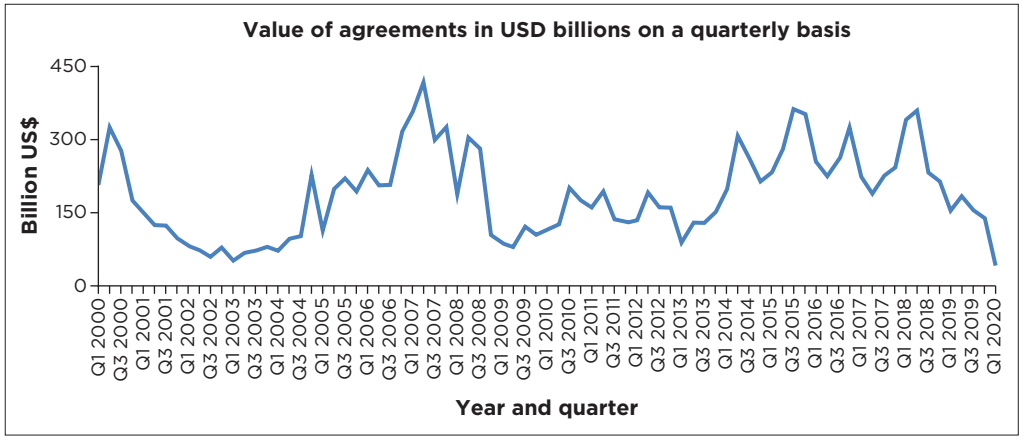
Chaudhary et al. argue convincingly that COVID-19 struck at a time when myriad other problems emanated from the so-called new industrial revolution and countries tended to look inward, especially in the West (economic nationalism), creating a worsening scenario for global FDI, international production and the GVC landscape. The changing world economic structures are bound to profoundly affect developing economies that are looking to export-driven development strategies as a cure for their underdevelopment. This may hinder their desire to attain transformational movement up the value-addition ladder.

For the African continent, this does not augur well given the continent's export structure with primary commodities and little value-addition comprising the bulk of their exports and their reliance on export-led industrialisation strategies being key to their economic policy. The changes in the global posture towards inward-looking Western countries and African countries' export-driven industrialisation strategies could imply that the ramifications of the structure of African exports of predominantly primary commodities and no value-added natural resource exports could be a more severe handicap.

Figure 5.9 shows the immediate negative impact of COVID-19 in the first quarter of 2020, where there is a precipitous drop. Foreign direct investments



Source: UNCTAD, World Investment Report (2021), https://unctad.org/system/files/official-document/wir2021_en.pdf.
FIGURE 5.8: Inward project finance investments across developing regions pre- and post-COVID-19.



Source: UNCTAD, World Investment Report (2021); https://unctad.org/system/files/official-document/wir2021en.pdf.
FIGURE 5.9: The negative effects of COVID-19 on global foreign direct investment transactions.

in Kenya generally remain relatively weak, considering the size of its level of development. Despite this, it is still one of the largest recipients of FDI in Africa, with FDI inflows significantly increasing since 2010. According to figures from UNCTAD'S 2020 World Development Report, FDI flows decreased by 18% to US$1.3bn in 2019 (compared to 1.6 billion in 2018). Despite several new projects in information technology and health care, the total stock of FDI stood at US$15.7m in 2019.

In recent years, the ICT sector has attracted the most FDI, especially after the arrival of fibre optics in 2009/10. The other sectors targeted by FDI have been banking, tourism, infrastructure and extractive industries.

In 2020, because of the COVID-19 pandemic, FDI flow to Kenya fell significantly and was interfered with by budget cuts and a morose business climate. According to UNCTAD'S global investments trends monitor, FDI flows to sub-Saharan Africa overall decreased by an estimated 11% to about US$28bn (Figure 5.8).

Table 5.5 shows a steady rise in FDI inflows up to 2018. The drop was recorded in 2019 before the intervention of COVID-19 in 2020. Figure 5.10 shows the trend in FDI inflows to Kenya from 1970 to 2019. It is clear that FDI inflows have been fluctuating over the years.

It is noted that the Kenya government has been actively taking measures and implementing reforms to attract FDI to the country. Consequently, the country made progress in the Doing Business Ranking published by the World Bank. The country was ranked 56th worldwide for the ease of doing business in the 2020 report of the World Bank, an improvement from 2019 when it was ranked 61st.

Table 5.6 shows the FDI situation before the disruption caused by COVID-19 in the first quarter of 2020.

There have been notable changes in registering property, getting credit, protecting minority investors, tax payments and resolving insolvency. Important improvements have occurred in all these areas, which had been a major concern for both domestic and foreign investors.

The development of public-private partnerships as part of 'vision 2030' should also have a positive influence on FDI inflows.

Kenya plays a pivotal role in the East African Community (EAC), acting essentially as a hub. It benefits from a strategic geographic location with sea access, a growing entrepreneurial middle class, diversified agriculture and an expanding services sector, and recently discovered carbon resources. Nevertheless, numerous obstacles to investments persist in the economy, notably the country's poor-quality infrastructure, skills shortages, instability related to terrorist risk and political, social, and ethnic divisions, the ineffective rule of law and corruption.

Figure 5.11 shows FDI trends 2008–2020: The COVID-19 drop is observable.

TABLE 5.5: Foreign direct investment inflows to Kenya in recent years.

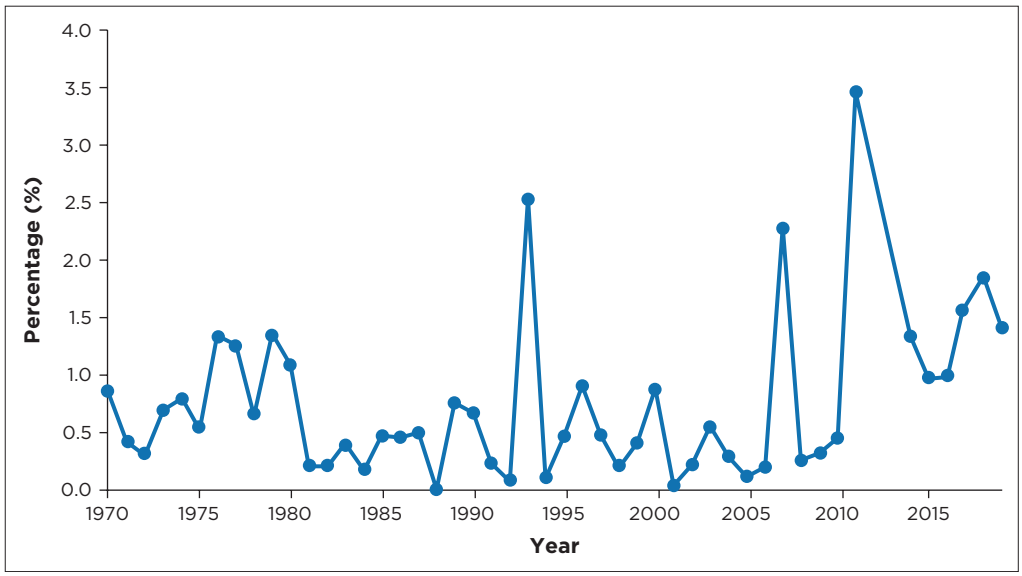
Date	Value	Change %
2019	1,332,436,904	–18.05
2018	1,625,921,131	28.42
2017	1,266,137,283	86.52
2016	678,803,417	9.53

Source: UNCTAD, World Investment Report (2021).

TABLE 5.6: Foreign direct investment inflows, stocks Greenfield investments and their investment values.

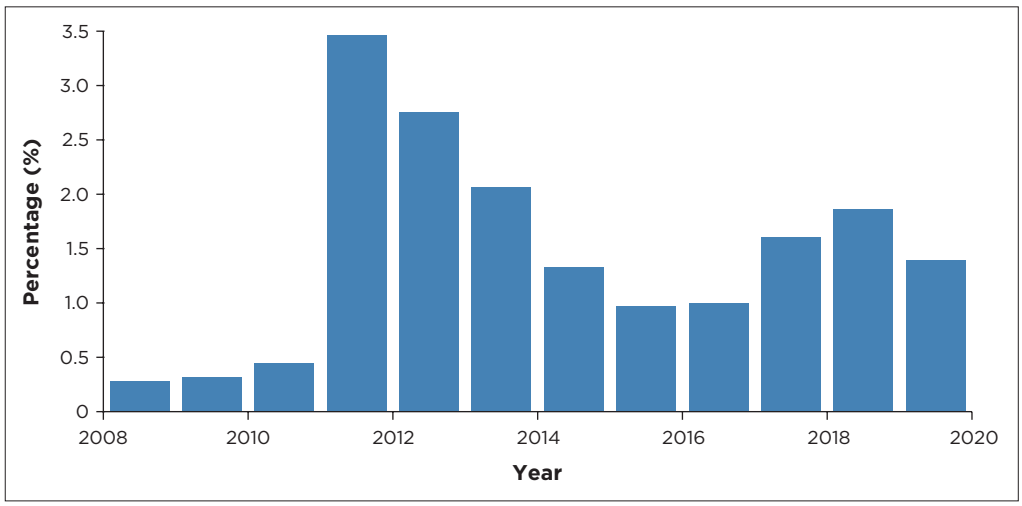
Foreign direct investment	2017	2018	2019
FDI inward flow (million US$)	1 266	1 626	1 332
FDI stock (million US$)	12,784	14,410	15,742
Number of greenfield investments*	52	65	95
Value of greenfield investments (million US$)	2 714	1 775	3 861

Source: UNCTAD, World Investment Report (2021).
Note: *Greenfield Investments are a form of Foreign Direct Investment where a parent company starts a new venture in a foreign country by constructing new operational facilities from the ground up.



Source: World Bank (2020).

FIGURE 5.10: Foreign direct investment inflows to Kenya (1970–2019).



Source: World Bank (2020).

FIGURE 5.11: Foreign direct investment trends (2008–2020).

The pandemic brought a drastic deterioration in FDI flows into the continent in the year 2020, reflecting world trends. The effect of the pandemic on FDI in the continent was worsened by low world demand for commodities and the fact that natural resources commanded comparatively low prices *vis-à-vis* manufactured goods. It is estimated that FDI inflows to Africa went down by some 20% in 2021 compared to the previous year and are projected to remain low in 2021 (UNCTAD 2021). The pandemic shock has impacted supply,

demand, as well as policies with regard to FDIs. The shocks to demand came from falling overall demand, lower spending by consumers and delays in investments by businesses (see Baldwin & De Mauro 2020). The situation was also impacted by the new containment measures responding to the health crisis. These measures came along with restrictions which negatively impacted cross-border investments, including FDI inflows to the continent.

Djankov and Panizza (2020) submit that world FDI flows will eventually come back to the pre-COVID-19 levels and this will entail GVC restructuring for purposes of resilience learning from the COVID-19 experience. There will also be an almost mandatory capital stock replenishment as the world economy re-establishes itself. However, developing nations may still face some difficulties, especially with respect to the uncertainty of the path to recovery.

The challenge for the African continent is that a health crisis added to a prolonged fall in FDI inflows to the continent would impact the pace of development and growth, with the situation making it more difficult to pursue the export-driven path to economic growth and transformation.

It is imperative to note that the situation produced by the COVID-19 crisis will also accentuate the existing problems with diversifying the economy away from dependence on primary products and natural resources. This will eventually bring about shortages of external financial resources, thereby negatively impacting an already fragile balance-of-payments position of most of the African economies.

In the opinion of the authors, after the health crisis, a persistent downturn in FDI flows to Africa can affect development prospects for the continent. The scenario would complicate pursuing an export-driven strategy for structural transformation.

The situation also compounds existing obstacles to economic diversification, particularly away from natural resources, and, finally, it leads to the dwindling of external financial flows and can affect the already precarious balance-of-payments situation for a number of economies.

Freund et al. (2020) indicate that despite all these issues, numerous opportunities for investment exist in Africa and to promote structural change in the continent. The crisis may have a silver lining as it may stimulate opportunities in the networks of international production, especially for the economies receptive to FDIs which are likely more disposed to gain (Freund et al. 2020). It is further suggested that the new restructuring in the GVC system will likely lead to new opportunities for the economies of Africa. There is leeway to bring in light manufacturing that gives way to enhanced addition of value to both Africa's natural resources and their primary commodities.

The author further suggests that the ongoing reconfiguration in the geography of GVCs can open new opportunities for countries on the continent.

There is scope to attract light manufacturing that enhances the value-addition of natural resources and commodities.

The soaring significance of RVCs can go forward alongside the African Continental Free Trade Area (AfCFTA) to attract FDI inflows aimed towards regional manufacturing and market-seeking opportunities. The African Development Bank proposes that this state of affairs does give chances for local private firms in Africa can make bigger strides in the region's development by mobilising local resources, embracing new technologies and strengthening RVCs (AfDB 2020).

Conclusion

The review of the service sector, especially tourism and its employment effects on the economy, leads us to the conclusion that while the Kenyan economy is changing, services are becoming a major economic driver in the country. The pandemic may have a long-lasting impact on the economic fortunes of Kenyans.

The arguments of a number of authors are that there are wide-ranging opportunities to enhance the restructuring of the economy anchored on the services sector (see Arzeki et al. 2021).

We have observed that the COVID-19 pandemic affected people's health (life) and their livelihoods (jobs and other sources of income). The effects have been more severe in sectors that rely on face-to-face interactions like hotel accommodation, wholesale retail trade and education. It is noted that informal sector firms tended to be more affected negatively than formal ones. This is especially with regard to obtaining financing. This is because of the fact that informal tended to face bigger sales drop and were under considerable uncertainty. They also tended to have cash flow problems and eventually also trouble repaying their debts.

Firms in the hospitality sector requiring face-to-face interactions as a necessity have been most heavily affected. This also happened in the informal public transport sector.

Foreign direct investment flows have fallen by an appreciable proportion during the early part of the pandemic as multinational corporations (MNCs) were reluctant to expand their activities and even put new investments on hold because of the uncertainty which comes with such major disruptions as a global pandemic. The FDI flows of the developing countries dropped even more since the severely impacted sectors, like primary and manufacturing sectors, accounts for a larger share of their FDI inflows than in the advanced countries.

The expectation is that the FDI flows could remain below the pre-crisis levels through the whole of 2021 unless the public health measures and economic support policies pursued by the government are effective.

The COVID-19 pandemic has profoundly impacted the country. The beginning of the pandemic in March 2020 triggered stringent measures to slow the spread of the virus, which was essential to minimise the loss of life but also resulted in widespread economic disruption and the loss of jobs and livelihoods. It abruptly weakened growth and increased poverty, leading to the worst economic growth performance in Kenya since 1992.

Some of the suggested strategies for dealing with the COVID-19 fallout have been to develop the use of digital platforms to enable firms and other sectors to cope with the uncertainty brought about by the COVID-19 pandemic since precautions requiring non-face-to-face interactions were introduced.

The use of digital platforms could allow a fair amount of business to go on. The schools and universities, where possible, also employed online learning with varying levels of success. More widespread use of these relatively new platforms is better tailored to the sectors amenable to home-based work. The use of digital platforms has also been somewhat limiting to the informal sector enterprises because of the nature of their activities, yet the informal sector enterprises are a significant employer of Kenya's relatively youthful labour force.

Another strategy will be to leverage access to public support in response to COVID shocks on firm sales, jobs, and finances. This public support is equally likely to be more prevalent among larger firms as informal ones stand on their own.

Various strategies are likely to be applied by MNCs and governments to get benefits from FDIs. Countries will try to intensify their participation in the global or regional value chains. In response to the COVID-19 crisis, integrating into RVCs should be a major plank in the arsenal of policy tools for virtually all countries in the continent. There is a need for the formulation of clear- and far-sighted investment and business facilitation policies and protocols in response to this and future crises.

The other more common strategy will include diversification and should result in a wider distribution of economic activities. This will mainly affect services and the GVC-intensive manufacturing industries. Diversifying value chains can lead to new opportunities.

Regionalisation could also lead to a transition towards RVCs that have a shorter turnaround in production length and are also less fragmented in terms of the number of cooperation agreements. Supply chain resilience is to be prioritised. Regionalisation would help create new opportunities for developing economies like Kenya to be competitive in attracting FDI and participating in value-added activities.

In Kenya, like most of sub-Saharan Africa, post-pandemic recovery will to a great extent be dependent on policy-makers' policy environments favouring gradual adjustment of international production networks. Policy-makers should aim at focusing more investments in critical infrastructure, health and access to COVID-19 vaccines for all members of society.

Chapter 6

Effects of coronavirus disease 2019 on informal cross-border trade in Kenya

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Introduction

The establishment of the African Continental Free Trade Area (AfCFTA) appears to restructure trade in Africa. It continues the campaigns for the formalisation of trade within the continent. However, a special kind of trade is still mushrooming within the borders as men and women are seen crossing with goods loaded on their heads, backs and even hands. Some have even resorted to the use of bicycles, hand carts and even automobiles to transport their merchandise across the border. This special kind of trade provides essential income to many for livelihood. The majority of the participant in this trade are women making up to 70% because of its nature (Manjokoto & Ranga 2017; UN Women 2010).

The composition of goods traded includes majorly agricultural produce and industrial commodities ranging from animals and animal products, cereals, horticulture, electronics, vehicle parts and other consumer goods. This parallel trade is what is known as informal cross-border trade (ICBT). It accounts for

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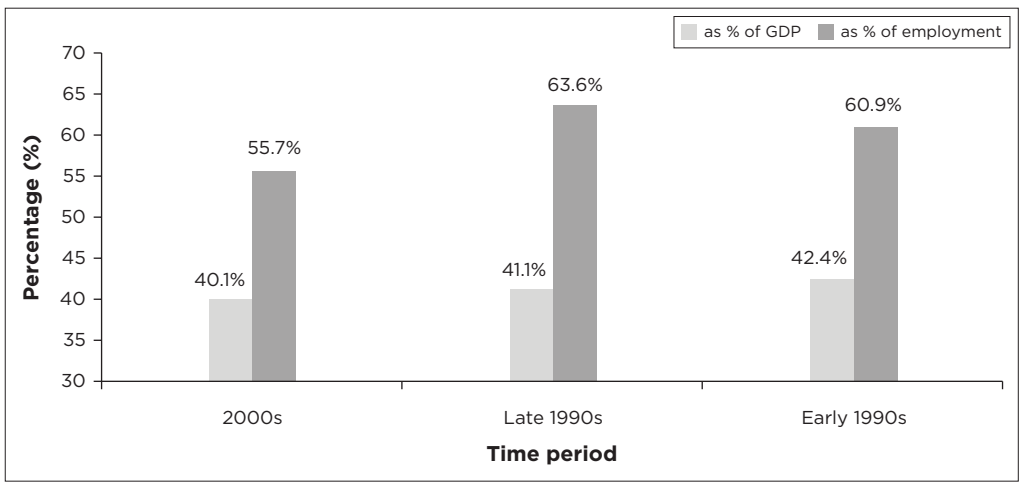
almost 99% of agricultural trade across borders (Bouët et al. 2020). The majority of the traders in this sector operate fully outside the formal economy, thereby escaping trade-related regulations like duty payments to the respective government revenue agencies.

Informal cross-border trade has been in existence for quite long and forms the main opportunity for livelihood and security for small-scale traders and border communities in a continent characterised by rising unemployment. Informal cross-border trade is considered to create more employment opportunities and generate income for informal traders, thereby alleviating poverty (Ityavyar 2013). On average, ICBT contributes approximately 43% of the total trade within the continent, yet it is largely ignored by many policy-makers in Africa. Despite its prominence and importance to trade, poverty alleviation, economic development and regional integration, ICBT significantly remains an unacknowledged and under-researched area in international trade.

Figure 6.1 highlights the shares of ICBT in the gross domestic product (GDP) and in employment creation. It indicates that ICBT is one of the main sources of livelihood for many small-scale traders. It creates employment opportunities for the youth and females and also generates a sizable share of GDP.

Informal cross-border trade is mainly dominated by females, although a majority of the enterprises are started by their male counterparts (UN Women 2010). These groups of women traders are faced with a number of challenges ranging from financial constraints to border harassment and now COVID-19 restrictions. For example, in the South African region, female ICBT is approximately 70%, while in Western and Central Africa nearly 60% of informal traders are mainly females (Afrika & Ajumbo 2012; UN Women 2010).



Source: Bacchetta and Bustamante (2009) using data from Schneider and Enste (2000).
Note: Countries included Botswana, Cameroon, Egypt, Ethiopia, Ghana, Kenya, Malawi, South Africa, Tanzania, Zambia and Zimbabwe.

FIGURE 6.1: Informal trade as percentage representing of employment and gross domestic product in Africa.

In order to understand the impact of COVID-19 at the border points, policy-makers rely mainly on formal trade. But the data from this kind of trade only paint a limited picture of the disruptive nature of the virus on trade. It only gives a glimpse of how formal trade is important to the consumers and producers but paints very little importance to the livelihood of the small cross-border community. Therefore, to better understand the impact of COVID-19 on trade at the Kenyan borders, the study tries to examine its effects on ICBT.

Theoretical construct and evidence on informal cross-border trade and COVID-19

Theories on ICBT form part of the basic conventional trade theories: that is, for trade to occur, goods and services must move from one point to another. Specifically, trade only occurs between two countries if and only if products are traded crosses the border. The concept follows the Vinnerian theory of trade creation and trade diversion (Azam 2007; Bhagwati & Hansen 1973). Based on this, ICBT can lead to trade creation by increasing trade flows or diverting legal trade through unlawful border transactions (Koroma et al. 2017). However, as indicated in the customs union analysis, the net welfare effects may seem ambiguous.

In connection to this, some empirical evidence has been used to show the fluctuating trend of ICBT and female participation in ICBT (Ugandan Bureau of Statistics [UBOS] 2020; UBOS & Bank of Uganda [BOU] 2020). On average, they put female participation at about 49%. However, because of the short-term period of COVID-19's effects worldwide, there is limited data to help quantify its effects on ICBT. Studies have mainly relied on primary data sources to show the negative impact COVID-19 has had on the respective economies, especially on cross-border trade. For instance, The United Nations Conference on Trade and Development (UNCTAD) reports that trade on goods fell globally by 5% in the first quarter of 2020 and projects a 27% drop for the second quarter because of COVID-19. They also predict a 20% annual decline for 2020 (UNCTAD 2020). This demonstrates that the impact on Africa's exports and imports worsened as both the severity and spread of COVID-19 increased across the continent and as the decline in commodity prices worsened.

UBOS and BOU (2011) did an informative study on Uganda's ICBT to estimate its magnitude and nature. They put ICBT figures for Uganda in 2009 at about US$800 (51% of the formal export trade). However, this has hysterically declined to about US$528 (33%) in the subsequent years.

The issue of data inadequacy has largely affected research on ICBT. Most existing studies on ICBT in Africa are, therefore, qualitative and based on field

research or case studies relying on indirect inference and accounting. Literature has focused more on smuggling in transit and re-exports, which in some contexts has reached impressive volumes of trade, for example, the case at the border between Senegal and the Gambia (Golub & Mbaye 2009). Golub (2012) focuses on this informality trade in Benin, Togo and Nigeria which is very large in volume but not recorded and has thus attracted much attention from the respective governments.

Ackello-Ogutu and Echessah (1997) use data collected through direct border monitoring between Kenya and Uganda. Their findings showed that ICBT at this border comprises some re-exports as well as large volumes of domestic trade in agricultural and manufactured products, especially from Kenya. However, recent technological changes in the informal sector have made ICBT activities improve over time.

Methodological approach

An overview of the methodological approach

Currently, the African continent has no systematic way of monitoring and quantifying the impact of ICBT. However, governments and other agencies or institutions have employed short-term initiatives to estimate the extent of ICBT in some regions. To some extent, the approaches have helped identify the most commonly traded products informally as well as those that heavily depend on ICBT.

The study therefore triangulates the use of various initiatives to understand and estimate the effects of COVID-19 on small-scale border traders.

Descriptive statistics

Much of the analysis relies on descriptive estimates, but excerpts from literature and other studies are used to enrich understanding of the effects of the virus on cross-border trade.

Data sources

In the analysis, we ride on secondary data from three initiatives. That is, the Family Farming, Regional Markets and Cross-Border Trade Corridors (FARM-TRAC 2021) project, the Comité permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel (CILSS) (2003), the Food Security and Nutrition Working Group (FSNWG) (Magagi et al. 2021) and national bureau of statistics.

Evidence of COVID-19 effects on small-scale border traders

COVID-19 and border management

The first wave of the COVID-19 pandemic brought confusion to many African countries. This placed cross-border trade on hold as border activities were suspended (IOM 2020). The process led to the introduction of border restrictions and regulations to help manage cross-border transmission of the virus. It implied countries suspended their international flights and introduced mandatory quarantine periods for those entering the country. For instance, Kenya introduced a 14-day quarantine period for external flight passengers.

Table 6.1 shows the measures that were taken by various African countries to control their borders. They either closed their land and maritime borders or suspended their international flights.

Table 6.1 demonstrates the tension brought on by the pandemic within the region. Only South Sudan did not restrict land border crossing points, while the rest of the East Africa Community (EAC) member states did so. Five countries also closed their maritime border entry points, while only DRC restricted flights during the first wave of the pandemic. The regulators allowed only essential service providers and emergency services to move around to aid in the transfer of cargo across borders while limiting the movement of cross-border traders. However, the regulations required mandatory testing and proper sanitisation of the providers while limiting the number of passengers and crew members on board.

The regulations helped contain the rising viral infection and minimised death cases worldwide. For instance, the confirmed infections and death cases by WHO as of July 2020 stood at 493,708 and 11668, respectively. However, such regulations negatively impacted cross-border traders and significantly hindered economic activities. The confusion was so enormous that the regulations caused some disputes at certain border points.

TABLE 6.1: COVID-19 and border management.

Country	COVID-19 closed borders/suspended flights		
	Land borders	Maritime borders	Flights suspended
Burundi	Yes	Yes	No
DRC	Yes	Yes	Yes
Kenya	Yes	No	No
Rwanda	Yes	Yes	No
South Sudan	No	Yes	No
Uganda	Yes	Yes	No
Tanzania	Yes	No	No

Source: ECA calculations are based on the World Food Programme COVID-19 World Travel Restrictions database (as of 07 June 2020).
Key: COVID-19, coronavirus disease 2019; DRC, Democratic Republic of the Congo.

COVID-19 disruption to livelihood and food supply in Kenya

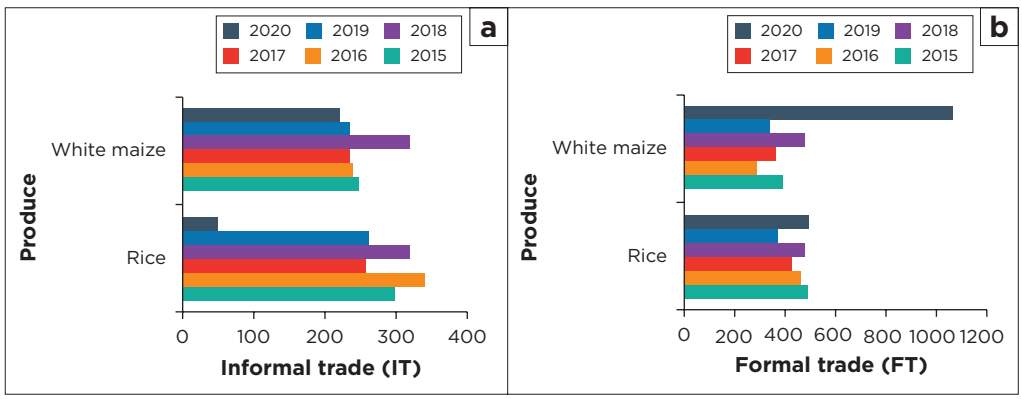
Significant cross-border trade activities in Kenya take place mainly with the Ugandan and Tanzanian counterparts. For instance, the benefits from trade balance for Kenya is mainly on industrially manufactured goods, while Uganda and Tanzania's trade balance is mainly from exports of agricultural produce, especially food trade.

The countries are among the EAC members that have suffered a great deal on the effects of COVID-19. The impact is more gravely felt by the ICBTs than the formal trade sector. Figure 6.2 indicates the weekly average shifts of informal and formal trade volumes for rice and maize at the Isebania border between Kenya and Tanzania.

Figure 6.2 clearly shows that the pandemic caused certain trade adjustments to take place. A significant volume of trade on maize and rice was shifted from informal to formal trade channels in 2020 because of the new COVID-19 regulations that vastly affected informal cross-border traders.

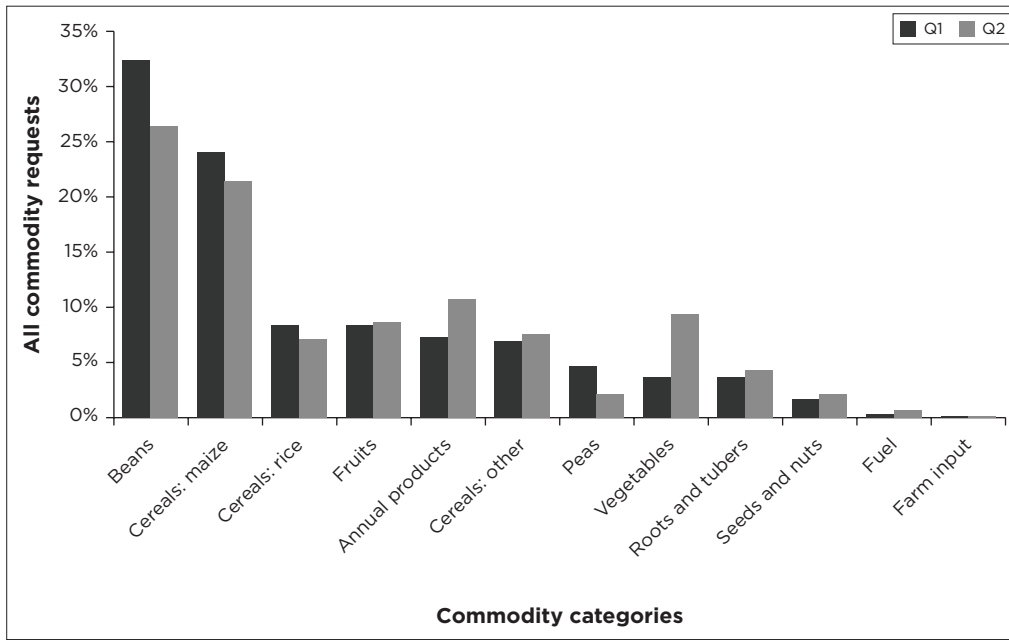
Apart from cereals and grains, perishable goods also constitute the largest share of ICBT amongst the many agriculture and food commodities traded in Africa. Kenya, for instance, is a net importer of most perishable commodities from Uganda and Tanzania. These include mainly fresh fruits and vegetables directly from the farms. These products do not require the costly border procedures which make formal trade impractical. In East Africa, there were disruptions in the shipment of fresh food under COVID-19 restrictions. This created food shortage at the point of demand and wastage at the point of production because of surpluses.

Figure 6.3 represents the most commonly traded commodities by cross-border traders within EAC member countries for the first and second quarters of 2020.



Source: FSNWG (2020).

FIGURE 6.2: Informal and formal trade at the Isebania border.



Source: Sauti Trade Insight (2020).

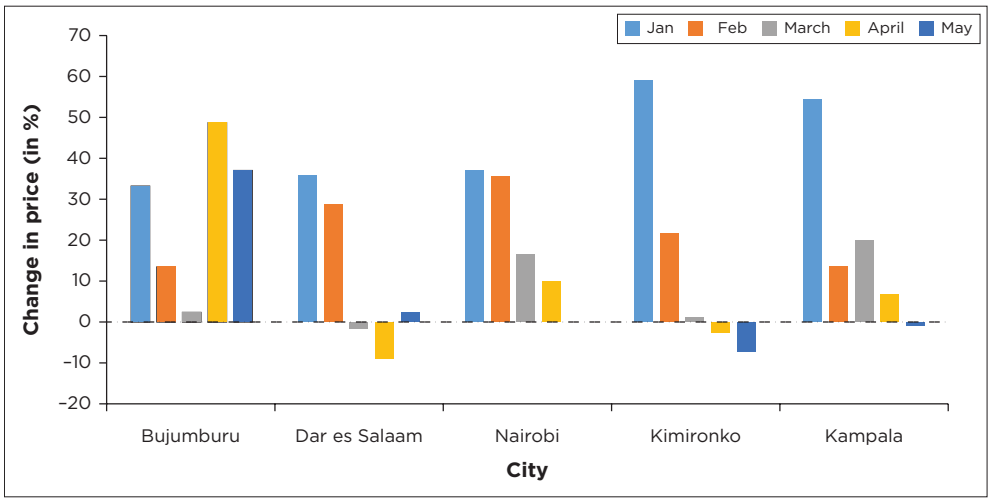
FIGURE 6.3: Most traded commodities within East African borders.

From Figure 6.3, the most commonly traded commodities by female cross-border traders are beans and maize. It is also indicative that because of the COVID-19 pandemic, the second quarter of 2020 experienced a sudden drop in trade in most traded commodities. However, vegetables and animal products showed a significant improvement in trade.

Because of their perishable nature, these goods are mostly transshipped at night when the temperatures are cool to minimise losses. However, curfew restrictions only allowing truck drivers to move during the day increase the risk of damage and losses. Transit time was also lengthened as the drivers were forced to pack and wait overnight for the curfew time to lapse. The increased transit time further leads to escalating commodity prices at the border as well as in the hinterland, as shown in Figure 6.4.

Figure 6.4 indicates high elasticity in maize prices comparatively, and yet the commodity is considered a staple to many families in Kenya and the greater region.

Much of the trade in livestock and food products also takes place in Kenya, especially with the northern neighbouring countries like Ethiopia, Somalia and South Sudan. This kind of trade requires strict sanitary and phytosanitary measures for its formality. However, most of the traders in this case are small-scale, and therefore these measures are an impediment to their existence. The strict measures therefore give cross-border traders incentives to circumvent



Source: ECA estimates are based on data shared by the Eastern Africa Grain Council for 2019 and 2020.
FIGURE 6.4: Percentage change of maize prices in East Africa, 2020 versus 2019.

official controls. The COVID-19 pandemic made governments enhance sanitary and phytosanitary measures at border points, and this greatly hampered ICBT activities.

Enhanced COVID-19 restrictions have also intensified bribes and illicit fines and created more checkpoints along the corridor nodes. Both formal and informal cross-border traders are adversely affected. These numerous checkpoints cause significant time delays, leading to bribery. By April 2020, the illicit collections and bribes had increased by almost 50% (Luke, Masila & Sommer 2020).

Kenya COVID-19 restrictions and survival of the informal cross-border traders

Kenya closed most part of its borders following the wake of COVID-19 regulations. However, this was not the case in some parts of the partner's borders. Some countries took longer to limit movement, making it easier for cross-border traders to shift and settle on the other side of the border (UBOS 2020). This allowed some limited opportunities for ICBT, irrespective of the COVID-19 regulations. Many traders who shifted from either the Kenyan or Ugandan side, however, found it difficult to cross back because of the closure of border points and were forced to live in precarious conditions.

The limited movement also complicated the transhipment of goods and services by traders on either side of the border. Some would therefore resort to paying truck drivers to buy and transport goods on their behalf. This involved certain risks. The arrangement implied compromising on the quality and quantity of consignments, and some would end up being duped by truck drivers entrusted by the consignees. For example, a truck driver at the Busia

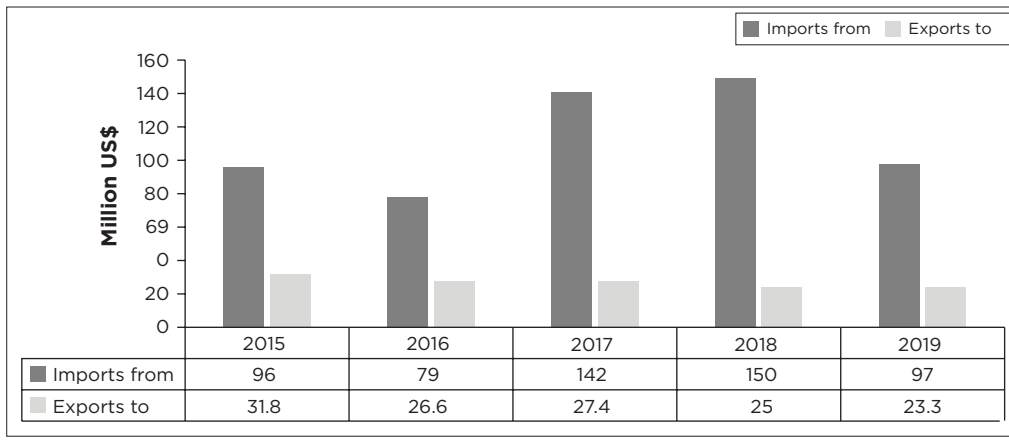
border would buy low-cost maize from the Ugandan side, thereby compromising on the informal cross-border trader's maize quality.

Figure 6.5 gives an indicative trend of the informal trade between Kenya and Uganda for the past five years. The analysis has used mirror data from UBOS (2020)

The results show that Kenya is a net importer of Ugandan products, especially agricultural output. This confirms literature indicating that Kenya is a net importer of both formal and informal goods from Uganda. The figure also indicates that 2019 trade figures might have gone down because of the first wave of COVID-19 impact. We can infer from the result that cross-border trade is an important source of livelihood for the border communities and vulnerable groups, including women and smallholder farmers.

Table 6.2 provides a glimpse of the nature of ICBT transactions at the respective Kenya-Uganda borders using mirror data.

From Table 6.2, we can conclude that much of the ICBT transactions take place mainly at the Busia border, followed by the Malaba border. The nature of traded commodities indicates that these border communities are subsistence



Source: UBOS (2020).

FIGURE 6.5: Informal trade between Kenya and Uganda (USD millions).

TABLE 6.2: Informal trade between Kenya and Uganda by border.

Year	Imports (US$ 000)				Exports (US$ 000)		
Border	**Busia**	**Malaba**	**Suam**	**Lwakhakha**	**Busia**	**Malaba**	**Suam**
2015	69 942	9 583	15 487	1 423	18 704	8 429	3 447
2016	66 060	9 308	2 492	1 266	18 479	5 593	1 135
2017	117,406	15 774	3 327	5 156	17 647	7 292	574
2018	133,130	11 157	3 722	1 943	15 697	5 831	1 749
2019	84 113	10 163	2 122	1 081	15 760	4 699	1 359

Source: Compiled from UBOS (2020).

farmers and small-scale traders and therefore require regular border crosses in order to essentially survive. The majority of the commodities are perishable agricultural products such as tomatoes, peppers, cassava, fish and eggs.

Therefore, the COVID-19 short notice to traders to prepare for border closures negatively impacted their livelihoods. The result sometimes leads to spoiled stock and hefty losses for the traders. For instance, in Kenya, the cessation of movements in and out of cities was abruptly announced as farmers were en route to markets with truckloads of produce. These farmers were not allowed to pass police barriers and were forced to abandon their harvest for a full season and return home (Luke et al. 2020).

For instance, announcement of COVID-19 restriction brought into a halt the Malaba border operations subjecting truck drivers to long waiting times. Some suspended the journey while others abandoned the cargo because of their perishable nature and made a return journey to the hinterland.

The loss of stock and sales because of cross-border trade COVID-19 disruptions also impact negatively on revenue and the ability to pay back loan premiums. The financial stress is so grievous in informal cross-border traders who rely mainly on expensive lending schemes that are not banked. For example, many female cross-border traders participate in table banking that offers short-period loans to acquire merchandise to trade and pay back in the evening. Defaults because of unsold stock as a result of COVID-19 restrictions led to escalated interest rates and a spiralling of the debt (Luke et al. 2020).

Conclusion

The Kenyan Government, through the relevant ministries, has adopted several mechanisms to help cushion the small and micro enterprises and the economy against COVID-19 damaging effects. Some of the key policies undertaken include the following:

1. A reduction of the Central Bank Rate by 1% by the Monetary Policy Committee to allow commercial banks access loans and cushion the borrowers from the effects of COVID-19.
2. The Marginal Propensity to Consume (MPC) also reduced the Cash Reserve Ratio by 1%, thereby enhancing the available liquidity to the commercial banks to aid borrowings.
3. The Central Bank of Kenya (CBK) extended the maximum tenor of repurchase agreements (REPOs) from 28 to 91 days to allow flexibility in liquidity management.
4. The CBK further announced a set of emergency measures to facilitate increased use of mobile money transactions to curb the spread of the virus

through cash handling by waiving charges for mobile transactions up to KSh1000 and increasing transaction and daily limits for mobile transactions.
5. The government also reduced the turnover tax rate from the current 3% to 1% for all Micro, Small and Medium Enterprises (MSMEs).
6. There was also the reduction of the VAT from 16% to 14% to ease the tax burden on consumables.

The Kenya government also, being a member of the EAC, participated in the publication of COVID-19 border guidelines. But, to enhance the perception of COVID-19 border regulations and how to safely trade, government authorities should develop simplified step-by-step guides for small cross-border traders and truck drivers. Their aim should focus on easing the implementation challenges at borders.

They should make efforts to widen the scope of guidelines to facilitate the movement of merchandise across the border. This will create more business opportunities and further help kick-start economic recoveries towards the 'new normal'. Priority should be given to the speedy movement and clearance of essential goods and services.

Any new updates or advancements in border regulations should be made public and announced in advance to allow stakeholders to adapt to avoid conflicts at border posts. This should include sharing updates on test certificates for drivers and other essential service providers at designated testing points and border points.

Kenya and the greater African continent, through the African Union (AU), should develop a common COVID-19 protocol for the region as the region is characterised by membership overlaps. This will help harmonise and coordinate the implementation of trade and transport-related regulations.

Mobile banking and cashless payment systems should be encouraged to control the spread of COVID-19 through cross-border trade. Mobile lending platforms should also be encouraged to facilitate credit transfers to cross-border traders. Similar guidelines should be encouraged and issued in other countries and regions as well.

There is a need for the government to design a system that can be used to capture ICBT data and integrate it into the national database. However, caution must be taken to ensure that the data is not being used against informal traders. They should develop a strong policy for the formalisation of ICBT activities.

More appropriate information and customs regulations should be provided to protect small-scale and female traders, especially during the pandemic.

Chapter 7

Kenya's economic recovery strategies

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Introduction[12]

This chapter discusses the strategies that Kenya can use on its path to economic recovery post-coronavirus disease 2019 (COVID-19). The Kenyan government posits an optimistic view of the economy recovering in 2021, as shown by the 2020–2022 Economic Recovery Strategy. However, it is important to remember that the COVID-19 pandemic is not yet over, as most countries of the world, Kenya included, are still experiencing the new waves of the COVID-19 pandemic. Restrictive measures such as curfews and lockdowns, among others, may be necessary to curb the spread of the pandemic. However, they will have negative economic and social consequences both for the economy and the citizens. It is important to

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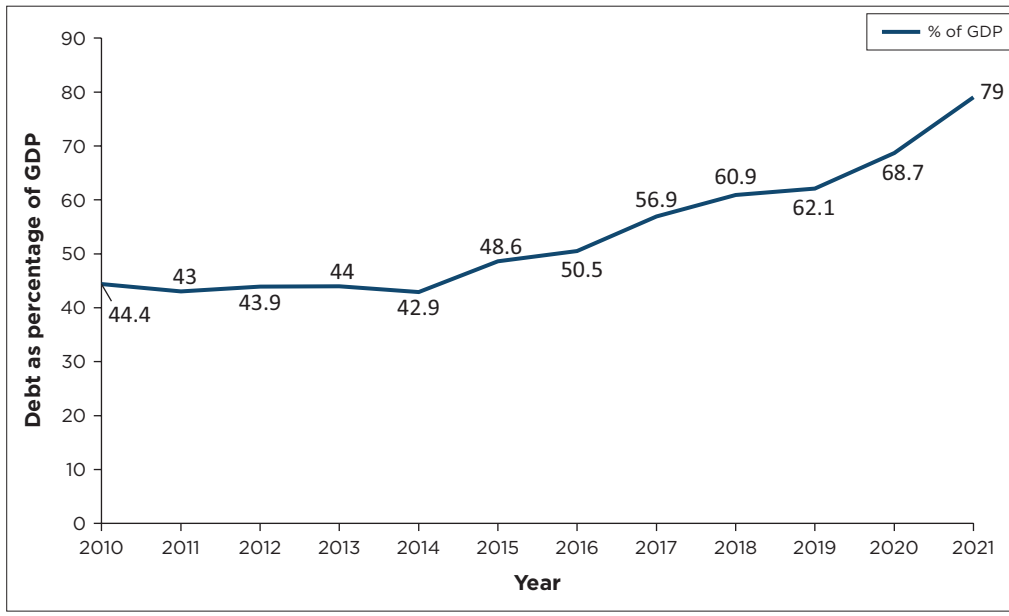
note that the initial Kenyan government socio-economic stimulus programme that provided lump-sum payments in the form of cash transfers to the most deserving citizens, tax rebates and other measures are no more. The situation of most Kenyan firms, individuals and households still remains dire. Hence, the government needs to put in place strategies that can protect firms, individuals and households against the negative consequences of the pandemic (Kiriti-Nganga 2022).

Continued use non-tariff measures (NTMs) by countries to curb the spread of new COVID-19 variants exposes Kenya to the risk of weak external demand for its exports and falling international tourist arrivals. This has increased public expenditure pressure by the government to protect the public and private sectors against continued reduced aggregate demand and continued rise in the cost of living. This means that the Kenyan government needs to come up with monetary and fiscal policies and strategies to maintain macroeconomic and fiscal stability, as well as accelerate the pace of economic growth by achieving resilience and sustainability of economic growth and development (Kiriti-Nganga 2022).

The policies and strategies are expected to lessen the adverse negative impacts of the COVID-19 pandemic and fasten the pace of the opening up of the economy. They are also designed to accelerate economic recovery and the attainment of sustainable economic growth and development. Some of the strategies should be implemented in the short run, others medium and others in the long run. It is important to note that the COVID-19 pandemic found Kenya with a huge budget deficit. The total public debt in June 2019 was KSh5.8tn rising to KSh6.7tn in June 2020 and KSh7.7tn in June 2021 (The National Treasury and Planning 2021a). Kenya's fiscal policy space has changed significantly in the last 10 years. Kenya went on an expansionary fiscal policy driven by huge spending on infrastructural development. As a result, gross public debt increased from 44.4% of gross domestic product (GDP) at the end of 2010 to an estimated 79% of GDP at the end of 2021, as shown in Figure 7.1. The International Monetary Fund (IMF) (2010) recommends that ratios of public debt-to-GDP not exceeding 40% for developing countries.

The increased debt levels have been driven by high deficits. In 2020, Kenya's debt problem was exacerbated by the COVID-19 global shock. The increase in the budget deficit and public debt was a result of a significant decline in tax revenues coupled with the high costs of dealing with health and economic issues because of the COVID-19 pandemic. The reduction in tax revenues because of the pandemic implies that Kenya faces significant fiscal pressures because of increased expenditure on health and other socio-economic issues to mitigate the impact of the pandemic. The strategies proposed in this chapter would require the Kenyan government to walk a tightrope of increasing expenditure on health as well as on social protection against a background or rising public debt.



Source: IMF (2021).
Key: GDP, gross domestic product
FIGURE 7.1: Kenya's public debt percentage of gross domestic product (2010–2021).

Short-term strategies

Mass vaccination

Without the Kenyan community achieving health immunity against COVID-19, then there are few prospects of the economy recovering soon. No one is safe until everyone is safe. The level of COVID-19 vaccination in East Africa and in Kenya is low, with only 1,699,584 (5.7%) of the Kenya's total population having been fully vaccinated by 27 October 2021. Kenya has been depending on vaccination dose donations from developed countries because of shortages experienced by the usual vaccine producers such as India. There are no signs that this shortage will be over soon unless there are concerted efforts to produce vaccines locally. There is therefore a need for collective action in the production of vaccines (Kiriti-Nganga 2022). Rwanda has started the production of vaccines not only for its citizens but also to supply the East African market.

The prospects for Kenya's economic recovery depend on the progress of the vaccination effort by the Kenyan government. The Kenya government, through the health ministry, should prioritise vaccination in the short term and it has pledged to have 10 million people vaccinated by the end of 2021 and 26 million by the end of 2022. The government has already ordered 13 million doses of the Johnson & Johnson vaccine and received donations of COVID-19 vaccination

doses from different countries. The Ministry of Health has already launched a National Vaccination Plan in an effort to curb the spread of COVID-19 (Kiriti-Nganga 2022).

Innovative COVID-19 preventive measures

There is a need for accelerated vaccine deployment in different counties and the use of innovative actions on containment and preventive measures, such as continued campaigns to rally the citizens to observe basic hygiene measures like wearing masks, washing hands and social distancing without resorting to lockdowns with the unintended consequences of shortages, unemployment and recession (Kiriti-Nganga 2022). Pandemic preparedness by different government agencies can identify production and supply bottlenecks and come up with alternatives or measures to remove bottlenecks, such as encouraging local production of products that are essential in dealing with a pandemic in case of anticipated shortages. Innovative strategies help bolter prevention and offset delays from external suppliers. This worked well in Eritrea, where the United Nations Children's Fund (UNICEF) Eritrea's internal contingency plan had identified bottlenecks to transport and supplies and immediately began looking within the country for alternative channels of supply and production (www.africa-newsroom.com).

Quality and access to health services

There is a need to strengthen the quality of and access to health services. Kiriti-Nganga (2021) found that COVID-19 found Kenya's health system not fully prepared for a pandemic. The government therefore needs to increase the level of funding of the health sector to the recommended 15% of the government budget according to the Abuja Declaration. The funds should be used to increase the infrastructure needed to deal with pandemics, such as intensive care unit (ICU) or high dependency unit (HDU) facilities, training and employment of health personnel to increase the level of preparedness for any other pandemic in Kenya and to reach the norms recommended by the WHO. It is also important that all health facilities have all that is needed to handle emergencies, including pandemics, starting with 24-hour ambulances, outpatient emergency units that are well-equipped with not only personnel such as anaesthetists and surgeons but also 24-hour laboratories and radiological services. All health facilities should have all the required items to prevent infections for both frontline workers and patients seeking services. At the same time, there is a need to ride on the level of awareness of increased levels of hygiene among Kenyans by making sure that water for drinking and hand washing is available in every household, as this will lead to a reduced burden of disease for households and the health sector. Public health officers should continue with the momentum of educating people in their households and at the community level on cleanliness and hygiene (media.africaportal.org).

In case a home-based care strategy is used for asymptomatic COVID-19 patients, it should be accompanied by an ambulance system equipped with oxygen to evacuate patients whose conditions deteriorate while at home. It is also important to increase the number of health facilities at every ward to reduce the pressure on referral hospitals. This will ensure that primary health care is accessed at these health facilities. The facilities should be well-equipped with ICU and HDU facilities, complete with oxygen and ventilators. They should also have trained personnel to handle cases before referring them to the national referral hospitals. An example is the community midwifery model (CMM), whereby the lives of women who do not deliver in an institution are not endangered. At the same time, the government needs to increase funding for the National Health Insurance Fund to not only cover illnesses and complications caused by a pandemic but also increase the number of people who have some form of health insurance as this will reduce the out-of-pocket expenses incurred mainly by the lower income households that makes them fall even further into poverty (media.africaportal.org). This entails implementing Universal Health Coverage and the health facilities treating patients getting refunded by the National Health Insurance Fund.

Subsidies

To stop the spread of COVID-19 and to protect health workers from getting infected as they attended to patients, hand washing, use of personal protective equipment (PPE), masks, sanitisers and social distancing were recommended, which led to an increase in demand for these items. The directive that people work from home meant that there was a need to have electricity and internet facilities at home. Closure of public places because of the COVID-19 lockdown led to the loss of jobs and loss of household income, leading to increased poverty as prices of essential items increased to unaffordable levels. A number of firms closed down because of the increased cost of doing business as Kenya's GDP slumped to an all-time low. Taking into consideration the adverse socio-economic impacts of the COVID-19 pandemic on the health and livelihoods of Kenyans and especially the most vulnerable groups in society, the government should adopt strategies to reduce these adverse impacts. To maintain lives and livelihoods, Kiriti-Nganga (2022) proposed that the government should impose subsidies on essential services and goods such as energy, water, food, transport, PPE, masks and internet data services. This would reduce the cost of doing business as well as increase demand for goods and services which would be a boost for firms to produce more to meet the increased demand. Recovery of firms would increase the amount of tax revenue available to the Kenyan government as it grapples with fiscal challenges. As the economy improves, these subsidies can be eased off slowly but not abruptly to allow citizens to adjust (Kiriti-Nganga 2022).

Medium-term strategies

In the medium-term Kiriti-Nganga (2022) contends that it is important that the Kenyan government embarks on the elimination of inefficiencies in spending on social and investment projects, creating job opportunities and improving the welfare of Kenyans. This entails prioritisation of fiscal consolidation even as it tries to balance the needs of its poor and vulnerable citizens who may have been rendered unemployed by the COVID-19 measures and fiscal sustainability. Hence the government needs to continue with the economic stimulus programme in order to save the lives and livelihoods of its people while at the same time preparing the economy for a stable economic growth path. Some of these medium-term strategies are:

Use of expansionary fiscal policies

As shown earlier, COVID-19 measures led to firms laying off workers while other firms closed altogether because of reduced aggregate demand. This led to high levels of unemployment, reduced income and poverty (Kiriti-Nganga 2022). The government could use expansionary fiscal policies which would increase the level of aggregate demand through either increases in government spending or reductions in taxes. An expansionary policy can do this by increasing consumption by raising disposable income through cuts in personal income taxes or payroll taxes; increasing investments by raising after-tax profits through cuts in business taxes; and finally, increasing government purchases through increased spending by the government on final goods and services and raising government grants to state and county governments to increase their expenditures on final goods and services.

In the Kenyan case, we recommend strategies such as lower personal taxes like income tax, as well as indirect taxes like value-added tax (VAT). This will give households more disposable income, which when spent on domestically produced goods will increase aggregate demand hence prompting firms which already had excess capacity to produce more to meet the increased demand (Kiriti-Nganga 2022).

Medical devices and supplies such as physiotherapy accessories, treadmills for cardiology therapy and treatment, medical ventilators and the inputs for the manufacture of medical ventilators, electro-diagnostic apparatus, diagnostic or laboratory reagents, breathing appliances and gas masks, among others, are exempted from import duty. However, there is currently a 16% VAT rate on the procurement and sales of medical devices in Kenya. Providers of normal medical services are VAT-exempted entities. For these buyers, there is no reverse charge method for the VAT paid to their suppliers. This is a severe cost driver for procuring and buying medical devices and supplies. Next to VAT, it should be noted that doing business in Kenya involves

paying various levies which could add up to an additional 7.5%. Value-added tax and levies could increase the purchase price of medical products and equipment. There is therefore a need for the government to consider the reduction of taxes or removal of levies on essential medical products and equipment. However, this strategy would lead to reduced tax revenues, unless the government cuts down on expenditure on long-term capital projects such as infrastructure and concentrates on other expenditures such as health care and tourism (Kiriti-Nganga 2022).

Temporary basic income to households of laid-off workers

Giving a temporary basic income to workers who have been laid off from work would hedge against them falling into poverty as well as boosting demand for goods and services hence preventing firms from closing down altogether (Kiriti-Nganga 2022). The temporary basic income, as recommended by Gray & Ortiz-Juarez (2020, cited in Kiriti-Nganga 2022), is supposed to be made on an individual basis, regardless of household composition. This would help in avoiding any assumption of economies of scale and unintended within-household discrimination that could be particularly harmful for female empowerment and control of economic resources.

The amounts given per individual beneficiary will help them cover essential spending, internet connectivity in order to support education and those working from home, cover costs associated with childcare and assist households in preventing the depletion of productive assets (Kiriti-Nganga 2022). George, María and Eduardo (2022) found that temporary basic income to vulnerable workers is within reach of most developing countries as it comprises a small proportion of their GDP.

Job retention programmes

Kiriti-Nganga (2022) found that some firms laid off workers since they could no longer retain them in employment as the economy plunged into a recession. A programme where taxes are reduced taxes or firms are compensated with income equivalent to wages/salaries retained during this time would provide an incentive to allow for continued operation and rehiring of workers by the firms. Organization for Economic Co-operation and Development (OECD) countries have been using job retention programmes as the main policy tools to prevent a rise in unemployment and the social fallout of the COVID-19 pandemic. For this policy tool to succeed, it is important for the government to be on the lookout to make sure that programmes are not downscaled too quickly or too slowly and becoming obstacles to economic recovery. When the economic and health situations improve, job retention programmes should

be better targeted to jobs that are viable but at risk of being terminated and place a greater focus on supporting workers such as females who are at risk of becoming unemployed, rather than their jobs (OECD 2020b, cited in Kiriti-Nganga 2022).

In countries such as France, employees who are forced to work fewer hours are eligible to receive 70% of their gross wage from the employer. However, during the COVID-19 pandemic, most French employers did not bear any cost of hours not worked as the government reimbursed what they paid to employees to a maximum of 4.5 times the hourly minimum wage. Australia and New Zealand, on the other hand, introduced a lump-sum subsidy which acts as a minimum wage for all employees. Those employers who qualify are expected to continue paying as usual for hours worked or pay the level of the subsidy if this is higher (OECD 2020b).

Restructure public debt and fiscal consolidation

As mentioned earlier, COVID-19 found Kenya in a situation of rising public debt. The structure of Kenya's external (public and publicly guaranteed) debt changed significantly between 2010 and 2020, with increased uptake of commercial debt to improve Kenya's presence in the international financial markets to diversify Kenya's sources of external financing.

However, interest and principal repayments on external debt are made in foreign currency, and this can deplete a country's foreign exchange reserves as well as depreciate the domestic currency. The relatively high level of Kenya's external indebtedness and the rising debt burden has serious implications for the country's economic recovery. It is now imperative that the government restructures public debt with longer maturity loans, and any new external loans should be on a concessional basis in order to reduce the amounts paid in debt service. This would give Kenya more time to repay the loans while at the same time leaving the government with enough revenue to meet local needs. There is a need for the Kenyan government to further adopt a mix of borrowing instruments, such as treasury bonds of medium to long-term tenor, as financing instruments for the domestic market (The National Treasury and Planning 2021b). At the same time, there is a need to reduce the amount of government borrowing to make the debt sustainable while making sure to utilise the available national resources (Kiriti-Nganga 2022) efficiently.

The ratio of public debt-to-GDP and the proportion of fiscal deficit to GDP should be reduced through fiscal consolidation in terms of mobilising revenue and rationalising expenditure. The effect of fiscal consolidation requires entrenching efficiency in expenditure and transparency in the use of funds. This will ensure that government expenditure is directed to the areas where it is most needed while at the same time freeing up resources for private investment (Kiriti-Nganga 2022).

Long-term strategies

Kiriti-Nganga (2022) argues that the government should take the COVID-19 pandemic as an opportunity to learn how to respond to other epidemics in the future. The government needs to look into the future and assess opportunities that it can take advantage of post-pandemic in order to build resilience and diversify its economy. It is important to remember that the COVID-19 pandemic found the economy facing various economic challenges, but the pandemic worsened the country's economic stress levels. This section looks at the strategies that the government can use to address some of the structural economic challenges that it has been facing, as well as to explore post-COVID-19-pandemic opportunities it can take advantage of in its path for sustainable economic growth and development.

Enhance local production

The disruption in global value chains (GVCs) and the resulting shortages experienced by both households and firms because of the COVID-19 pandemic exposed the risks associated with over-dependence on a few global trading partners for the supply of services and goods. This was felt more in the importation of pharmaceutical/medical supplies as well as equipment to contain COVID-19 after the source-countries imposed export bans and restrictions on such goods as well as food products. This experience gives Kenya an opportunity to restructure its economy towards more domestic production and achieve its goal of being self-reliant by becoming both the consumer and producer of goods and services. This means that Kenya must move away from over-dependence on imports and direct efforts towards supporting locally produced goods in order to retain profits and support the creation of jobs and economy-building initiatives (Thakkar 2021 cited in Kiriti-Nganga 2022).

The onset of COVID-19 set a new record for the reshoring of manufacturing operations and sourcing by various countries, with the United States of America (USA) having a total of 109,000 jobs reshored and 51000 for foreign direct investments (FDIs). Most of the reshored operations include those dealing with PPE and pharmaceuticals as well as manufacturers who experienced problems of shortages with offshore sources. Reshoring of production and encouraging local production of these items acts as a risk mitigation strategy, creates resilience and helps in increasing the speed of responsiveness to local demand. Also, encouraging reshoring creates local jobs, reduces unemployment, reduces poverty caused by the COVID-19 pandemic, leads to a better balance of trade and reduces budget deficit caused by increased borrowing to import pharmaceuticals and COVID-19 vaccines. Lack of local productive capacity and expertise may make it difficult to re-shore or to produce domestically or even achieve the required resilience

in case of another pandemic (Kiriti-Nganga 2022). Kenya's growth is vulnerable to external shocks because of its weak productive capacities. According to United Nations Conference on Trade and Development (UNCTAD)'s Productive Capacities Index (PCI), Kenya had an overall PCI score of 25.7 in 2018, ranking 149th in the world (UNCTAD 2021). These trends suggest that Kenya needs to adjust its strategy to drive the productive transformation of the economy and maintain an inclusive and sustainable growth path. Productive capacities include inputs necessary for business operations, such as skilled workers, energy, transportation and information and communication technology (ICT) services. The availability and quality of these inputs influence whether a firm can compete, innovate and grow. The implementation of regional trade agreements such as the Africa Continental Free Trade Area (AfCFTA) can help Kenya implement key economic reforms needed to accelerate the country's economic recovery. This is through helping attract more and different types of FDIs, encouraging more competition, spurring innovation and technological upgrading as well as providing greater access to skills and technology, and further opening up market access for Kenya's export of goods and services and creating more jobs for Kenyan workers. The AfCFTA can also bring benefits through reforms in new areas that were not included in past regional trade agreements. Regional trade agreements structure trade in a way that can increase domestic production capacity, promote an upward harmonisation of standards, improve institutions, introduce technical know-how into the domestic market and increase preferential access to desirable markets (DiCaprio, Santos-Paulino & Sokolova 2017). Regional trade agreements such as the EAC and the AfCFTA are discussed later in this chapter.

Leveraging digital technology

Kenya is a leader in mobile money, not just in Africa but globally. M-PESA presents an opportunity, for instance, to revolutionise inclusion and inclusive growth. The use of digital technology can fasten Kenya's speed of economic recovery after COVID-19 devastating effects. Digital solutions such as telecommunication, online customer service, on-demand delivery of goods, virtual surveillance, cloud computing, and tech-supported production, tele-working for office workers, among others, can address the issue of inclusion as well as youth unemployment. Digital gig economy apps have been shown to be giving Kenyans opportunities for self-employment as well as aggregation of demand for services and goods (Kiarie-Kimondo 2020 cited in Kiriti-Nganga 2022).

Hence there is a need to support firms' liquidity and digital capabilities as well as improved access to information to safeguard them from

permanent closure. This would entail investment in electricity, digital tools and infrastructure to make internet-enabled devices and internet services affordable and accessible to the majority of Kenyans. The Kenya National Bureau of Statistics (KNBS) (2019) report on the population census shows that only 50.4% of Kenyan households have access to electricity, and 19.3% have access to solar power. At the same time, smartphone penetration is only 27%. According to World Bank (2022), only 30% of Kenyans had access to the internet in 2020 because of the high cost of internet access. According to a survey done by a United Kingdom (UK) firm Cable.co.uk, Kenyans pay more to access the internet compared to their peers in the East African Community member states. Out of 230 countries analysed, Tanzania is ranked at position 32, Uganda at position 86, while Kenya and Ethiopia are ranked 118 and 94, respectively. In Tanzania, internet consumers pay an average of US$0.75 for one gigabyte of data, compared to a consumer in Uganda paying US$1.56 and Kenya US$2.25 for one gigabyte of data.

Electronic commerce

Electronic commerce has been shown to be a cog in the engine driving most economies. Therefore Kiriti-Nganga (2022) proposed that Kenya should fully embrace online services to connect supply chains in order to facilitate merchandise trade. Support economic growth and recovery will come from telecommunication, information, business, financial and audiovisual services that are vital for online supply, while distribution, transport and logistics will facilitate merchandise trade.

The Kenyan government and other trading partners should foster the inclusion of micro, small and medium enterprises (MSMEs) as they automate and streamline border procedures and simplify fees. They should also accelerate digitalisation and simplification of import, export and transit procedures such as paperless trade. This would require these governments to expedite the advance electronic lodging of documents, electronic payment of all trade-related taxes, digital certificates and signatures, as well as automation in the processing of trade declarations 24/7 (Kiriti-Nganga 2022). This means, therefore, that there should be acceptance by trading partners of digital trade-related documents, including sanitary and phytosanitary (SPS) certificates, in place of physical copies as well as the implementation of the single window in order to speed up border procedures and allowing for ‘one-stop shop’ processing (Kiriti-Nganga 2022).

However, so far, Kenya does not have a policy or legal framework for e-commerce hence the need to develop and implement a policy and legal framework for e-commerce.

Improvement in standards for competitiveness

The Competitive Industrial Performance (CIP) shows the ability of a country to produce and export manufactured goods competitively. It provides a yardstick against which Kenya can compare its manufacturing competitiveness on a global level. The CIP Index Report 2020 ranks Kenya in position 115 out of 152 with a score of 0.009 against a world average of 0.067. This is lower than other African countries, though high compared to its East African counterparts (UNIDO 2020). On the other hand, the World Economic Forum's (WEF) (2019) Global Competitiveness Index ranks Kenya at position 95 out of 141. Kiriti-Nganga (2022) argues that for the products coming from Kenya to compete in both the regional and global markets, they must improve product and process standards while at the time striving to meet the international required standards of various products, vaccines included. Hence Kenya needs to strengthen technical regulations, develop and implement these standards, conformity assessments, and metrology, have its laboratories accredited and provide enabling infrastructure for industries to grow. This can be done by taking advantage of the World Trade Organization (WTO) Trade Facilitation Agreement (TFA), which provides support for developing economies countries like Kenya through the Standards and Trade Development Facility (STDF), which helps imports and exports to meet SPS requirements for trade based on international standards. Kenya also needs to reduce the behind the borders (BTB) regulations that act as barriers to trade in services and, in the process, impede not only foreign suppliers from entering the market but also prevent local service suppliers from becoming competitive in export markets (Nordås and Kox [2009] cited in Kiriti-Nganga 2022).

Diversification of the economy

A diversified economy does not rely on a few sectors, relies on a wide range of profitable sectors, has a strong external as well as internal focus and does not overly depend on one good for export. Economic diversification is important for sustainable development since it can reduce economic volatility and improve economic performance and activity (Rabih et al. 2008).

Economic diversification shifts an economy away from a single income source towards multiple sources as well as to a wide range of sectors and markets. It is a structural transformative and inclusive strategy that involves all sections of the population and, in the process, encourages positive economic growth and development with the aim of improving and sustaining economic performance and growth, poverty reduction, building resilience against product, price and income volatility and creating job opportunities (Nourse 1968; United Nations Framework Convention on Climate Change [UNFCCC] 2016).

Kiriti-Nganga (2022) contends that Kenya, like other African countries lacks economic diversification, with most of them producing and exporting only a few agricultural or mineral products, concentrating on the lowest level of the value chains, producing and exporting unprocessed products and importing and exporting to only a few countries. This increases their vulnerability to external shocks such as COVID-19 that undermine their sustained economic growth and development.

Kiriti-Nganga (2022) found that the closure of borders to combat the spread of COVID-19 in 2020 disrupted production value chains, and Kenya found that it could no longer access the products and inputs that it previously imported leading to shortages of supplies such as disease testing reagents, masks, ventilators, pharmaceutical drugs as well as vaccines as the producing countries used export restrictions to prevent shortages locally. Hence, diversification and developing manufacturing are important for Kenya in order to foster growth through the development of manufacturing, to be less vulnerable to shocks, and to be able to produce essential goods within its boundaries so as to be less dependent in emergencies like COVID-19.

Kenya still relies on a few export sectors, a few export products, and a few export destinations, while its economic growth is generally driven by traditional sectors such as agriculture and services. It is important for Kenya to diversify its economy in order to increase its sources of income and growth. Kenya's recovery depends on product and export diversification. A study conducted by the United Nations Economic Commission for Africa (UNECA), Trade Mark East Africa (TMEA) and the African Economic Research Consortium (AERC) (2021) found that the severity of the COVID-19 crisis in the first three months of the pandemic on intra- and extra-regional trade was uneven. The study found that Kenya's intra- East African Community (EAC) trade exhibited greater resilience compared to its extra-EAC trade.

Kenya, according to Kiriti-Nganga (2022), needs to be more inclusive among the participants in productive activities, diversify its export destinations, import sources, export products and add value to export products in order to contribute positively to its economic growth and development.

The United Nations Development Programme (UNDP) (2011) defines export concentration as a situation where a country focuses its trade on only a few goods and a few trading partners. On the other hand, export diversification is the degree to which a country's exports are spread across a large number of products and trading partners. UNCTAD (2018) and Dennis and Shepherd (2013) argue that a country can diversify its exports by changing the composition of the basket of goods being exported, adding value to existing exports, or enhancing them through technology and innovation.

According to Rabih et al. (2008), diversification of exports lowers a country's export volatility as it creates more quantity and variety of exports as

well as buyers and, in the process, contributes to sustainable growth and development. Export diversification reduces foreign exchange volatility, leads to more job creation and employment, better pattern of growth and income distribution, increased GDP and improvement in the quality of manufactured goods because of more value-addition. One or few export goods are more prone to elastic or unstable demand, unlike where a county has a diversified basket of export goods. Hence diversification of export would reduce instability in export earnings and fluctuations in imports and capital. Therefore, Kenya needs to diversify the variety of export products, increase the number of export markets (market diversification) as well as increase the quality of export goods. As mentioned earlier, Kenya exports mainly primary goods, which are associated with exogenous price shocks, export instability and fluctuation in terms of trade, which implies that diversification of exports will provide Kenya with a hedge against these price shocks. With the diversification of exports, Kenya's road to economic recovery and pattern of growth and development will be more inclusive and sustainable.

More inclusive and broad-based economic growth can be triggered by the production of more sophisticated exports as a result of higher technology-intensity methods of production. Osakwe, Santos-Paulino and Dogan (2018) contend that as long as a country has the right macroeconomic conditions as well as structural factors, high technology-intensity and high sophistication can act as engines of growth as they can promote inter-sectoral and extra-sectoral linkages rather than isolated enclaves.

Kenya also needs to have more sources of imports (multiple supply chains) to ensure that the free flow of trade is not interrupted because of unforeseen circumstances such as COVID-19. An interruption or delay in the shipment of a single intermediate input in the supply chain can stop the entire production in a factory, as happened during the initial months of the COVID-19 pandemic. Hence multiple-source supply chains allow producers to respond to unexpected spikes in demand. The reliance on multiple-source supply chains underscores the need for policy-makers to commit to reducing trade restrictions.

Hence, Kenya needs to diversify and transform its economy by strengthening the productive capacity of the private sector to transform not only raw materials locally but also improve domestic resource mobilisation and reduce the continent's dependence on external financial flows. Essentially, diversification of the economy is a prerequisite for Kenya to achieve positive, inclusive and sustainable economic growth as it strives to recover from the negative effects of COVID-19.

It is important to remember that diversification is important for sustained economic growth and for economic resilience against the COVID-19 pandemic. Berthelemy and Solderling (2001) and Al-Marhubi (2000) argue that a diversified economy can lead to increased labour productivity and

human capital. In the process, this can contribute to economic growth by increasing the number of productive sectors, stability in export revenues, increased investment opportunities, reduction in investment risks and eventual sustained economic growth and development. Hammouda et al. (2010) found that diversification deepening leads to improvements in total factor productivity, showing that Kenya can scale up its economic growth by raising factor productivity through the pursuance of policies that enhance economic diversification.

Such policies are those that help in overcoming constraints to economic growth arising from factor accumulation and hence lead to exports and product diversification (Kiriti-Nganga 2022). The author argues that Kenya should aim at increasing its levels of both domestic investments as well as FDIs, addressing governance issues such as corruption and ethnic conflicts, especially during elections or because of competition over resources, addressing the rising fiscal deficit and lack of fiscal space through effective mobilisation of domestic resources, ensure macroeconomic, monetary, industrial trade policies that foster diversification in order to contain inflationary pressure and ensure regional value chains (RVCs) and GVCs are not disrupted by the prevailing COVID-19 pandemic (Kiriti-Nganga 2022).

Green economy

The effects of COVID-19 and the measures to combat it have led to a decline in economic growth, decreased trade, low business revenues and massive layoffs not only in Kenya but in the whole world (Kiriti-Nganga 2022). The pandemic gives Kenya an opportunity to increase the rate of structural transformation by coming up with stimulus packages and new investments that are aligned with climate change to create a green economy and build an economy that is more resilient than before the onset of COVID-19 (Kiriti-Nganga 2022).

For Kenya's economic recovery to be effective and sustainable, it needs to include all dimensions of sustainable development, including issues of environmental and their effects on the most vulnerable people, including females, children, persons with disabilities and marginalised communities. It is therefore important to have a socially inclusive COVID-19 recovery strategy which is in line with actions on climate change and environmental protection (Kiriti-Nganga 2022). Green economic policies and laws are vital to transitioning into economic sectors that ultimately build a resilient economy. On 23 May 2020, during the seventh presidential address on the COVID-19 pandemic, the President announced an eight-point economic stimulus programme, one point being that Kenya's parliament was considering budget allocations geared towards mitigating the impact of deforestation and climate change. The stimulus package also proposed allocating funds to support community

conservancies and the Kenya Wildlife Service.[13] Hence Kenya needs to have policies that will ensure the equitable use of environmental resources and the promotion of those economic activities that will preserve biodiversity (Kiriti-Nganga 2022). Kenya aims to reduce its greenhouse gas emissions by 32% by the year 2030. This will only happen through increased finance for adaptation, particularly in the management of water resources, disaster risk management and conservation of forest cover. Kenya also needs to increase investment in key mitigation sectors such as transport as well as give subsidies and providing incentives to the private sector, which has a major role in closing Kenya's investment gap. Hence provision of incentives and subsidies and creating an attractive and enabling environment for private investment in the transport, forestry, water, land use, and waste sectors are very important. For example, to reduce fossil energy and cutting of trees for firewood and charcoal, the government should consider subsidising liquefied petroleum gas to increase its usage among Kenyan citizens. Kenya has already proposed incentive schemes in the national strategy for achieving and maintaining over 10% tree cover by 2022. To increase the production and use of renewable non-fossil energy, the Kenyan government should consider subsidising the production of solar panels and their installation in homes, subsidising the production of solar and wind energy, among others, including water harvesting as well as encouraging tree planting and reforestation. There is also a need for international public finance to focus on more water, forest, energy and sanitation sectors. Kenya can use innovative financing models to mobilise domestic as well as FDI into key sectors, such as forestry, transport, and water.

There is also a need for improved coordination and reporting between Kenyan actors at all levels: Ministries, agencies, county-level government entities, international development partners, and private sector stakeholders, as well as the need for regular reporting from Ministries to the National Treasury on climate-related expenditure.

Bilateral and regional agreements

Bilateral and regional agreements are one way that Kenya could use in order to escape import and export restrictions on key intermediate input supplies of key traditional routes. Hence the need to take advantage of the opportunities presented by being a member of regional and multilateral groupings to collaborate on managing challenges such as those occasioned by the COVID-19 pandemic (Kiriti-Nganga 2022).

For example, Kenya is a member of the AfCFTA, EAC, Common Market for Eastern and Southern Africa (COMESA), as well as being party to the tripartite

13. The seventh presidential address on the Coronavirus pandemic: the 8-point economic stimulus programme Saturday 23rd May, 2020

agreement that brings together the South African Development Community (SADC), COMESA and EAC. An integrated regional economy has the capacity to accelerate economic diversification in Kenya. In order to benefit from this regional integration, it is imperative that member states should harmonise their responses in case of future pandemics as well as providing opportunities for the expanding sectors such as the services sector in Kenya.

Kenya's services sector accounted for accounted for an average of 51.3% between 2010 and 2019 of its GDP, which is mainly boosted by the rising digital economy. Kenya has been facilitated to enter into new markets by digital technologies, which have created new small and medium entrepreneurs, created jobs, improved productivity, and diversified the economy to some extent.

Kenya's geographical position – especially from the Indian Ocean to the East facing Australasia – gives it a geographic advantage of access to key shipping lines between the Mediterranean and Indian Oceans and, in the process, working towards diversifying its economy and taking advantage of international opportunities such as fibre optic connections to conduct e-commerce.

For example, the COVID-19 lockdown and the resulting shortages showed that there are potentials for Kenyan industries to respond to local demand. The inadequacy of equipment and other medical supplies led to local innovations to fight the spread of the disease in Kenya as students from Kenyatta University invented ventilators while researchers from the University of Nairobi designed a local oxygen concentrator. At the same time, textile factories such as Rivatex in Eldoret and another in Kitui that had been closed for decades started manufacturing PPE, including masks en-masse, to supply these to other counties in the EAC and hence the need for industrial priorities and regional trade.

Regional integration is not only beneficial at the continental level but also at the local level, such as EAC and COMESA, as it encourages member states to pool resources to address shortages of essential items whose demand escalates during shocks such as COVID-19 (Kiriti-Nganga 2022). For example, on 18 April 2018, the EAC partner states resolved to develop their own pharmaceutical industry, including vaccine manufacturing, as part of the region's social, economic and political integration. This would ensure stable access to and supply of vaccines. The African Development Bank (AfDB) is also supporting the development of pharmaceutical products and the creation of value chains for the COMESA Member States**.**

Africa Continental Free Trade Area

The AfCFTA is considered the largest free trade area as well as the eighth economic bloc in the world. The AfCFTA is expected to create a single

continental market for goods and services from member states, transform African countries from being suppliers of raw materials by enabling them to diversify their economies through value-addition, integrate into GVCs and local content development, earn more from commodities, facilitate free movement of businesspersons and investments as well as laying the foundation for the establishment of a Continental Customs Union.

Article 4 of the AfCFTA expects member states to eliminate tariffs and non-tariff barriers (NTBs) and liberalise trade in services progressively. They are also supposed to cooperate on competition policies, investment and intellectual property rights (IPRs). Member states are supposed to cooperate on all trade-related areas, on customs matters as well as in the implementation of trade facilitation measures. Lastly, they are expected to cooperate in designing a mechanism for the settlement of disputes concerning their rights and obligations and establish and maintain an institutional framework for the implementation and administration of the AfCFTA.

According to the African Union (AU) (2020), African counties, Kenya included, should turn the current COVID-19 pandemic into an opportunity to help transform the economy into one that is resilient to external shocks and achieve sustainable development (Kiriti-Nganga 2022).

The AfCFTA started trading on 01 January 2021. It has a market of 1.2 billion people and a US$3.4tn combined GDP provides an opportunity for product diversification, industries to grow, provide homegrown solutions and drive RVCs. This GDP is expected to more than double by 2050. Attiah (2019) contends that the AfCFTA is based on the principle for African countries to move up the ladder in GVCs, they have to increase the levels of industrial. Hence African countries should create RVCs that can better serve their markets and GVCs that serve the rest of the world. It is important to note that the AfCFTA is now considered the only conduit or a vehicle for designing trade agreements with African countries which increases the continent's bargaining power in the global market and hence prevents fragmentation of trade agreements among countries and their trading partners.

Songwe (2020) contends that the AfCFTA provides the vehicle for expansion through a pooled African market. It is important to note that the AU has taken over the funding of the Lamu Port South Sudan Ethiopia Transport corridor (LAPSSET) infrastructure project. The completion of this project will accelerate the inter-linkage between Kenya and other African countries. This will lead to more trade between Kenya and the rest of the African continent.

As intra-Africa trade increases, it will be necessary to address hurdles faced in export trade within Africa, such as small and medium enterprises' (SMEs') export competitiveness, rules of origin and technical and product safety standards.

So far, 36 countries have ratified the AfCFTA and it now has 90% of tariff offers and 34 service offers. This enables sound business and investment decisions for intra-African trade and strengthens increased trade.

A study conducted by UNECA (2019) found that the AfCFTA will increase Kenya's intra-African trade by reducing the tariff and NTBs on its trade with African countries. The study finds that the AfCFTA presents a unique opportunity for Kenya to bolster its intra-African trade and investment; improve prospects for export diversification through increased demand for manufactured goods; accelerate its industrialisation in line with the *Vision 2030*, the *Kenya Industrial Transformation Programme* and as well as the *Big Four Agenda*; enhance food productivity and security as per the goals of the *Big Four Agenda*; *and b*oost outward FDI by Kenyan firms towards the rest of the continental market.

Kenya is a member of the AfCFTA, can benefit from free trade areas, entering into international cooperation with development partners to help address the challenges that increase its risks and vulnerabilities to economic shocks. As a region, the AfCFTA can enter into public-private partnerships in research and development, deepen regional integration in order to pool financial resources to reduce the risk of shortages, as well as collaborate with international development partners who can provide technical assistance. For example, the University of Nairobi, in collaboration with a team from the University of Cambridge, started a project in April 2020 to develop an oxygen concentrator and ventilator with the support of the Cambridge-Africa programme and Cambridge Global Health Partnerships.

On 21 March 2021, the signing of a strategic partnership between the AfCFTA Secretariat and the UNDP took place. This partnership is expected to promote trade which would act as a stimulus for Africa's socio-economic recovery from the COVID-19 crisis as well as a driver of sustainable development, particularly for females and youth in Africa, in line with the sustainable development Goals and Agenda 2063. Kenya will benefit from this.

Trade facilitation

The WTO TFA is supposed to expedite the movement, release and clearance of goods to reduce trade costs. It establishes measures for effective cooperation between economies to establish customs compliance. It contains provisions for technical assistance and capacity building in this area. The WTO also provides support for developing economies countries like Kenya through the STDF, which helps imports and exports to meet SPS requirements for trade based on international standards. The STDF has provided support for the implementation of Africa's SPS policy framework and has helped to strengthen sanitary capacity in many industries.

Kiriti-Nganga (2022) argues that in the recovery period, Kenya should take advantage of the TFA to meet the new TBT and SPS standards that continue to be imposed by trading partners to combat the COVID-19 pandemic. It should also take advantage of the World Bank Trade Facilitation Support Programme (WB-TFSP), UNCTAD, and development partners such as AfDB, European Union (EU), OECD and others in aligning their trade practices with the TFA. For example, on 13 April 2021, the Coalition for Epidemic Preparedness Innovations (CEPI) and the AU signed a Memorandum of Understanding (MOU) to boost African Vaccine Research and Development and manufacturing. Such trade facilitation measures will not only support African countries to diversify their economies but also leverage technology to keep up with innovations and reduce their vulnerability to exogenous shocks. Beverelli, Neumueller and Teh (2015) show that product and geographical export diversifications are increasing in the various provisions of the WTO TFA. Hence, implementing the TFA should create significant diversification of exports gains for Kenya, EAC and the AfCFTA.

There is therefore a need to fully implement the WTO TFA in Kenya and rally other African countries to do the same to ensure the free flow of goods in the region (Kiriti-Nganga 2022).

Aid for trade

Aid for trade is a major component of trade facilitation and has been found to facilitate and increase the diversification of imports. In their study, Ly-My, Lee and Park (2020) found that aid for trade promotes the diversification of imports by increasing the number of import commodities and import partner countries. The authors found that all three components of aid for trade, such as infrastructure, building productive capacity, trade policy regulations and adjustment contribute to the diversification of imports from recipient countries. Hence Kenya can take advantage of aid for trade to diversify the countries that it imports from as well as the products that it imports. Institutions that provide aid for trade include the World Bank, OECD and AfDB, among others.

International cooperation

For trading partners to have sufficient information in order to make decisions, there is a need for enhanced cooperation among EAC and AfCFTA governments, international organisations and the private sector. This can help promote transparency on essential goods, in particular with regard to production capacity; facilitation of mutual recognition of standards and trade in particular for emergency goods; and to hold inventories to prevent excessive stockpiling. Hoekman et al. (2021) and OECD (2020a) contend that these governments

and trading partners should cooperate to collect and share information on potential concentration and bottlenecks upstream and develop stress tests for essential supply chains.

There is a need for international cooperation to help Kenya, EAC and the AfCFTA address the challenges that increase their risks and vulnerabilities to economic shocks such as the ones caused by COVID-19. They can enter into public-private partnerships in research and development, deepen regional integration in order to pool financial resources to reduce the risk of shortages as well as collaborate with international development partners who can provide technical assistance. For example, the University of Nairobi, in collaboration with a team from the University of Cambridge, started a project in April 2020 to develop an oxygen concentrator and ventilator with the support of the Cambridge-Africa programme and Cambridge Global Health Partnerships.

Conclusion

This chapter, borrowing a lot from Kiriti-Nganga (2022), has analysed the strategies that the Kenyan government should pursue to support the lives and livelihoods of its citizens, support industries to remain in operation and at the same time take advantage of the opportunities offered by the regional integration, the AfCFTA, development partners in the form of trade facilitation as well as aid for trade. The COVID-19 pandemic is still spreading, with the country in its fourth wave at the time of writing this chapter. It is therefore important for the country to stop the spread of the virus by making sure that almost everybody is vaccinated, reducing taxes on essential items such as gas, water and kerosene, continuing campaigns of proper hygiene, wearing masks and keeping social distancing in the short run (Kiriti-Nganga 2022). In the medium-term, it is necessary that lives and livelihoods are protected through both monetary and fiscal strategies while at the same time maintaining macroeconomic stability and fiscal sustainability. In the long run, the government should restructure the economy to increase domestic production of goods and services, achieve self-sufficiency and stop over-relying on a few global suppliers of goods and services, strive to have a green economy to combat the effects of climate change, diversify the economy in terms of export products, adding value to exports towards more manufactured items and reduce over-reliance on exports of raw materials, have multiple sources of supply of goods and services, enhance domestic resource mobilisation and diversify sources of financial resources (Kiriti-Nganga 2022). The author has argued that Kenya should pursue policies that help in overcoming constraints to economic growth arising from factor accumulation and hence lead to exports and product diversification. Kenya should aim at increasing its levels of both domestic investments as well as FDIs, addressing governance issues

such as corruption and ethnic conflicts, addressing the rising fiscal deficit and lack of fiscal space through effective mobilisation of domestic resources, ensure macroeconomic, monetary, industrial trade policies that foster diversification in order to contain inflationary pressure and ensure RVCs and GVCs are not disrupted by the prevailing COVID-19 pandemic.

Chapter 8

Policy recommendations as a conclusion

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Introduction

The main objective of this book is to analyse the effects of the coronavirus disease 2019 (COVID-19) pandemic on international trade and recommend post-recovery strategies in Kenya, taking into consideration the opportunities offered by the African Continental Free Trade Area (AfCFTA). The book starts by tracing the trend of COVID-19 and the measures put in place by governments to combat the disease. This is followed by an analysis of the macroeconomic performance of the global, regional, African, sub-Saharan and Kenyan situation before and during the COVID-19 pandemic. This is followed by an analysis of east Africa's trade patterns in terms of products, services and partners. Thereafter, an analysis of the impact of the pandemic on merchandise trade is presented, followed by a chapter on the impact of COVID-19 on services and foreign direct investments (FDIs), as well as the impact of the pandemic on small and medium enterprises (SMEs) and on informal cross-border trading. The last chapter is on Kenya's COVID-19 recovery strategies, taking advantage of the opportunities afforded by the AfCFTA.

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Summary[14]

Chapter 1 analysed the COVID-19 pandemic and measures governments used to combat the spread of COVID-19, which turned out to be non-tariff barriers (NTBs). Some of these measures were trade-facilitative while others were trade-restrictive, hence turning into NTBs.

International trade flows had been on the increase before the COVID-19 Pandemic in March 2020. This was because of the reduction in trade barriers, transportation costs, tariffs and NTBs, as well as a drop in internal trade and transaction costs. It is important to note that non-tariff measures (NTMs) have increased in terms of the number of goods covered and the number of countries using them.

Measures such as relaxing sanitary and phytosanitary (SPS) requirements, exemptions from duties and taxes as well as easing of non-automatic licensing requirements on imported medical supplies are expected to help expedite trade of such goods and hence ensure adequate supplies for the source-country. On the other hand, the use of export bans, export quotas, requirements for licenses and permits or registrations in order to export medical supplies can have a negative impact on trade and, in the process, affect the availability of essential goods in import-dependent countries, particularly the most vulnerable ones.

Most NTMs are often imposed without reference or coordination with trading partners. Hence, they end up disrupting global value chains (GVCs) as they act as barriers to the smooth flow of trade in critical goods. Some measures such as export monitoring and surveillance requirements are supposed to ensure the high quality and safety of the product exported. Unfortunately, such measures also end up delaying exports because of the additional inspections and checks imposed.

Most of the NTBs were largely premised on domestic law citing public health and safety as a reason to institute measures which ended up impacting not only internal trade but also cross-border and international trade.

The government measures acted as a stumbling block on trade flows in the global economy. They also led to a rise in trade costs and a decline in world trade as a result of additional border controls, transport and associated logistics-related disruptions, which are estimated to account for up to a third of the drop in world trade of from 12% to 32%.

These measures placed additional demands on border agencies that were also struggling with how to efficiently carry out their normal functions while at the same time implementing containment measures such as social distancing.

14. Sections of the summary represent a substantial reworking of two sources, authored by Kiriti Nganga (2022a, 2022b).

The measures also led to a disruption of supply chains of essential commodities such as testing kits, personal protective equipment (PPE) and other medical equipment leading to low testing capacities, diagnosis and treatment. The banning by the United States (US) government on the exportation of any reagents for Roche and Abbott machines led to Kenya scaling down testing for COVID-19, resulting in running two systems: a manual system and an automatic polymerase chain reaction (PCR) system. The COVID-19 pandemic measures also led to increased demand worldwide for various pharmaceutical products, and developing countries like Kenya found themselves cut off from their suppliers who also needed the same products, and they preferred satisfying local demand first.

Developed countries also placed huge orders for these products leaving little for the poor and developing countries. These regions also ordered more than 60% of the world's vaccines before they were even approved for use. Also, more than 80 countries had banned exports of medical and personal protective goods, especially in the initial months of the pandemic. UNCTAD (2021) found that almost 40% of all trade-restrictive NTMs had been terminated by 15 March 2021, implying that almost 60% of these measures are still in place even in 2021.

However, the Kenyan government came up with an economic stimulus package to help sustain lives and livelihoods. It also came up with trade facilitation measures in order to ensure an easy flow of goods and services as a result of the disruption in supply chains because of the COVID-19 measures taken by trading partners as well as the Kenyan government itself to stem the spread of the virus.

Chapter 2 established that the pandemic has adversely affected the macroeconomic performance of all countries in the world. The purpose of the evaluation of the global macroeconomic performance was to; identify the trends of these aggregates prior to the COVID-19 pandemic, the position when the pandemic struck and the projections past the pandemic. The chapter finds that the pandemic had shocks on labour supply and demand, production, consumption and government expenditure. Countries' growth trajectories were hampered by the global epidemic, with the real gross domestic product (GDP) declining, but this is expected to grow in the medium and long-term perspectives. Further, the fiscal deficit and debt burdens were significantly high and especially amongst the low- and middle-income countries (LMICs) and well pronounced with the economic crisis in 2020.

It was observed that, in 2020, the African continent was hampered by the global epidemic, with real GDP declining by 2.1%, but this is expected to grow by 3.4% in 2021. Budgetary balances and debt burdens were directly impacted by the subsequent economic crisis in 2020. Africa's fiscal deficits were 4.6% in 2019 and are expected to nearly double to 8.4% in 2020.

Africa's overall current account deficit was forecast at 5.5% of GDP in 2020, with 4.1% and 2.7% projected in 2021 and 2022, respectively. Trade deficits and net factor payments overseas have been the primary drivers of current account deficits. However, in the short-to-medium term, Africa's average debt-to-GDP ratio is predicted to rise by 10%–15% points because of product diversification and value-addition endeavours by governments. The COVID-19 pandemic has significantly affected the production processes in the continent, like other regions. Africa's currency depreciated significantly because of disruptions in external financial flows (remittances, FDI, portfolio investment, and official development assistance [ODA]). Exchange rate volatility wreaked havoc on tourism-dependent and resource-intensive economies the most. Indeed FDI, tourism, and ODA inflows to Africa all decreased as a result of COVID-19 infections and the relatively weak control measures.

It was further observed that economic activities in sub-Saharan Africa fell in 2020. In 2021, sub-Saharan Africa is projected to be the world's slowest-growing region, and as the global economy recovers, the region risks lagging further behind. However, because of strong agricultural growth and a faster-than-expected rebound in commodity prices, the region's resilience in the face of the global pandemic is expected to be critical in the recovery process. On a per capita basis, the region's activities decreased. The public debt situation worsened and continued to worsen. However, sub-Saharan Africa's recovery is predicted to differ from country to country, with the three largest economies of Nigeria, South Africa, and Angola expected to rebound the fastest.

The situation within the east Africa region, as was observed, is that the region remained the most resilient in Africa during this pandemic period, owing to lower reliance on primary commodities and a higher degree of diversification. The region grew by 5.3% in 2019 and was expected to expand in 2020 though such a projection was affected because of the striking of the pandemic during the year. The region's growth rate declined by 0.7% in 2020, but it still outperformed Africa's general decline of 2.1%. In 2021 and 2022, real GDP growth is expected to be 3.0% and 5.6%, respectively. Djibouti, Kenya, Tanzania, and Rwanda are expected to expand at the fastest rates in east Africa, with 9.9%, 5.0%, 4.1%, and 3.9%, respectively. East Africa is also the fastest-growing region within the African continent, with Ethiopia, Djibouti, Kenya, Rwanda, Tanzania and Uganda being the drivers of the region. However, it is important to note that the growth and development processes of the East African Community member states, like other regions of the globe, have been adversely affected by the COVID-19 pandemic. The region's projected growth, though moderate, is expected to be sustainable based on the effectiveness of COVID-19 control and management measures coupled with sustainable public debt management.

A further observation is that Kenya had a decline in its growth projections as a result of the COVID-19 pandemic. The coronavirus outbreak had a

significant impact on the country's economic activities in practically every sector of the economy in 2020. Tourism and Services industries took the brunt of the damage. Because of weak aggregate demand occasioned by the pandemic, Kenya's inflation rate dropped to 5.1% because of lower food prices. However, year-on-year total inflation has remained within the government target range since the end of 2017. As a result of tax revenue shortages and higher health care spending, the country's fiscal deficit rose to 8.3% of GDP. The country's current account deficit shrunk to 5.4% of GDP. Notably, Kenya's Foreign exchange reserves fell to US$7.8bn by the end of 2020, down from US$8.96bn in 2019, because of reduced net inflows as a result of international lockdowns to contain the COVID-19 pandemic. Effectively Kenya's national currency depreciated by 8.9% to KShs.110 per US$ in 2020, down from KShs.101 in 2019 (see Kiriti-Nganga 2021, p. 1). However, Kenya's growth rate is projected to return to its long-term average of around 6% in 2021 and 2022, and this is a function of the effectiveness of the COVID-19 containment measures taken by the Kenyan government.

However, because of notable proactive COVID-19 control and management measures globally, the study finds that there are some clear positive recoveries in a few key economies. In these circumstances, the global economy is expected to rise at a rate upwards of 5% in 2021, marking the highest growth of economic resurgence in the last eight decades. Rightly large-scale government backing and the easing of pandemic restrictions are predicted to boost growth in many economies. Growth in advanced economies is projected to be on an upward trajectory, albeit to a lesser extent. Notably, the pre-pandemic cooperation between countries through trade and international value chains played a crucial role in the economic growth process and subsequently lifted many people out of poverty. Despite this, current trends predict that global trade growth will slow down over the next decade. As poor nations recover from the COVID-19 epidemic, lowering trade prices will create an environment conducive to re-engaging in global supply chains and re-igniting trade growth.

The chapter concludes that all countries, notably the world's most powerful economies, must take part actively in the attempts to control and manage the pandemic for the common good. In the face of the COVID-19 pandemic, global economic collaboration and partnerships are essential in ensuring the fastest and smoothest possible recovery from the pandemic and reducing the danger of a repeat crisis. It can also help to reduce the long-term costs of the pandemic's unprecedented impact while maximising the advantages of national efforts to recover.

Chapter 3 looks at the Community member states' trade patterns in terms of products, services and partners. Given that the COVID-19 pandemic has disrupted international trade, this study assesses the performance of East

African Community's (EAC's) international trade from 2018 to 2021. Trade is assessed by products and partners for both goods and services.

The COVID-19 pandemic started as a health crisis in China in late 2019, but it is now a social and economic risk worldwide. International trade is one of the sectors that have been affected by the epidemic. The growth of exports and imports of goods and services in EAC was also affected. Burundi had the greatest slump in exports in 2020 (−20%) followed by Uganda (−16%), Kenya (−13%), Rwanda (−12%) and Tanzania (−3%) respectively. As for imports, the magnitude of the collapse was highest in Burundi (40%), followed by Uganda (12%), Rwanda (8%), Tanzania (2%) and Kenya (0.2%), respectively, in 2020. To understand the effect of the pandemic on EAC's international trade, it is imperative to understand the performance of trade before and during the COVID-19 period. Specifically, imports are seldom covered in empirical studies, yet they are vital for inputs of the manufacturing sectors of EAC countries. A dearth of literature also exists on trade in services in the EAC region, yet services account for as high as 48% of total goods and services exports in countries like Kenya and 39% of total goods and services imports in South Sudan. More so, EAC countries are undergoing pre-mature deindustrialisation, which means that the role of services in these economies is increasing.

By conducting descriptive statistics on macroeconomic data ranging from 2018 to 2021, this study establishes several findings. As for goods, Kenya is the top exporter and importer of merchandise in the EAC region. It is followed by Tanzania, Uganda, Rwanda and Burundi, respectively. Imports and exports of goods in most EAC countries increased during the pandemic, except for a few instances of slight drops in exports in Tanzania and imports in Rwanda. All EAC countries had a trade deficit (imports exceeding exports) in goods before and during the pandemic. The trade deficit worsened for Kenya and Tanzania during the epidemic while that of the other EAC countries compressed. EAC countries mainly export food products except for Tanzania, which exports manufactured intermediate commodities such as electrical machinery equipment. EAC countries mostly import manufactured commodities and mineral fuels and oils. The top 10 export products made up at least 55% of total exports in EAC countries while the top ten import products account for at least 62.1% of imports by EAC countries. The United Arab Emirates (UAE) is by far the top trading partner of most EAC countries. China, the United Kingdom (UK), and the United States of America (USA) are the major non-oil export trading partners of EAC countries. China is by far the top import trading partner of EAC countries. India, UAE and Saudi Arabia are also top import partners. Both intra-EAC and intra-Africa export and import trade in goods are strong among EAC countries. The top 20 trading partners account for at least 78% and 83% of exports and imports of goods from the EAC region, respectively.

As for services: Kenya is the top exporter and importer of services in the EAC region. Tanzania, Uganda, Rwanda and South Sudan follow in that order for exports. Uganda, Tanzania, South Sudan and Rwanda follow in that order for imports. Service exports dropped in all EAC countries during the pandemic, but imports increased in Uganda and South Sudan. Other countries experienced a drop in imports of services. Tanzania and Kenya have a trade surplus (exports exceed imports) in services, while the rest of the EAC countries have a deficit. The surplus for Kenya and Tanzania massively reduced during the pandemic, while Uganda's deficit worsened during the COVID-19 period. EAC countries mainly export travel services followed by transport services, except for Kenya and South Sudan, which majorly export transport and Other Business Services (OBS), respectively. Transport followed by travel are the main services imported in EAC except for Tanzania, which imports more travel services than transport services. Across the region, imports and exports of travel services dropped during the COVID-19 pandemic. Exports and imports of transport services increased except in Uganda, which experienced a decline. Other Business Service exports and imports increased in all EAC countries, especially in Uganda, whose OBS imports almost doubled in 2020. The USA is by far the highest service export and import trading partner of EAC countries. Other top trading partners are spread across Europe (Germany, France, UK etc.) and Asia (China, India, Japan, UAE, Saudi Arabia etc.). Both intra-EAC and intra-Africa service export and import trade are weak. Overall, the top 20 partners account for at least 72% of service export and import trade in EAC.

Chapter 4 analyses the impact of COVID-19 on the merchandise trade in Kenya. African trade, especially exports, was predicted to decline greatly because of COVID-19. The argument was that most of the exports from African countries, especially to developed countries like the USA, China, Japan, Germany, France, Italy and the UK would greatly fall because of the strict measures taken by these nations to combat the spread of the virus.

These nations form the main destinations of Africa's exports; thus, closing their borders was expected to significantly affect Africa's merchandise trade. The effect was mainly expected to affect exports through the network of GVCs. This was so because most industries in developed nations import raw materials from African markets. This study analyses the impact of the spread of COVID-19 and government responses towards the pandemic on merchandise trade in Kenya.

The analysis of the impact of COVID-19 on merchandise trade observed volumes of imports and exports before and after the invasion of COVID-19. The measure of COVID-19 involved the spread of the disease and the government's response to the pandemic. The spread is defined by the period when COVID-19 came into place in January 2020 up to the current period of study, May 2021. Government measures are defined by the period when the Kenyan government began to take measures to combat the spread of the

pandemic. The spread of COVID-19 is observed to have reduced exports by 0.47% and imports by 0.29%. However, over time, exporters are observed to adjust their reactions towards the spread of the disease and thus exerting upward pressure on exports. On government measures, imports reduced by close to 0.9% while exports reduced by around 0.6%.

On specific product categories, data from the Kenya National Bureau of Statistics (KNBS) shows that the negative impact of the spread of COVID-19 on merchandise exports was more observed in consumer goods, followed by industrial supplies and finally, food and beverages. Consumer goods declined by 29%, followed by industrial supplies at 25% and finally, food and beverages at 14%. The three products form the largest shares of merchandise exports in the country. Government response to COVID-19 led to a decline in exports of transport equipment by 50%, followed by consumer goods at 45% and finally, industrial supplies by 35%.

In terms of imports, the largest negative impact of the spread of COVID-19 was observed on imports of fuel and lubricants. Imports in this category dropped by 37%. According to KNBS (2020), products in this category form 16% of the share of merchandise imports. The largest share of imports is industrial supplies (41%). Imports of these products were reduced by close to 15%. Consumer goods form the least of import shares at 9%. Import of these products increased by close to 23% during the period of COVID-19. On government measures, Imports of fuel and lubricants experienced the largest decline of around 80%. Import of industrial supplies, which contribute the largest share of imports, reduced by close to 23%. Consumer goods that form the least in import shares recorded an increase of 18%. However, over time this increase is observed to decline.

Generally, in terms of the magnitudes of the impact, a large impact is observed on the government response to COVID-19 in relation to the general spread of the disease. The strict measures placed by the government, like the closing of its borders, are observed to affect both volumes of imports and exports in the country. The negative impact was large on imports compared to exports. However, over time, both exporters and importers began to adjust their importing and exporting reactions. These adjustments are seen to exert positive and upward pressure on both imports and exports in the country.

On products, the largest negative impact of COVID-19 is observed on imports and exports of industrial supplies. This shows that the manufacturing sectors that are dependent on these industrial supplies were the most affected by COVID-19. Specifically, the results reflect a situation where COVID-19 led to a shutdown of some manufacturing industries. This led to a decline in the demand and supply of industrial supplies in the country. Finally, imports of consumer goods recorded a significant increase of between 17% and 23%. Apart from the reduction in domestic production of these goods, the increase

could as well be attributed to 'panic-purchases' because of the uncertainty caused by the virus or where COVID-19 led to an increase in the purchase of 'new consumer goods' like face masks.

Chapter 5 analyses the effects of COVID-19 on SMEs and informal cross-border trade (ICBT) in Kenya and argues that COVID-19 measures significantly affected the ICBT activities between Kenya and its neighbours.

Informal cross-border trade involves males and females crossing the border with goods loaded on their heads, backs and even hands. Some even use bicycles, hand cats, wheelchairs and even automobiles to transport their merchandise across the border. This special kind of trade provides essential income to many for livelihood. The majority of the participant in this trade are women making up to 70% because of its nature.

The composition of goods traded includes majorly agricultural produce, intermediate goods and industrial commodities ranging from animals and animal products, cereals, horticulture, electronics, vehicle parts and other consumer goods. On average, ICBT contributes approximately 43% of the total trade within the continent. Yet it is largely ignored by many policy-makers in Africa. It accounts for almost 99% of agricultural trade across the borders. The majority of the traders in this sector operate fully outside the formal economy, thereby escaping trade-related regulations like duty payments to the respective government revenue agencies.

The chapter finds that the first wave of the COVID-19 pandemic brought confusion to many African countries. This placed cross-border trade on hold as border activities were suspended. The process led to the introduction of border restrictions and regulations to help manage the cross-border transmission of the virus. This formed the immediate regulatory measure by many countries to help curb the spread of COVID-19. It implied the closing of land and maritime borders, as well as the suspension of international flights while introducing a mandatory quarantine period for those entering the country. For instance, Kenya introduced a 14-day quarantine period for external flight passengers.

The EAC member countries either closed their land and maritime borders or suspended their international flights. For instance, all EAC countries restricted their land border crossing points except Kenya and Tanzania. Among the EAC countries, only the Democratic Republic of the Congo closed its maritime border entry points, while only South Sudan did not restrict flights during the first wave of the pandemic.

The regulations significantly contained the rising viral infection and allowed only essential service providers and emergency services to move around to aid the transfer of cargo across the borders but limited the movement of cross-border traders affecting their livelihood. However, the regulations

required mandatory testing and proper sanitisation of the providers while limiting the number of passengers and crew members on board.

Significant cross-border trade activities in Kenya take place mainly with the Ugandan and Tanzanian counterparts. For instance, the benefits from the trade balance for Kenya are mainly on industrially manufactured goods, while Uganda and Tanzania's trade balance is mainly from exports of agricultural produce, especially food trade.

The countries are among the EAC members that have suffered a great deal from the effects of COVID-19. The impact is more gravely felt by the informal cross-border traders than the formal trade sector. For instance, there was a significant shift from informal to formal trade on the weekly average of trade volumes for rice and maize at the Isebania border between Kenya and Tanzania. This is reflected in most border points.

Apart from cereals and grains, perishable goods also constitute the largest share of ICBT amongst the many agriculture and food commodities traded in Africa. Kenya, for instance, is a net importer of most perishable commodities from Uganda and Tanzania. These include mainly fresh fruits and vegetables products direct from the farms. These products do not require costly border procedures, which makes formal trade impractical. In east Africa, there were disruptions in the shipment of fresh food under COVID-19 restrictions. This created food shortage at the point of demand and wastage at the point of production because of surpluses.

Much of the trade in livestock and food products also takes place in Kenya, especially with the neighbouring northern countries like Ethiopia, Somalia and South Sudan. This kind of trade requires strict SPS measures for its formality. However, most of the traders, in this case, are small scale and therefore these measures are an impediment to their existence. The strict measures therefore give cross-border traders incentives to circumvent official controls. The COVID-19 pandemic made governments enhance SPS measures at border points, and this greatly hampered ICBT activities.

Enhanced COVID-19 restrictions have also intensified bribes and illicit fines and created more checkpoints along the corridor nodes. Both formal and informal cross-border traders are adversely affected. These numerous checkpoints cause significant time delays, leading to bribery. By April 2020, the illicit collections and bribes had increased by almost 50%.

Kenya closed most part of its borders following the wake of COVID-19 regulations. However, this was not the case in some parts of the partner's borders. Some countries took longer to limit movement making it easier for cross-border traders to shift and settle on the other side of the border. This allowed some limited opportunities for NTBs, irrespective of the COVID-19 regulations. Many traders who shifted, however, found it difficult to cross back

because of the closure of border points and were forced to live in precarious conditions.

Limited movements also complicated the transhipment of goods and services by traders on either side of the border. Some would therefore resort to paying truck drivers to buy and transport goods on their behalf. This involved certain risks. The arrangement implied compromise on the quality and quantity of consignments, and some would end up being duped by truck drivers entrusted by the consignees. For instance, a truck driver at the Busia border would buy low-cost maize from the Ugandan side, thereby compromising on the informal cross-border trader's product quality.

Chapter 6 investigates the impact of COVID-19 on Kenya's service sector as well as FDI. The service sector in Kenya has a crucial key role both directly and indirectly through job creation and revenue generation and indirectly through fostering forward and backward linkages to other sectors in the economy, thereby contributing both to job creation and to the GDP. It is the largest contributor to GDP compared to the agricultural, manufacturing and industrial sectors.

The COVID-19 pandemic affected some sectors of the economy more than others. World Bank (2021) posits that the overall GDP contracted by 0.4% year-on-year in the first three quarters of 2020, driven by the COVID-19 pandemic's severe impact on the services sector. The World Bank argues that real services sector (tertiary) output contributed 2.5% points to year-on-year GDP in the first quarter of 2020 but subtracted 5.5% points from growth in the second quarter as the full impact of the pandemic was felt. It is further submitted that in the third quarter services output rose from quarter two levels but remained lower than its level one year previously, consequently reducing year-on-year GDP growth by 2.7% points. The report argues that the main driver of the drag on the services sector output growth was education, reflecting the impact of the closure of most education institutions as a containment measure by the government which has resulted in significant losses.

Activity in the accommodation sector and the restaurant subsector was severely impacted by the pandemic as international travel was suspended for much of 2020. Hotels closed or significantly scaled down their operations since movement restrictions were imposed in most countries.

Receipts from services exports fell sharply, reflecting the collapse of international travel and transport. The subsector contracted by 57.9% year-on-year in quarter three, subtracting 0.8% points from overall GDP growth.

However, the Kenyan economy staged a recovery in the third quarter of 2020 and the services sector increased by 2.9% year-on-year, contributing 0.2% points to GDP. The other service subsectors like finance, insurance, information and communication technology (ICT), as well as real estate, picked up in the second half of 2020.

Growth in the finance, insurance, ICT, real estate renting, and business services sector strengthened to 5.3%, 7.3% and 5.3% year-on-year, respectively, in third quarter of 2020. The financial sector's performance has been supported by continued credit growth. The ICT sector benefited from government measures to facilitate digital money transactions and promote more e-commerce.
On the other hand, the COVID-19 pandemic caused a dramatic fall in global foreign investments (FDI) in 2020 and brought FDI flows to a level last seen in 2005. It has been an immense negative impact, especially on the most productive of investments, the Greenfield investment in industrial and infrastructure projects. The UNCTAD (2020) shows that FDI fell by one-third to US$1tn, which is well below the low point reached after the global financial crisis of 2008–2009. The COVID-19 pandemic reduced Africa's FDI inflows due in part to her severe dependence on commodity trade.

The pandemic caused a serious drop in FDI to Kenya as it muzzled trade arrangements across the world. The UNCTAD (2021) investment report on FDI shows that Kenya attracted US$717m worth of FDI investments in 2020 compared to US$1.3bn in 2019. This was the second straight drop considering that US$1.6bn was attracted in 2018. Kenya, considered to be the East African Community member states' powerhouse, lagged behind its neighbours Uganda (at US$823m) and Tanzania (at US$1.013bn).

However, it is projected that FDI will recover this year (2021) after an almost 35% drop in 2020 because of the COVID-19 crisis. According to the UNCTAD 2021 report, the global FDI is projected to increase by between 10% and 15% in 2021, although it will still be below the pre-pandemic levels.

The lockdowns witnessed worldwide led investors to pause investment projects and made multinational enterprises (MNEs) shy away from new projects. Investment flows to Africa are unlikely to fully recover in the near term.

The COVID-19 pandemic affected peoples' health (life) and their livelihoods (jobs and other sources of income). The effects have been more severe in the service sector that relies on face-to-face interactions like hotel accommodation, wholesale retail trade and education.

Foreign direct investment flows have fallen by an appreciable proportion during the early part of the pandemic as multinational corporations (MNCs) were reluctant to expand their activities and even put new investments on hold because of the uncertainty which comes with such major disruptions as a global pandemic. The FDI flows of the developing countries dropped even more since the severely impacted sectors, like primary and manufacturing sectors, accounts for a larger share of their FDI inflows than in the advanced countries.

The expectation is that the FDI flows could remain below the pre-crisis levels through the whole of 2021 unless the public health measures and economic support policies pursued by the government are effective.

It is important to note that the Kenyan government has got a positive outlook for economic recovery, and that explains why it came launched the 2020–2022 Economic Recovery Strategy. However, the pandemic is not over yet, as shown in Chapter 7, which demonstrates that the pandemic is now in its fourth wave. The possibility of bringing back restriction measures such as curfews and lockdowns, although necessary to control the spread of the pandemic, could have negative economic and social consequences for the citizens. At the same time, the initial Kenya Government's economic stimulus plans that provided cash assistance to the most vulnerable and reduced taxes, among other measures, have already come to an end. The situation of most Kenyan individuals and households remains uncertain. Strategies are therefore necessary to protect individuals and households and firms from these negative consequences.

This means that policy-makers need to come up with strategies that require the use of both fiscal and monetary measures to maintain fiscal and macroeconomic stability and, at the same time, build and strengthen the resilience of the economy. These strategies are expected to lessen the negative effects of the COVID-19 pandemic and, in the process, facilitate the opening up of the economy, build resilience, speed up economic recovery and the attainment of sustainable economic growth and development.

In the short term, the most important strategy is to ensure that all adult Kenyans are vaccinated. There is also a need for collective action in the production of vaccines. There is a need for accelerated vaccine deployment in different counties and the use of innovative actions on containment and preventive measures such as continued campaigns to rally the citizens to observe basic hygiene such as wearing masks, washing hands and social distancing, as well as strengthening the quality of and access to health care services. The government should also impose subsidies on essential services and goods such as energy, water, food, transport, PPE, masks and internet data services.

In the medium term, it would be prudent to lower taxes, have a policy of temporary basic income for those who lost their jobs because of the pandemic and subsidised essential goods such as energy, gas, kerosene, water, food and transport. This would reduce the cost of production and increase consumption. Other medium terms strategies include job retention programmes, restructuring public debt towards longer maturity non-commercial loans and making sure that any new loans are taken only on a concessional basis. At the same time, the Kenyan government should ensure that resources are used efficiently by reducing the level of corruption.

In the long run, efforts should be put in place towards restructuring the economy to more local production of goods and services with the aim of achieving the goal of being self-reliant by Kenya becoming both consumer and producer of its own goods and services.

It is also important for Kenya to leverage the use of technology in order to speed up its pace of economic recovery after COVID-19 negative effects on the economy.
In the long term, it is also important for Kenya to increase local production and strengthen e-commerce since it has been seen as the cog in the engine driving modern economies. Kenya should also consider digitalisation and simplification of procedures used in the import, export and transit of goods and services. These include procedures such as paperless trade, electronic payment of all trade-related taxes, digital certificates and signatures, or 24/7 automated processing of trade declarations developing and implementing a policy and legal framework for e-commerce.

Kenya's exports should meet set product and process standards if they have to compete in the local and international markets. Kenya needs to remove technical barriers to trade, as well as develop and implement set standards as well as conformity assessments. It also needs to have all its laboratories accredited and provide soft and hard infrastructure to enable industries to grow. There is need to diversify the destination of exports, export products and sources of import, be more inclusive among the participants in productive activities and add value to export products.

Kenya also needs to have policies that will ensure equitable use of environmental resources and the promotion of those economic activities that will preserve biodiversity, such as increased investment in transport, forestry, water, land use, and waste sectors. Consider subsidising liquefied petroleum gas to increase its usage among Kenyan citizens; production of solar panels and their installation in homes; production of solar and wind energy, water harvesting, as well as encouraging tree planting and reforestation.

Bilateral and regional trade agreements could help in reducing import and export restrictions on input supplies of traditional trade partners. An integrated regional economy has the capacity to accelerate economic diversification in Kenya. In order to benefit from this regional integration, it is imperative that member states should harmonise their strategic and policy responses in case of other pandemics. Regional integration also provides opportunities for the expansion of certain sectors, such as the services sector in Kenya.

Kenya's geographical position, especially with the Indian Ocean to the East facing Australasia, gives it a geographic advantage of access to key shipping lines between the Mediterranean and Indian Oceans. Hence Kenya should

work towards diversifying its trading partners while at the same time and taking advantage of the fibre optic connection to conduct e-commerce.

The AfCFTA will increase Kenya's trade with other African countries since the AfCFTA promises to reduce tariffs and NTBs to facilitate intra-African trade.

Kenya is a signatory to the World Trade Organization (WTO) Trade Facilitation Agreement, and it should take full advantage of it. Other trade facilitation facilities that Kenya should take advantage of are the World Bank Trade Facilitation Support Programme; African Development Bank [AfDB]; UNCTAD, OECD as well as the EU. Aid for Trade will promote import diversification by increasing the number of both import commodities and import partner countries. Enhanced cooperation among EAC and AfCFTA governments, international organisations and the private sector is critical to ensure that all trading partners have sufficient information to make decisions.

Conclusion

The EAC and Kenya, in general, have been relatively protected from high infection rates, as shown in this book. The containment measures have led to relatively low COVID-19 infection rates and death rates. This book has shown that there is a need for value-addition policies to support export and import diversification, as well as e-commerce policies to support economic diversification in line with digital trade within the AfCFTA and SMEs.

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Chapter 1

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Index

The central notion of this book is to analyse the effects of the COVID-19 pandemic on international trade and to recommend post-recovery strategies in Kenya. The analysis explored in the book and the conclusions reached will contribute significantly to the economics of international trade. The evaluation takes cognisance of the government's efforts in containing the pandemic, both at individual-country-level and international-level, in terms of appropriate policy measures with a critical examination of the efficacy and appropriateness of such policy measures. An intriguing aspect of the newly produced knowledge in this scholarly book is the substantiated argument that an analysis of the COVID-19 containment measures demonstrates the difference between trade-restrictive and trade-facilitative measures. The language employed by scholars in economics adopts a descriptive mode, using tables and graphs, while in other chapters, econometric methods are employed for data analysis. This book provides valuable insight into countries that need to reduce their trade restrictions.

This book is about the impact of the global COVID-19 pandemic on international trade and post-recovery strategies in Kenya. Specifically, the main aim of this book is to examine the effect of the COVID-19 pandemic on trade and to recommend recovery strategies in Kenya by exploiting opportunities presented by the African Continental Free Trade Area (AfCFTA). This book highlights the relationship between the COVID-19 pandemic and international trade and provides factual information on its implications.

Specifically, the data and statistics provided will be helpful today and in the years ahead. This book is a benchmark for lessons on what to and what not to repeat in terms of actions should Kenya or other African countries be confronted with another pandemic. It highlights and consolidates the solutions necessary to rebuild economies devastated by the pandemic's effect. Last but not least, the book does not just focus on international trade but also deals with the wider economics field and the socio-economic aspects of society.

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