Africa's Pulse

APRIL 2020 | VOLUME 21

AN ANALYSIS OF ISSUES SHAPING AFRICA'S ECONOMIC FUTURE

ASSESSING THE ECONOMIC IMPACT OF COVID-19 AND POLICY RESPONSES IN SUB-SAHARAN AFRICA

WORLD BANK GROUP

A PRODUCT OF THE OFFICE OF THE CHIEF ECONOMIST FOR THE AFRICA REGION

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Executive Summary

- **The COVID-19 pandemic has taken a toll on human life and brought major disruption to economic activity across the world.** The impact of this unprecedented crisis on human life and the global economy reflects the speed and magnitude of the contagion, greater global integration, and the major role that China plays in global supply chains, travel, and commodity markets.
- **Despite a late arrival, the COVID-19 virus has spread rapidly across Sub-Saharan Africa in recent weeks.** As of April 7, 5,425 cases of COVID-19 have been confirmed in 45 of the 48 countries in Sub-Saharan Africa. The insufficient testing capacity in many countries in the region suggests that these figures most likely understate the true number of infections.
- **We project that economic growth in Sub-Saharan Africa will decline from 2.4 percent in 2019 to -2.1 to -5.1 percent in 2020, the first recession in the region in 25 years.** It will cost the region between US$37 billion and US$79 billion in terms of output losses for 2020. The downward growth revision in 2020 reflects macroeconomic risks arising from the sharp decline in output growth among the region's key trading partners, including China and the euro area, the fall in commodity prices, reduced tourism activity in several countries, as well as the effects of measures to contain the COVID-19 global pandemic.
- **The COVID-19 shock is hitting the region's three largest economies—Nigeria, South Africa, and Angola—in a context of persistently weak growth and investment, and declining commodity prices.** The prices of crude oil and industrial metals have fallen sharply (by 50 and 11 percent, respectively, between December 2019 and March 2020). Model simulations suggest that, compared with a no-COVID base case, average real gross domestic product (GDP) growth in these countries could be reduced by up to 6.9 percentage points in 2020 in the baseline scenario, and by up to 8 percentage points in the downside scenario. South Africa has the largest number of confirmed cases in the region, and strict measures to contain and mitigate the spread of the virus are weighing on the economy.
- **More generally, countries that depend on oil exports and mining would be hit the hardest.** Growth could fall by up to 7 percentage points in oil-exporting countries and by more than 8 percentage points in metals exporters compared with the no-COVID base case.
- **In non-resource-intensive countries, growth is expected to slow but remain positive.** Growth will weaken substantially in the two fastest growing areas—the West African Economic and Monetary Union where outbreaks are spreading rapidly and the East African Community—due to weak external demand and disruptions to supply chains and domestic production. Activity in tourist-dependent countries is expected to contract sharply in response to severe disruption to travel and tourism activities.
- **In the baseline and downside scenarios, growth will fall well below the regional average population growth rate of 2.7 percent,** indicating that, in the absence of appropriate measures to mitigate its effects, the COVID-19 outbreak will severely impact the welfare of large numbers of individuals in the region.
- **The negative impact of the COVID-19 crisis on household welfare would be equally dramatic. In the optimistic scenario, welfare losses amount to 7 percent relative to the no-COVID scenario in 2020.** The welfare loss would be 10 percent greater than in the no-COVID case in the event of a lengthy crisis. The lower terms of trade (as a result of the plunge in commodity prices) coupled with lower employment result in a pronounced welfare loss for households.

- **Policy responses that result in sub-regional trade blockages will increase transaction costs and lead to even larger welfare losses.** In Africa, a region dependent on agricultural products, these policies will disproportionately impact household welfare as a result of price increases and supply shortages.
- **Welfare losses amount to 14 percent relative to the no-COVID scenario if countries were to close their borders to trade.** Border closings would disproportionally affect the poor, particularly agricultural workers and unskilled workers in the informal sector. In this context, African countries need to take this opportunity to strengthen regional value chains in the context of the African Continental Free Trade Area.
- **The COVID-19 crisis is also contributing to increased food insecurity as currencies are weakening and prices of staple foods are rising in many parts of Africa.** This is compounded by other existing crises in many countries, including the desert locust emergency, drought, climate change, fragility, conflict, violence and underdeveloped food markets. While global food stocks are plentiful and many commodity prices are stable, the prices of other staples (such as wheat and rice) are rising when many countries' currencies are weakening. These two factors lead to spikes in consumer prices and contribute to increased food insecurity, particularly for food importers. Household incomes are also falling, reducing demand and contributing to food insecurity for the near poor, poor and vulnerable, such as refugees and internally displaced persons (IDPs).
- **Local agri-food supply chains are already experiencing disruptions, including reduced access to inputs and services, labor movements, transport and roadblocks, and credit or liquidity.** This comes on top of the global supply chain disruptions such as export bans that affect local African food security in importing countries. There is an urgent need for coordinated, evidence-based policy responses and financing to prevent a major food crisis in Africa resulting from COVID-19.
- **The COVID-19 crisis has the potential to create a severe food security crisis in Africa.** Agricultural production is likely to contract between 2.6 percent in the optimistic scenario and 7 percent in the scenario with trade blockages. Food imports also decline substantially (from 13 to 25 percent) due to a combination of higher transaction costs and reduced domestic demand.
- **These findings reflect the multiple channels of transmission of COVID-19 on economic activity in Sub-Saharan Africa.** The first is the disruption in trade and value chains, affecting commodity exporters in the region (as the international prices of oil, minerals, and metals collapse) and countries with strong value chain participation (such as Ethiopia and Kenya). The second is the reduced foreign financing flows in the form of lower foreign direct investment (especially in extractives and infrastructure investments), foreign aid, remittances, tourism revenues, as well as capital flight (such as the US$1.75 billion in portfolio outflows in South Africa during March). The third channel of transmission is the health channel, the direct impact of COVID-19 on economic activity from a wider spread of the virus in the region (the number of infected people and the number of fatalities). The fourth channel includes disruptions caused by containment and mitigation measures imposed by governments and the response of the citizens. Combined, the weak external demand, the accompanying sharp fall in commodity prices, and the disruption in tourism that COVID-19 is causing will negatively affect economic activity in Sub-Saharan Africa.
- **Current account deficits in the region are set to widen as trade balances deteriorate due to falling exports.** Heightened risk sentiment has weakened African currencies and amplified fiscal risks. This has been reflected in sharply higher sovereign spreads in some countries (say, Angola, Zambia). In Nigeria, pressures on foreign reserve buffers prompted the central bank to let the naira

weaken against the U.S. dollar for the first time since mid-2016. Inflation has remained in single digits in most countries, allowing central banks to cut interest rates to support their economy. Low levels of capital inflows could force some countries to finance their current account deficit through reserve drawdowns, exposing them to further currency depreciation which could generate inflationary pressures.

- **Fiscal deficits are projected to widen amid falling government revenues.** The deterioration of fiscal balances is expected to be greater in commodity exporting countries and those that are dependent on tourism revenues. Oil abundant countries are currently revising their 2020 national budgets as their price assumptions are higher than the average crude oil price.
- **At the global level, incoming data suggest that the economic disruption from the COVID-19 outbreak is extensive, and the global economy is falling into recession.** Industrial production, investment, retail sales, and services production contracted sharply in China in 2020Q1. Contractions of a similar magnitude are expected to follow in other countries, including the United States and the euro area, as localized outbreaks combined with strict containment measures weigh on activity.
- **The prices of most commodities have been declining, with prices of crude oil and industrial metals falling sharply.** Further, global equity markets have been volatile and plummeting in response to uncertainties around the duration and effects of the COVID-19 outbreak. Spreads on higher-risk borrowing have widened, and the currencies of emerging markets and developing economies (EMDEs) have rapidly depreciated. In March 2020, the pace of capital flows out of EMDEs exceeded the worst period of the 2008 global financial crisis, with the bulk of these outflows coming from non-China EMDEs.

POLICY RESPONSE TO COVID-19

Much Needed: A Differentiated African Policy Response

- **Customizing the policy response to reflect the structural features of African economies and the peculiar constraints that policy makers face, including much less fiscal space and much less operational capacity to respond.** Several African countries have reacted quickly and decisively to curb the potential influx and spread of the COVID-19 virus very much in line with emerging international experience. As the situation evolves, there are more questions about the suitability and likely effectiveness of some of these policies, such as strict confinement. The large size of the informal sector (89 percent of total employment); the precariousness of most jobs; the limited coverage of pensions and unemployment insurance schemes; and the predominance of micro, small, and medium-size enterprises in business activity (90 percent) all need to be factored in, as they may make aggressive containment measures less effective. Protecting vulnerable groups, ramping up testing, and promoting the wearing of masks may be better options. Equally important is the need to differentiate the monetary policy response due to the weak monetary transmission in countries with underdeveloped financial markets. Because of the reduced monetary policy effectiveness, the policy response will be mostly fiscal.
- **Focusing on the dual objectives of saving lives and protecting livelihoods.** This requires a combination of short-term relief measures and stimulus measures to keep the economy running. Policies should aim at strengthening health systems, providing (income and in-kind) support to (formal and informal) workers, and providing liquidity support to viable (formal and informal businesses) while guaranteeing the provision of public services.

- **Given the fiscal constraints, priority should be put on strengthening public health human and technical capabilities to respond to the COVID-19 crisis.** Resources should be directed toward protecting health workers, equipping them with all the necessary protective gear to avoid a depletion in the already scarce stock of medical personnel. Efforts need to be deployed to scaling up testing, and as much as possible, implementing surveillance testing including in rural areas. At the organizational level, setting-up a national-level command center led by highly respected scientists, and ensuring coordination within the government (top executive, Health, Economics and Finance as core), and with private sector organizations will be critical for success.
- **The are important lessons from the Ebola crisis management experience.** Massive community engagement that ensured credible flow of information to the population was crucial. Beyond cities, solving problems at the village level, including organizing to get water and soap for hand washing, practicing social distancing, will be key to success. Community-level problems solving play an important role in Liberia at the height of the Ebola crisis. This is essentially true in countries where the central government lacks or has lost credibility with the population.
- **Implementing social protection programs to support workers, especially those in the informal sector.** Cash transfers are the most used instrument in the majority of developing countries, including some Sub-Saharan African countries. Some of the measures being implemented include online payments, in-kind transfers (food distribution), social grants to disabled people and the elderly, wage subsidies to prevent massive layoffs, and fee waivers for basic services (such as electricity tariffs and mobile money transactions).
- **Minimizing disruptions in critical intra-African food supply chains and keeping logistics open to avert a looming food crisis in the region.** Government action to reduce international and domestic trade barriers, and ensure that food system workers can go to work without problems is critical. Funding for agriculture and agribusiness needs to be protected. Digital technologies can help anticipate problems and smooth temporary shortages as well as build the resilience of food chains. Early warning systems for food shortages, and associated emergency food provisioning systems, will have to be adjusted to increase attention on rural and urban areas.
- **Regional coordination can enhance the policy response.** At a time when countries are choosing national solutions, autarkic policies, or have non-coordinated efforts across states, Africa needs to intensify its efforts on economic integration and deepening regional cooperation. Existing pre-COVID priorities like implementing AfCFTA, increasing intra-regional trade, building regional markets in energy, digital and financial inclusion would be critical.
- **Overall, the policy response to the COVID-19 crisis in African needs to be differentiated.** Policies tailored for aging advanced countries are not necessarily suitable for poor and young low-income countries. A collapse in economic activity that results from the containment measures and macroeconomic instability will increase poverty, and endanger lives and livelihoods.
- **Sowing the seeds of future resilience.** It is a condition sine qua non to avoid another lost decade in African development. Beyond the much-needed quick fixes, the policy response should consider strategies to boost water and sanitation, address the human capital crisis especially in the health sector, leverage digital technologies for trade and government effectiveness during confinement and beyond, maintain a healthy level of investment for analog complements such as electricity, and

foster intra-African value chains under the umbrella of the African Continental Free Trade Area for import substitution. Policy makers and development partners need to think ahead and be mindful of economic policies that build greater resilience and boost productivity, thus allowing African economies to recover faster and thrive after COVID-19. Although it may seem counter-intuitive in periods of emergency, this long view could be decisive for African countries. These and other policies may shorten the recovery time and put Africa on a path of economic transformation with more, better and inclusive jobs.

Finding the Fiscal Space to Fight Covid-19 Amid Heightened Public Debt Vulnerabilities

- **Due to deteriorating fiscal positions and heightened public debt vulnerabilities, Sub-Saharan African governments do not have much wiggle room in deploying fiscal policy to address the COVID-19 crisis.** The fiscal crunch, as a result of dwindling revenues, is reducing African countries' fiscal space. The reference commodity prices and growth rates in the government budgets are being significantly revised downwards. The problem is compounded by the larger and riskier debt positions and an increase in external borrowing costs—which will further worsen debt sustainability prospects. Conducting effective policies while preserving macroeconomic stability in the region during the COVID-19 crisis will require massive international coordination and support. Financial assistance from multilateral organizations and official bilateral creditors will be needed. The International Monetary Fund, in its stabilization mandate, is stepping up efforts and availing resources to support balance of payments. The World Bank Group has created a new US$14 billion fast-track facility and availed US$160 billion in overall resources to respond to the crisis over the next 15 months. A first wave of 25 projects providing grants, credits, and loans of US$2 billion to assist countries (of which 10 are in Africa) was approved by the World Bank Group on March 27. While laudable, these efforts may fall short without global action on debt.
- **Temporary debt relief will be necessary for fighting COVID-19 while preserving macroeconomic stability in the region.** External debt service paid by the region to all creditors in 2018 amounted to US$ 35.8 billion (2.1 percent of the regional GDP), of which US$ 9.4 billion was paid to official creditors (0.6 percent). In a region that may need emergency economic stimulus of US$100 billion (including an estimated US$44 billion waiver for interest payments in 2020), a debt moratorium would immediately inject liquidity and enlarge the fiscal space of African governments. A debt moratorium granted by official creditors to Angola represents US$ 4.1 billion (4 percent of GDP), and that amount would increase to US$ 7.4 billion (7 percent of GDP) if it included all creditors. For Kenya, the resources released total US$ 675 million (0.8 percent of GDP) and US$ 2.3 billion (2.7 percent of GDP) if the suspension of debt payments come from official bilateral creditors and from all creditors, respectively. African leaders are beginning to call for a larger resource flow from the global community, including international financial institutions, bilateral official creditors, and the private sector. The World Bank Group and the International Monetary Fund have called for a "Debt Standstill." Such an initiative should be an important part of the global response to soften the impact of COVID-19 on Africa's poor.

Assessing the Economic Impact of COVID-19 on African Economies: Our Methodology

Our findings on the impact of Covid-19 on African economies draw on two economywide models: a macro structural model, the World Bank Macroeconomic and Fiscal Model, "MFMOD," and the World Bank global dynamic computable general equilibrium (CGE) model, "ENVISAGE".

1. The analysis builds on two scenarios. The first—an optimistic scenario—is based on the assumptions that the pandemic peaks in advanced economies such that containment measures are gradually removed in the next two months, the pandemic fades in China, and outbreaks are contained in other countries and in Sub-Saharan Africa. The second—a downside scenario—assumes that the COVID-19 outbreak continues to weigh on the economy in the third and fourth quarters of 2020 and into 2021, as some social distancing measures are required to keep the spread of the virus at manageable levels.
2. In the CGE model, it is assumed that the propagation profile of the pandemic in the optimistic scenario is similar to that of the 2014 Ebola outbreak in Guinea, where the number of cases reached 2,707 in 2014 and 1,097 in 2015, which is used to calibrate exogenous domestic shocks for this scenario. The propagation profile of the pandemic in the second scenario is assumed to be close to the 2014 Ebola outbreak in Sierra Leone (the most affected country), where the number of cases reached 9,446 in 2014 and 4,676 in 2015. Thus, the economic impact of the 2014 Ebola crisis in Sierra Leone is used to calibrate the exogenous shocks for this scenario. In both cases, the size of the COVID-19 shock in affected countries is scaled up according to the Epidemic Preparedness Index.
3. Key results of the scenarios are
    - Illustrative simulations with the MFMOD model show that, under the scenario of a severe but contained crisis, growth in Sub-Saharan Africa could be reduced by up to 5.2 percentage points in 2020 compared to a no-COVID base case. On this basis, real gross domestic product (GDP) growth in the region is projected to drop to -2.1 percent in 2020 from 2.6 percent in 2019. In the downside scenario, in which COVID-19 lingers and spreads more intensively, growth in the region could drop to -3.0 in 2020.
    - Simulations from the CGE model suggest that the immediate impact of COVID-19 on growth in Sub-Saharan Africa would be substantial, even under the most optimistic scenario of a rapid and efficient response. Simulation results show that GDP would be lower than in the no-COVID base case by about 5.7 percentage points in 2020. On this basis, growth in the region is projected to decline to -2.5 percent in 2020 due to COVID-19. Under the most pessimistic scenario (the COVID-19 pandemic lasts through 2021), the output decline would be much more dramatic. GDP would be 7.6 percent lower than in the no-COVID base case. In this event, growth in the region would decline to -5.1 percent in 2020.

Memo:

The World Bank's Macroeconomic and Fiscal Model (MFMOD) is a structural econometric model with most parameters estimated using the error correction approach of Wickens and Breusch (1988). The MFMOD is currently estimated for 181 individual countries (developing and developed) and is best suited for forecasting, notably in the short and medium term, as well as for policy analysis. The version of the MFMOD used for the current analysis is a Sub-Saharan Africa regional model derived from the aggregation of individual country models. This model is estimated on the latest World Development Indicators data available during the third quarter of 2019. The individual country models are linked through trade and remittances flows.

ENVISAGE is a global recursive dynamic computable general equilibrium (CGE) model that explicitly models the year-by-year effects of a particular policy on the economy. The current version of ENVISAGE largely relies on the GTAP 9 database (Global Trade Analysis Project 2014). The data include social accounting matrices and bilateral trade flows for 141 countries/regions and 57 sectors. This analysis relies on 14 African countries/regions based on (i) the availability of data in the GTAP data base (only 32 African countries are represented in the GTAP data base); (ii) the size of the economy (the priority is to assess the largest African economies represented in the GTAP data base); (3) key transmission channels (oil, mining, other commodities, global supply chains, tourism and travel); and (iv) currently affected countries. Non-African groups considered include: China, the EU 27, the United States, other Organization for Economic Co-operation and Development countries, and the rest of the world.

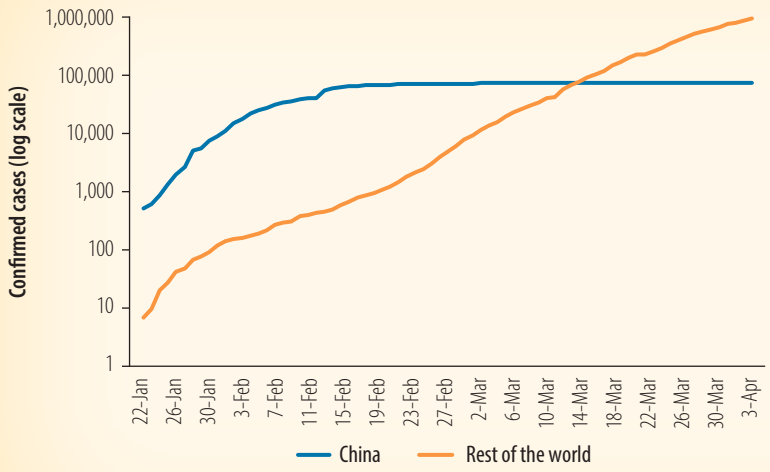
Section 1: Recent Trends and Developments

GLOBAL TRENDS

The COVID-19 Outbreak Has Taken a Toll on Human Life and Brought Major Economic Disruption across the World

The COVID-19 virus first appeared in the Hubei province of China in December 2019, and has been spreading rapidly to Asia, Europe and the rest of the world. On March 11, the World Health Organization (WHO) designated COVID-19 a global pandemic amid the rapid spread across countries and the significant public health risk it posed to the world. Although the pace of new infections inside China is stabilizing, it is accelerating in many other parts of the world (figure 1.1). Some areas that were successful in containing the initial spread of the virus, mostly in East Asia, are seeing a second wave of infections as citizens return from overseas travel (for example, from tourism abroad and international students). With heightened health and economic uncertainty, persistent financial market turmoil, and drastic measures to contain it, the COVID-19 outbreak has emerged as the most significant adverse shock the global economy has experienced since the 2007-09 global financial crisis.

FIGURE 1.1: Global COVID-19 Confirmed Cases



COVID-19, first reported in China, has since spread rapidly to other countries.

Source: World Bank staff estimates.
Note: Confirmed cases reported as of April 4, 2020.

Containment measures to slow the spread of the COVID-19 virus have slowed global trade by reducing international travel and disrupting global value chains (GVCs). Official quarantines have interrupted the free flow of people and goods, while precautionary behaviors (such as flight cancelations) by consumers and firms, and restrictions imposed by governments have reduced travel and tourism. Tighter border controls and production delays have also disrupted the tightly-linked system of GVCs. Factories around the world have slowed or halted production due to shortages of intermediate inputs from China and elsewhere. Large parts of the services and entertainment sectors, an important contributor to global growth, have been closed in many countries.

International and national efforts are being deployed to find ways to treat and immunize against COVID-19. In addition to national medical research developments, there is a strong will between G-7 countries to develop a COVID-19 vaccine. Some advanced economies are already

testing with anti-retroviral drugs (typically used for the treatment of AIDS) and chloroquine phosphate (a drug for the treatment of malaria). Efforts are also being deployed to increase the production of personal protective equipment (such as masks and gowns), testing kits, ventilators, and other medical equipment. The WHO and countries are increasingly raising awareness on personal protection and prevention of spreading the virus in the population by providing correct information about COVID-19.

Global Economic Activity Was Weak Prior to the COVID-19 Outbreak, but Signs of Stabilization Had Appeared

In 2019, the global economy grew 2.4 percent, the lowest rate since the global financial crisis. The global composite output Purchasing Managers' Index (PMI) had increased moderately in December, and the manufacturing component signaled a firming of global manufacturing activity, which had weakened since early 2018. The services sector was broadly stable and grew further in December. Global survey data pointed to continued recovery at the start of the year, with the composite PMI rising to a 10-month high of 52.2 and the manufacturing PMI reaching a 9-month high of 50.4 in January 2020. Survey measures of manufacturing new export orders had improved, spurred by reduced trade policy uncertainty amid progress in U.S.-China trade negotiations.

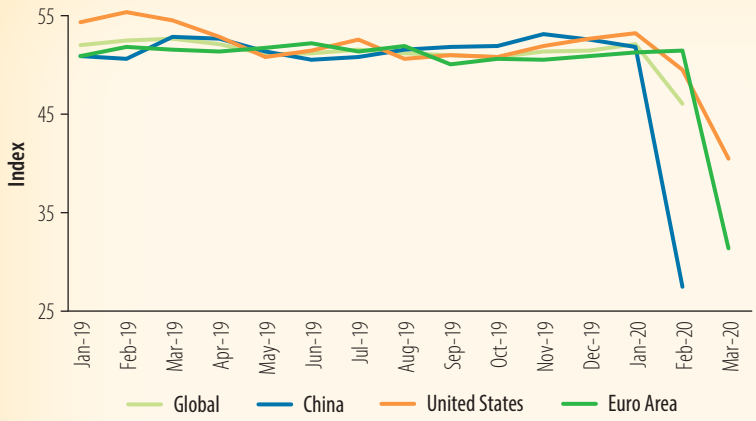
The January 2020 Global Economic Prospects report of the World Bank had forecast that global activity would rebound in 2020. This projected pickup was already fragile, being predicated on a recovery in a few large emerging markets and developing economies (EMDEs), while growth was expected to continue to slow in China, the euro area, and the United States—Sub-Saharan Africa's key trading partners. The spread of the COVID-19 virus means that this rebound will not occur, and global activity will instead contract in 2020.

The COVID-19 Outbreak Is Likely to Lead to a Global Recession in the First Half of 2020

Incoming data suggest that the economic disruption from the COVID-19 virus is extensive, and the global economy is falling into recession. The global composite PMI fell by 6.1 points in February, the steepest single-month decline since October 2001, primarily due to the composite PMI for China plummeting from 51.9 to a record low of 27.5 (figure 1. 2). The PMIs for the euro area and the United States joined in the decline in March. The PMI for the United States fell from 49.6 in February to 40.5 in March, while that for the euro area dropped from 51.6 to 31.4. The downturn in economic activity in the United States and the euro area was more severe in consumer-facing businesses (for example, hotels, restaurants and other leisure-based activities) and the transport and travel sectors. In China, incoming activity data demonstrate the scale of the contraction in the first quarter. Industrial production fell 13.5 percent and fixed asset investment contracted 24.5 percent in January-February (year-on-year). Services production fell 13 percent, and retail sales dropped 20.5 percent (year-on-year) in the first two months of the year. Contractions of a similar magnitude are expected to follow in other countries as localized outbreaks combined with strict containment measures weigh on activity. In the United States, initial jobless claims jumped to a record 6.6 million in the week ending March 28th, from 3.3 million in the previous week, adding up to about 10 million job losses during the last two weeks of March.

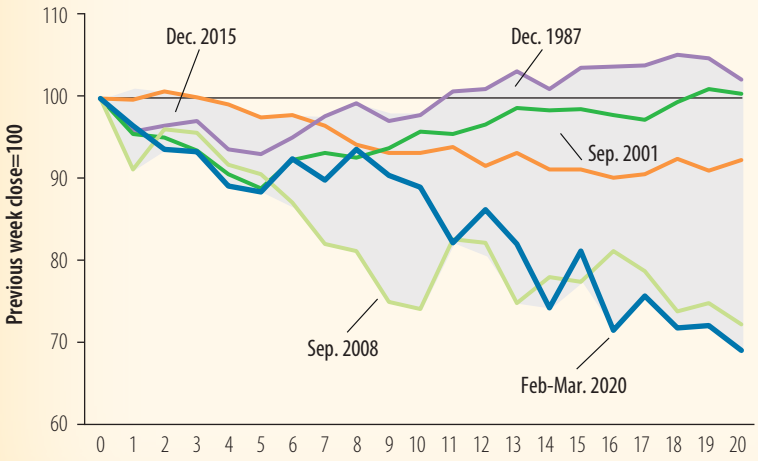
Global equity markets have been quite volatile and plummeting in response to news that the COVID-19 outbreak outside China was accelerating. Only a week after reaching an all-time high, the S&P500 experienced one of the fastest declines in its history in late February, and currently stands about 25 percent below its recent peak (figure 1.3). Stock markets in other countries have experienced declines of similar magnitude. Yields on safer debt have fallen to historic lows, spreads on higher-risk borrowing have widened, and EMDE currencies have rapidly depreciated. In March, the pace of capital flows out of EMDEs exceeded the worst period of the global financial crisis, with the bulk of the outflows coming from non-China EMDEs.

FIGURE 1.2: Composite PMI



The collapse of the Composite Purchasing Managers' Index in China, the United States, and the euro area suggests that the economic disruption from COVID-19 is likely to be extensive.

FIGURE 1.3: S&P 500 Index



The volatility of global equity markets reflects the uncertainty around the COVID-19 outbreak.

Sources: Haver Analytics, Bloomberg, and World Bank.

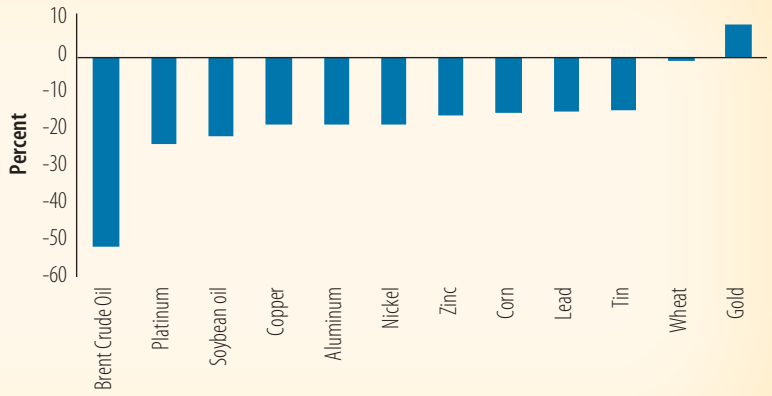
Note: In fig 1.3, the shaded area indicates the range of 17 episodes from 1951 to 2020 when the S&P 500 posted the largest weekly losses. Overlapping episodes are excluded. Preceding week closing value = 100.

The prices of most commodities have also been declining since January 20th—the date human-to-human transmission of the COVID-19 virus was first publicly confirmed—with the notable exception of gold, which has benefited from its safe-haven status and gained about 9 percent (figure 1.4). Industrial metals prices have suffered from lower demand, with significant declines in copper (-19 percent), nickel (-18 percent), and zinc (-16 percent). Oil prices fell even more precipitously following the announcement that both Saudi Arabia and the Russian Federation will boost oil production, with Saudi Arabia planning to increase output to a record level of 12.3 million barrels per day, 2.5 million more than it is currently producing. The Brent crude price had its worst one day decline since 1991 in early March, and now stands around $30 per barrel.

In response to these developments, central banks around the world, including the U.S. Federal Reserve and European Central Bank (ECB), have taken bold steps to provide further monetary accommodation, boost liquidity, and ensure the smooth functioning of financial markets. Large-scale fiscal stimulus measures to mitigate the economic effects of the virus are being deployed across the world to support households and the business sector. Nevertheless, the

Most commodity prices have been falling, with prices of crude oil and industrial metals dropping sharply.

FIGURE 1.4: Changes in Commodity Prices since January 2020



Source: Authors' construction using the CGE model (ENVISAGE)
Note: Last observation is April 7, 2020.

global outlook has been revised down sharply. The aggressive containment measures, heightened uncertainty, financial market turmoil, and stringent cross-border travel restrictions are expected to depress significantly global growth through the first half of the year, and potentially longer. The impact of COVID-19 on global economic activity is expected to be larger than in other pandemics not only because the COVID-19 virus is considerably more contagious but also because the integration of the Chinese economy into global economy is greater. Relative to the SARS outbreak in 2002, China plays a much bigger role in global output, trade, commodity markets and international tourism (box 1.1). Weak external demand, the accompanying sharp fall in key commodity prices, and disruption in tourism that the COVID-19 is expected to cause will negatively affect economic activity in Sub-Saharan Africa.

BOX 1.1: The COVID-19 Virus: This Time Is different

The COVID-19 pandemic is having a more severe impact on the global economy due to: (1) a greater direct impact on human lives, (2) the greater importance of China in a world economy that is increasingly interconnected, and (3) the economic severity of mitigation measures. Relative to the previous comparable outbreak, namely that of SARS in 2002, China plays a substantially larger role in the global economy and in commodity markets (figures B1.1.1 and B1.1.2). The COVID-19 pandemic started in China and has spread 205 countries and territories. As of April 7, 2020, 5,425 cases and 126 deaths have been confirmed in 45 Sub-Saharan African countries.

COVID-19 has already surpassed the three major virus outbreaks over the past twenty years (SARS, Avian Flu, and MERS) in terms of the number of infected cases and fatalities. As of April 7, the number of confirmed cases worldwide exceeds 1,4 million—an amount that is significantly higher than the 8096 cases of SARS in 2002. The number of fatalities surpasses 80,000 deaths — which is higher than the 858 deaths from MERS in 2012. Finally, SARS and MERS affected 29 and 28 countries and territories, respectively —as opposed to the 205 countries and territories that are currently being affected by COVID-19. The spread of the virus across the world is such that the number of confirmed cases outside China has already surpassed that of the epicenter.

BOX 1.1 *continued*

Since the end of February 2020, new major pandemic focal points have been identified in Asia, Europe, North America, and the Middle East. Other systemic countries in the global economy have been largely affected by COVID-19 —namely, the United States, Japan, the Republic of Korea, Germany, France, Italy, Spain, and the United Kingdom. The number of infected people continues growing at a faster pace in North America and Europe while countries in Asia appear to have already flattened the curve of confirmed cases. China along with the aforementioned eight countries account for half of global production and half of global consumption. They also account for almost two-thirds of the manufacturing output in the world and more than half of the global manufactured exports. Some of these economies—especially China, South Korea, Japan, the United States, and Germany— are also part of global value chains. In this context, deceleration of economic activity in these countries will produce "supply-chain contagion" in virtually all nations.

FIGURE B1.1.1: China plays a key role in the global economy (% of world)

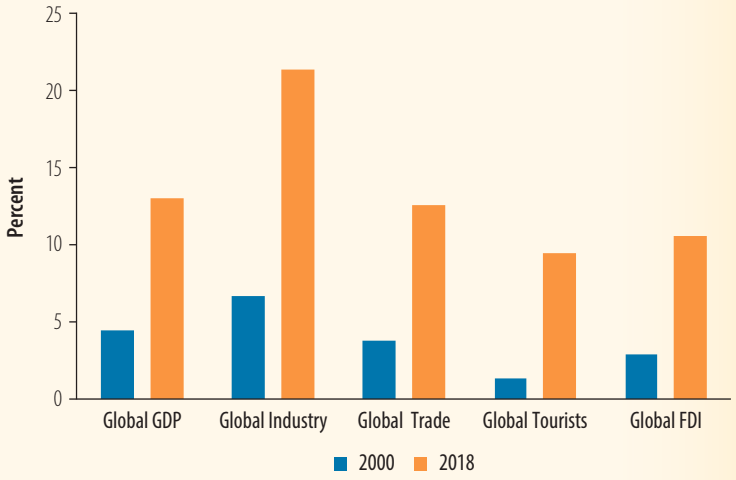
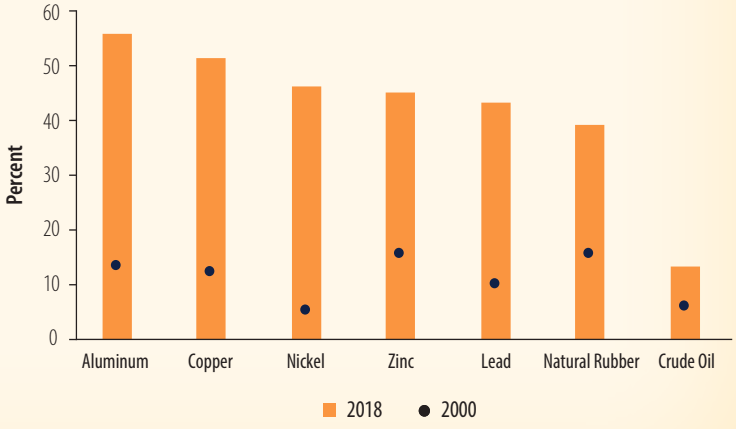


FIGURE B1.1.2: China is a major source of demand in global commodity markets



Sources: World Development Indicators, Commodity Market Outlook, World Bank.

1.2. COVID-19 AND ECONOMIC ACTIVITY IN SUB-SAHARAN AFRICA: CHANNELS OF TRANSMISSION AND THE INITIAL POLICY SPACE

In the Sub-Saharan Africa region, despite a late arrival, the COVID-19 outbreak has spread rapidly across the region in recent weeks (figure 1.5). As of April 7, 5,425 cases of COVID-19 were confirmed in 45 countries in Sub-Saharan Africa.[1] A relatively small but rising number of confirmed cases are now due to local transmission. The lack of testing capacity in many countries suggests that these figures most likely understate the true number of infections. South Africa has the largest outbreak in the region with 1,505 confirmed cases (map 1.1). It has declared a national state of disaster and announced a number of measures to curb the spread of the virus, including a travel ban on foreign nationals from high-risk countries, prohibition of public gathering of more than 100 people, and school closures. Rising outbreaks, although smaller in magnitude to that of South Africa, have also emerged in West Africa (Burkina Faso, Côte d'Ivoire, Senegal, Ghana, and Nigeria) and East Africa (Rwanda and Kenya). These developments have prompted governments to put in place their own containment measures, including travel bans on foreigners from countries that have reported any case of COVID-19, restrictions on public assemblies, and school closings. These containment measures may prove insufficient in stemming the outbreak without the appropriate health interventions and population response.

COVID-19 is a supply shock and a demand shock. On the supply side, there is a discrete drop in employment that goes beyond the number of people infected by COVID-19. It also includes a decline in employment as a result of workplace closures and travel bans. The resulting output contraction can be partly mitigated due to digital technology and cloud-based collaborative software and databases. However, some tasks cannot be performed remotely, and they require workers present on site. Employment can also be reduced directly due to health measures aimed slowing the spread of the virus —for example, school and daycare closures, and quarantines— as people stay away from work to take care of their children or tend sick relatives, or they have been in contact with or are family of infected people. On the demand side, consumer and firms will tend to defer spending when facing the Knightian uncertainty that is currently associated with the nature, strength and length of the COVID-19 crisis. In previous crises, households and entrepreneurs postponed purchases and delayed investments. Additionally, access to good and services will be reduced as stores are shut down (or service hours are cut) and some home delivery services are suspended.[2]

COVID-19 Is Affecting Sub-Saharan African Countries through a Series of Channels

The economic impact of COVID-19 is captured by the health shock (workers and consumers infected by the virus) and the series of disruptions caused by the mitigation measures imposed by the governments, the responses of individuals (particularly, in terms of hygiene and self-isolation), downturns in economic activity from major trading and investment partners, dislocation of global capital markets, and the different economic policy responses. In the case of Sub-Saharan Africa, limited access to safe water and sanitation facilities, urban crowding,

1 The number of COVID-19 cases was taken from the Center for Systems Science and Engineering at Johns Hopkins University.

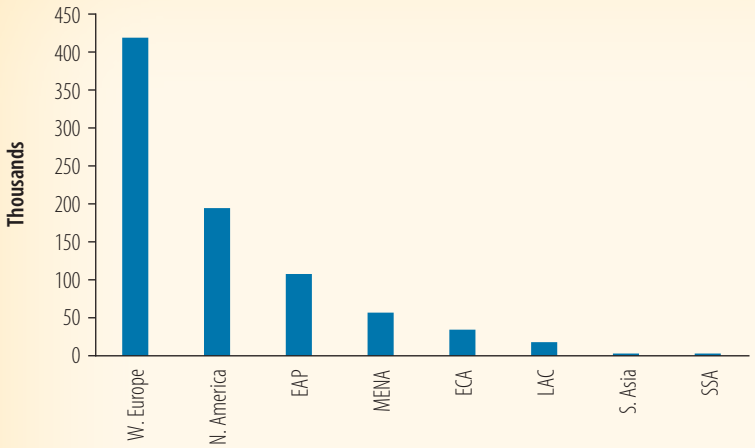
2 Decisions to delay spending and investment plans among households and firms can be unintentionally synchronized due to the internet (for example, personal communications and international media). The demand shock can be transmitted (domestically and internationally) through channels beyond the trade and finance linkages (Baldwin and Weder di Mauro 2020).

weak health systems, the large informal economy, and insufficient policy space may pose challenges to the protection of African lives and livelihoods amid the COVID-19 outbreak.

Broadly speaking, the following are the main channels of transmission of COVID-19 on economic activity in Sub-Saharan Africa:

The first channel of transmission is the disruption in trade and value chains. Growth deceleration in major economies, including China, will affect the demand for Sub-Saharan African exports. It will sharply reduce the international price of commodities exported by the region—especially, oil, mineral ores and metals—and affect countries with strong value chain participation. The latter is relevant for countries with rising participation in agribusiness and apparel (Ethiopia and Kenya), manufacturing goods (Tanzania), auto industry (South Africa), and mineral exporters that are part of the value chain in electronics (the Democratic Republic of Congo and Zambia). Disruptions to GVCs might in turn exacerbate the plunge in oil prices as demand from China declines.

FIGURE 1.5: Global COVID-19 Cases (Thousands)



Despite a late arrival, the COVID-19 outbreak has spread rapidly across Sub-Saharan Africa in recent weeks.

MAP 1.1: COVID-19 Confirmed Cases in Sub-Saharan Africa

While South Africa has the largest outbreak in the region, other countries are seeing an increase in the number of cases of COVID-19.

Source: Center for Systems Science and Engineering at Johns Hopkins University.

Note: The last observation is April 7, 2020. EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa.

The second broad channel of transmission is foreign financing flows into Sub-Saharan African countries.[3] Lower foreign direct investment (FDI) inflows may affect more adversely extractive sectors (energy and mining sectors) and, to a lesser extent, manufacturing activity. As access to financing flows from China and capital markets become more restricted, infrastructure investments will also be severely affected. In the context of these investments, preparation and implementation challenges—along with the reduced financing—may delay the delivery of

3 Foreign financing flows into Sub-Saharan African amid the COVID-19 outbreak will decline not only due to push factors (as the economic activity of countries investing in the region experience a growth slowdown and global investors shift their demand towards safe assets) and pull factors (many SSA countries will also experience growth deceleration).

infrastructure projects (say, energy projects, roads, airports, and ports). Aid flows might also be affected as traditional donors (say, the United States and Europe) are now at the epicenter of the COVID-19 outbreak and may deploy their resources to support the segments of the population that are most affected by the economic implications of the virus. The spread of COVID-19 and plunging oil prices could trigger capital flight from Africa —especially, as portfolio investments flow out of countries where investors purchased local currency securities (for example, Ghana, Nigeria, and South Africa). In addition to financing flows, the sudden-stop in travel is likely to hurt tourism sectors in Sub-Saharan Africa. Countries with greater dependence on tourism revenues will be significantly affected (Botswana, Kenya, Mauritius, and South Africa, among others).

The third broad channel of transmission is the health channel, the direct impact of COVID-19 on economic activity from a wider spread of the virus in the region (both in the number of infected people and the number of fatalities) and the fourth channel include disruptions caused by containment and mitigation measures imposed by governments and the response of the citizens. Several factors pose challenges to the effectiveness of containment and mitigation measures against the spread of COVID-19 in Sub-Saharan Africa, namely, large and densely-populated urban informal settlements, poor access to safe water and sanitation facilities, and fragile health systems. However, the magnitude of the impact will depend on the population's reaction within African countries, the spread of the disease, and the policy response. This could lead to reduced labor market participation, capital underutilization, lower human capital accumulation, and long-term productivity effects.

Health Channel: Saving Lives

Beyond the economic consequences, the risk of an explosion of COVID-19 cases in Sub-Saharan Africa is high, and the human cost of the pandemic could rise significantly. In addition to a call for strengthening the health care systems in the region, a series of non-pharmaceutical interventions (NPIs)—such as social distancing and self-quarantine—have been recommended. They impose severe economic costs but they arguably slow the spread of the pandemic.

Recent models that incorporate the interaction between epidemics and economic decisions argue that the decision to cut back on consumption and work (as a result of a lockdown) might reduce the severity of the epidemic. However, it will magnify the depth of the economic downturn (Eichenbaum, Rebelo and Trabandt 2020). Smoothing the economic costs of the lockdown reduces its intensity and extends it for a longer period. However, complementing the lockdown policy with random testing may generate important welfare gains and eliminate the need for indiscriminate quarantines (Piguillem and Shi 2020). Greater testing with targeted quarantine policies can mitigate the economic impact of COVID-19 and reduce peak symptomatic infections—which is important to relieve hospital capacity constraints (Berger et al. 2020)

With a few exceptions, such as South Africa, self-quarantining and social distancing as practiced in China or in other advanced economies may not be effective mechanisms to slow the spread of the virus in Sub-Saharan Africa. Resources to set up quarantine rooms for suspected cases at airports and hospitals, or to trace contacts of confirmed COVID-19 cases might be scarce. Self-quarantining and social distancing are specially challenging for a continent where 85 percent of

the population live on less than US$ 5.50 per day and 70 percent of city dwellers live in crowded slums. A lockdown could entail severe hardships in countries where most of the population work as farmers or self-employed entrepreneurs in the informal sector and needs to remain active to support their families. A more rapid and long-lasting spread of the virus is therefore possible. Box 1.2 discusses alternative options for Sub-Saharan Africa in terms of the mitigation measures that have been imposed worldwide.

BOX 1.2: Mitigation Strategies for African Countries

Many African governments have already begun to respond to the outbreaks in their countries with public health measures to limit the potential spread of the infection. These actions range from testing and quarantine for new arrivals to the country, through to active suppression measures, such restrictions on population movement and on large gatherings. The stakes are high. Modelling conducted by Imperial College (2020) suggests that Sub-Saharan Africa could face roughly one billion infections under an unmitigated scenario, where the disease is allowed to spread unimpeded. This would translate into roughly 2.4 million deaths across the region from COVID-19. Under two mitigation scenarios, one for moderate suppression, and the second for a more aggressive suppression approach, these numbers could be reduced downwards significantly. Under the moderate suppression scenario, they forecast around 450 million infections and 1.2 million deaths, roughly halving the unmitigated scenario. Under more aggressive actions by the state to suppress the spread, infections could be kept as low as 110 million, while deaths would be one-eighth the unmitigated level, at 300,000 (figures B1.2.1 and B1.2.2).

FIGURE B1.2.1: Projected Infections (billions)

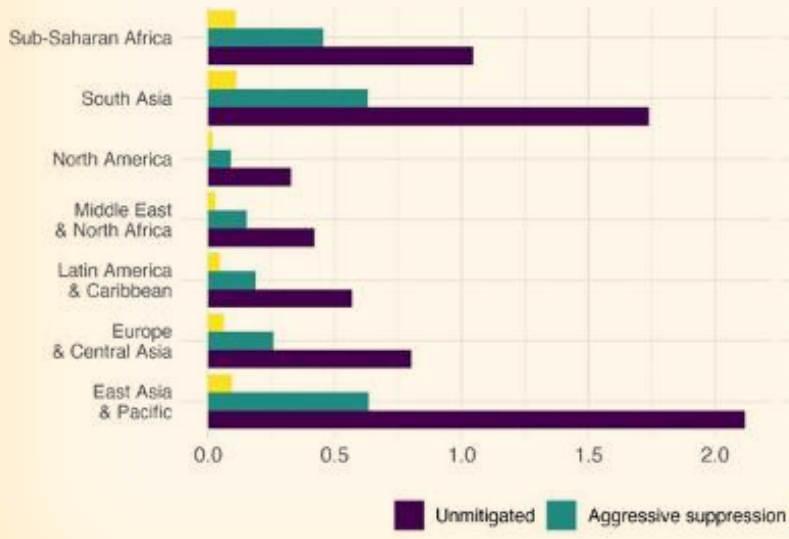
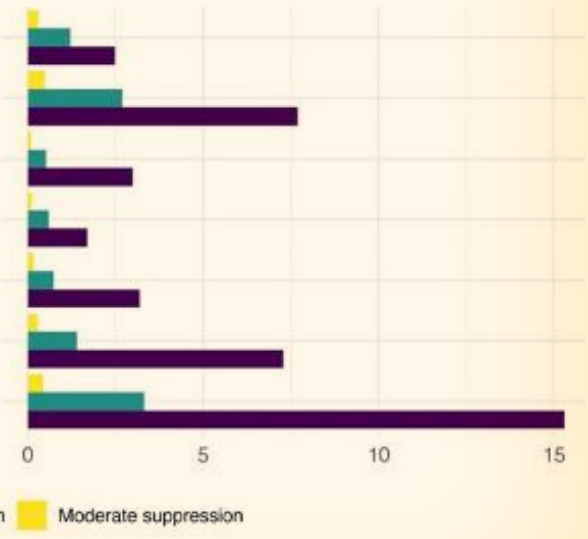


FIGURE B1.2.2: Projected Deaths (billions)



Source: Imperial College, Report 12, The Global Impact of COVID-19 and Strategies for Mitigation and Suppression, March 26, 2020

BOX 1.2 *continued*

Optimal containment strategies for high income countries may not be as suitable or feasible in lower-income settings such as Sub-Saharan Africa.

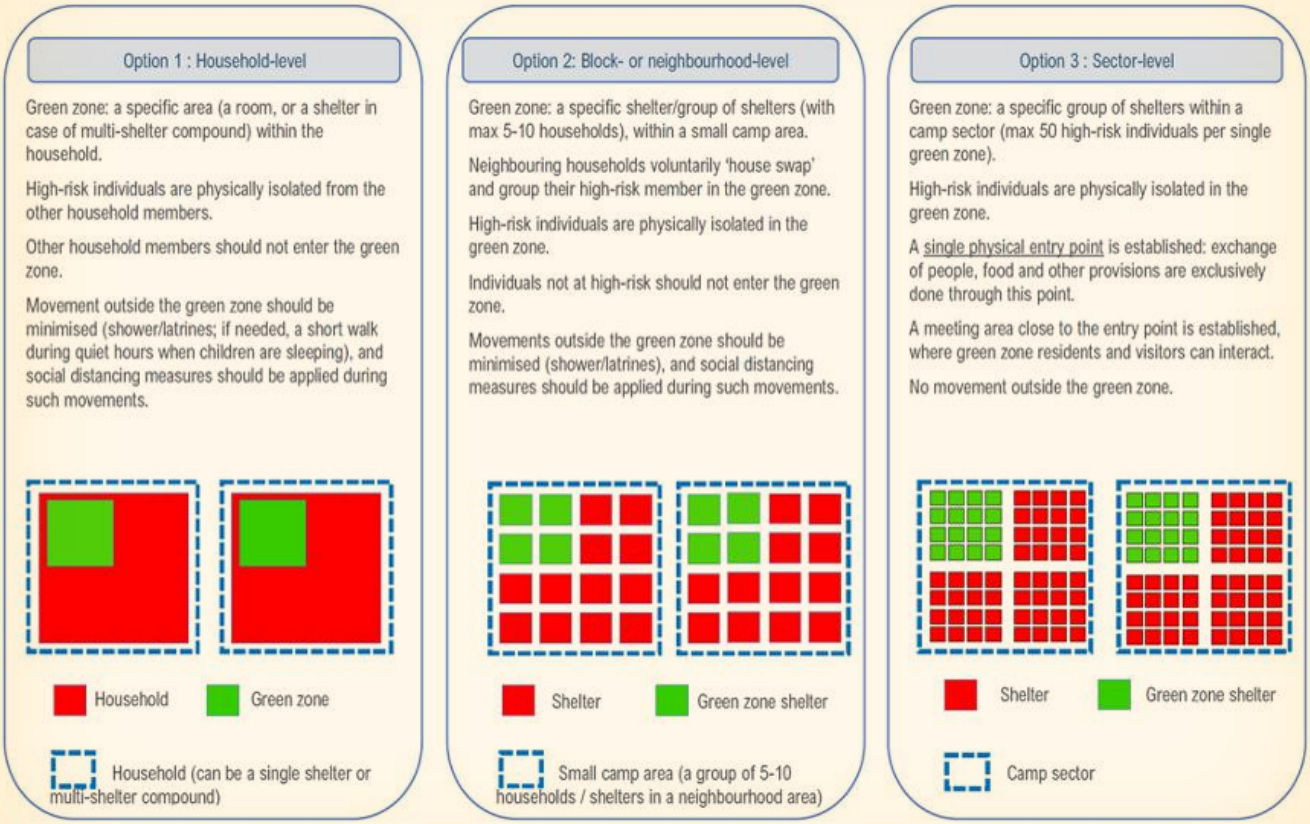
The costs of containment to the rest of the population may be very high. New analysis from OECD (2020) estimates that the initial economic costs of shutdowns could exceed 15 percent of gross domestic product (GDP) in South Africa during 2020, over 25 percent of GDP in the United States, and around 30 percent of GDP in Mexico. Comparable estimates for additional Sub-Saharan African countries are not yet available; however, it is likely that shutdowns comparable to those seen in OECD countries could carry high levels of cost to GDP, while also creating increased risks to the population, including hunger, starvation, impoverishment, as well as political backlash. The Africa Centers for Disease Control (CDC), part of the African Union, guidelines (2020) warn against "measures...that cause severe negative impact on the social wellbeing and economic progress of countries" and note that "this will ensure sustainability of the response...and avoid intervention fatigue and community revolt."

There is a range of alternative strategies for mitigation depending on the country context. Low-income countries may consider less aggressive but tailored containment strategies that might allow for greater continuation of normal economic activity, but also may lead to larger fractions of the population being infected prior to any vaccine reaching people.

The Africa CDC guidelines (2020) recommend a stepwise approach, where containment measures escalate only modestly over the phases of the outbreak. During phase 2, an expanding outbreak, they advocate social distancing, intensified promotion of hygiene measures, and restrictions on mass gatherings. By phase 3, an advancing outbreak, home isolation for suspected cases and consideration of community lockdowns is encouraged. In phase 4, a large national outbreak and widespread transmission, they encourage considering *lifting* community lockdowns and rescinding closures of institutions. The guidelines do not specifically mention—positively or negatively—strategies such as closing all nonessential businesses, and, importantly, they note that they are interim guidelines with minimum recommendations for African Union Member States based on currently available evidence. Countries may choose stricter measures depending on available resources.

Shielding of vulnerable groups instead of aggressive suppression could be considered in low-income countries. According to research by the London School of Hygiene & Tropical Medicine (Dahab et al. 2020), a policy of attempting to shield vulnerable groups from the virus—such as those over age 60—rather than an attempt to contain the virus, may be more feasible and desirable in low-income country settings. Only a small fraction of the region's population is over age 55—an estimated 7.4 percent in Nigeria and 5.9 percent in the Democratic Republic of Congo, for example (CIA 2020). Furthermore, the capacity to enforce and sustain more aggressive containment measures, such as closure of all nonessential businesses, may be far too limited in many African countries. Such shielding entails isolating only certain groups of the population, allowing younger or less vulnerable individuals to continue to participate in normal economic activity (figure B1.2.3).

FIGURE B1.2.3: Housing Arrangements for Each Shielding Option



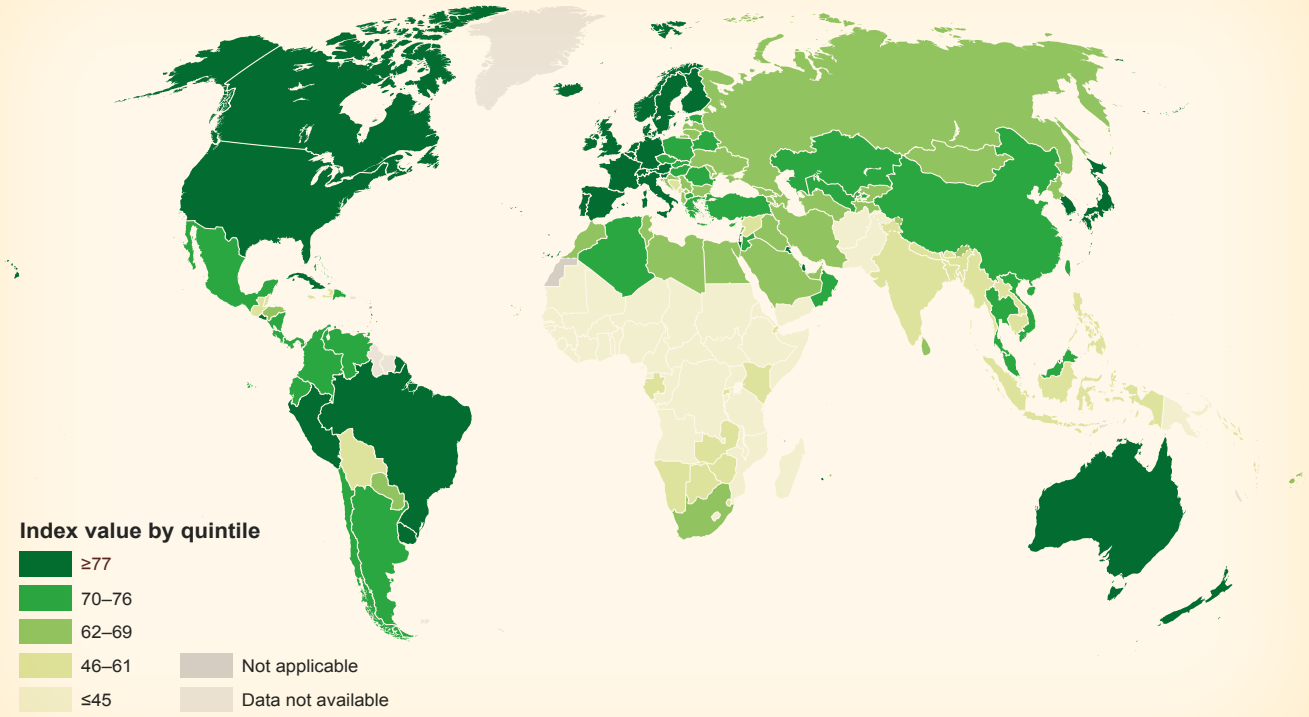
Source: Dahab et al. 2020.

Health Service Coverage and Financing

The need for universal health coverage (UHC) has never been greater than now, but Sub-Saharan African countries are ranked in the bottom quintile among the global regions. UHC means that all people in a country receive the quality health services they need, while at the same time ensuring that the use of these services is affordable. Health service coverage is tracked using 16 indicators that are compiled into an index that ranges between 0 and 100.[4] Ranking countries into quintiles based on this index, service coverage is lowest in the African region, especially low-income countries (map 1.2). The region has not only a health service coverage deficit but also health spending that is well below the recommended levels. Most of the countries in the region have critical shortages of health professionals, often combined with considerable numbers of unemployed health professionals due to financial constraints. A multitude of factors—extensive poverty, imperfect private labor markets, and limited public financing—lead to this paradox of service shortages while having underutilized talent in many countries (WHO Statistics 2019).

4 The universal health index consists of 16 indicators, divided equally into four subcategories: (1) an index for reproductive, maternal, newborn, and child health (family planning, antenatal care, immunization, and child care for pneumonia); (2) an index for infectious disease control (TB treatment, HIV treatment, treated bed nets, and basic sanitation); (3) an index for noncommunicable diseases (blood pressure, fasting plasma glucose, cervical cancer screening, and nonuse of tobacco); and (4) an index for service capacity and access (hospital bed density, health workers density, access to core medicines, and International Health Regulations core capacity).

MAP 1.2: Universal Health Coverage Index and Ranking of Countries

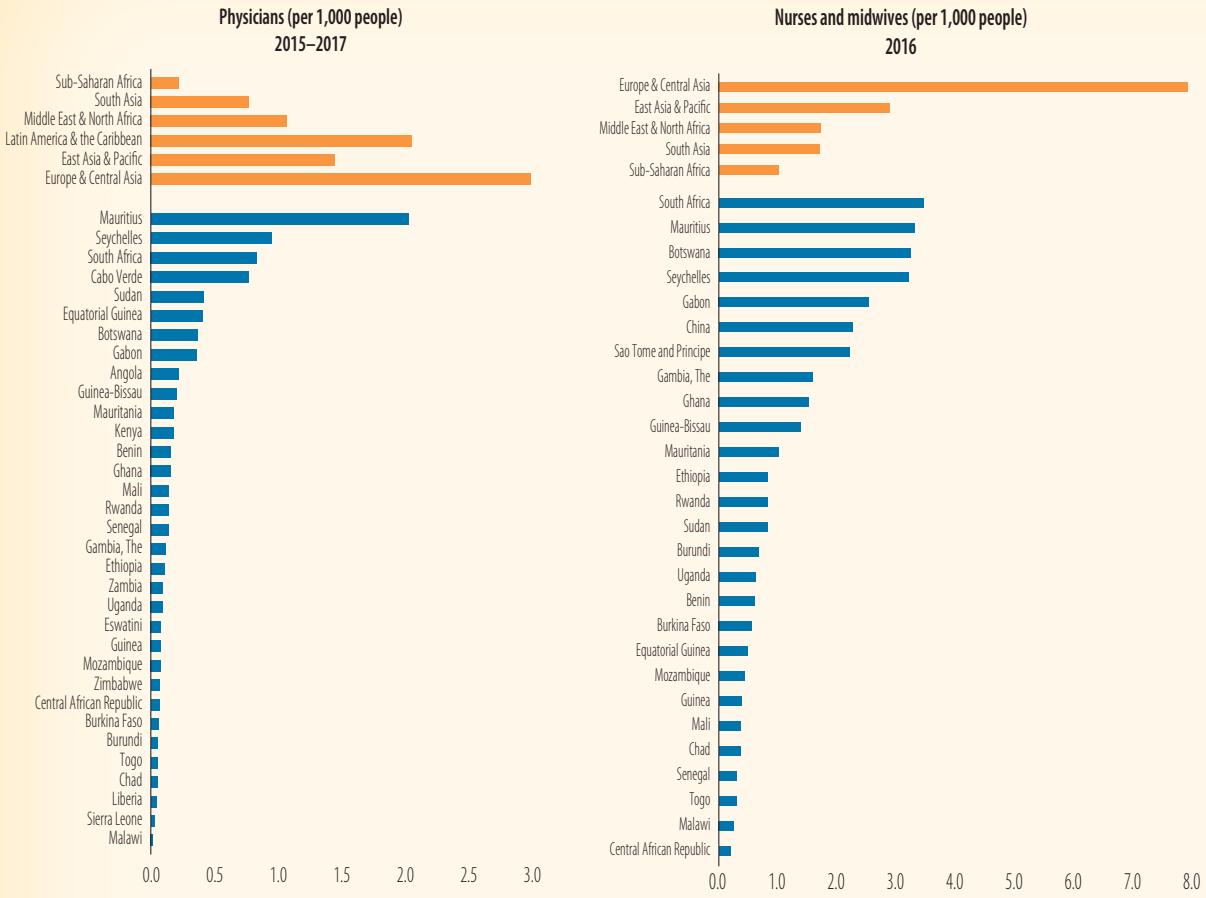


Sources: Tracking universal health coverage: 2017 Global Monitoring Report, World Health Organization; International Bank for Reconstruction and Development/World Bank.

Health services coverage in Africa. Low health services coverage in Africa is driven by many factors, including low population density in many parts of African countries making service delivery relative costly, limited funding, supply bottlenecks and low productivity of health professionals. Widespread, sustained community transmission could prove difficult to managed in Sub-Saharan Africa, given the region's weak health systems, including understaffed medical personnel (doctors, nurses, and mid-wives) and the lack of hospital beds and equipment, which could lead to a high level of deaths. The lack of qualified health workers is quite severe in some cases (figure 1.6). For example, a fragile country like Togo had only 8 doctors and 14 nurses per 100,000 people in 2018—well below the levels recommended by the WHO (100 doctors and 35 nurses). In addition, geographical disparities are quite large: 64 percent of health professions are in the capital region. In contrast, the Zambian population receives basic health services, although coverage is low in rural areas and the quality of health services is generally low across the country. A survey in 2018 revealed that 437 days are lost each month due to absenteeism and tardiness at public health facilities, and most of the health facilities lacked some of the core equipment (World Bank 2019b). Finally, hospitals may be unequipped in the event of surges of infected people. Although the number of hospital beds per 1,000 people is quite heterogeneous across countries in the region, more than 20 countries have less than one hospital bed per 1,000 people (including Ethiopia, Senegal, Nigeria, Tanzania, Angola, and Ghana). On average, Southern African countries, like Namibia, Mauritius, and South Africa, have more than 2.5 hospital beds per 1,000 people (figure 1.7). Mauritius has a density of hospital beds that is comparable to that of Italy (3.4 per 1,000) and lower than that of China (4.2).

FIGURE 1.6: Supply of Health Professionals: African Countries vs Other Regions

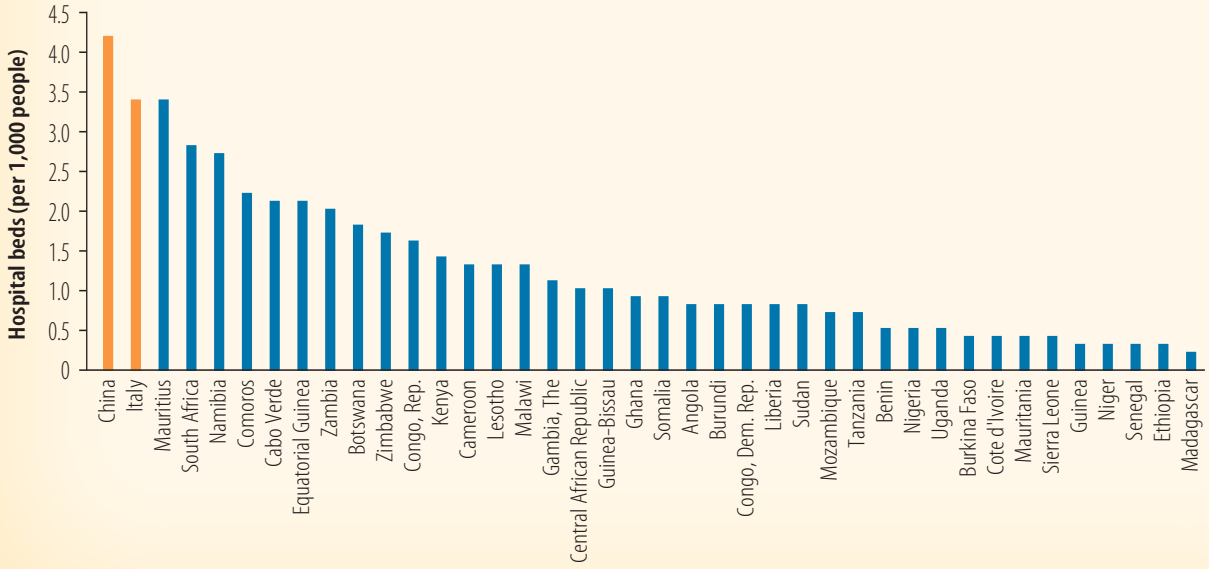
Africa is lacking qualified health professionals, and this shortage is quite severe in some countries.



Source: World Development Indicators, World Bank.

FIGURE 1.7: Hospital Beds per 1,000 People (Latest)

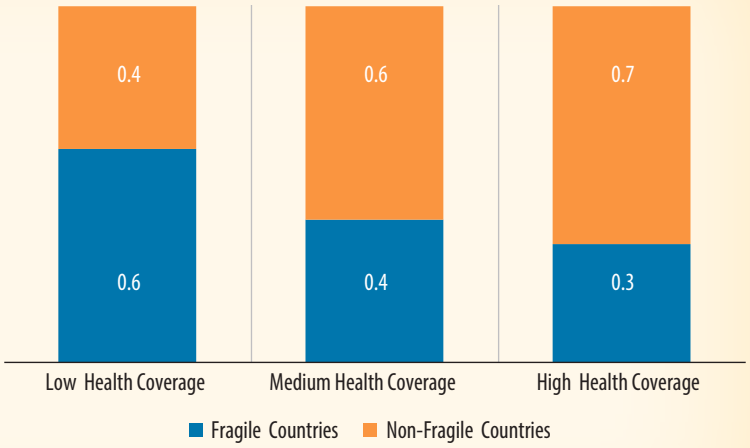
Nearly half the countries in the region have less than 1 hospital bed per 1,000 people.



Source: Word Development Indicators, World Bank.

People in fragile countries have particularly low access to basic health services.

FIGURE 1.8: Health Coverage and Service Delivery: Fragile versus Non-Fragile Countries



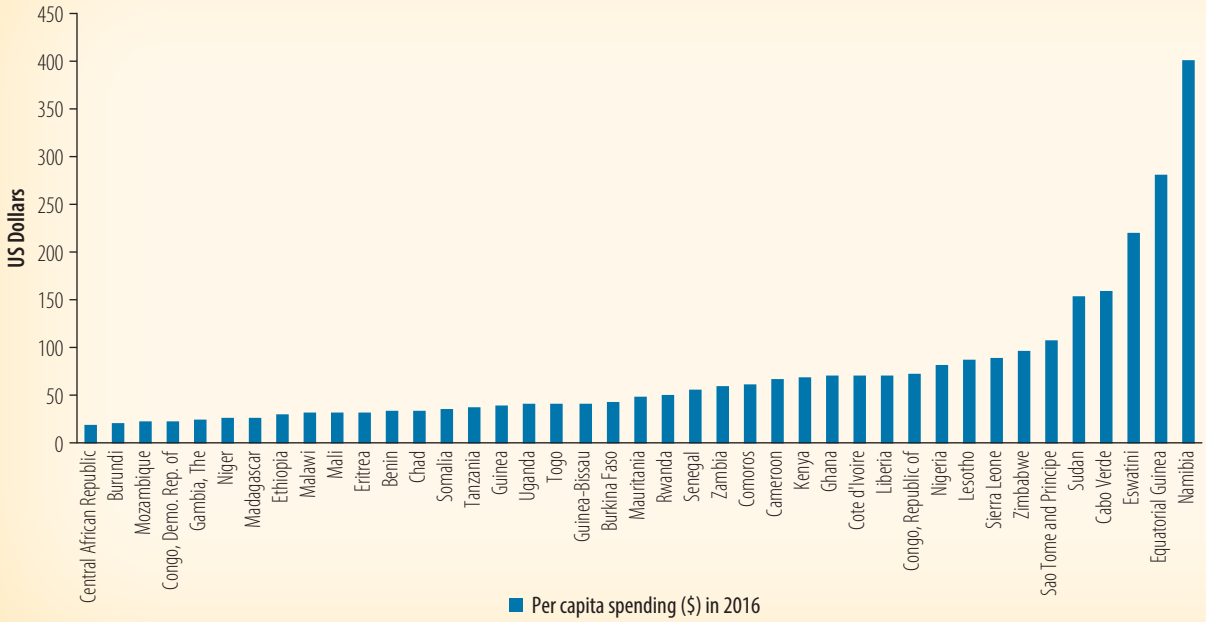
Source: Country Policy and Institutional Assessment reports, World Bank.

Note: Health coverage is low if most poor people are not receiving basic health services; it is medium if most of the population is receiving basic health services; and it is high when the majority of the population receives appropriate basic health services and there is good coverage and quality of preventive and curative health services.

Understandably, health services coverage is particularly weak in fragile countries in the region (figure 1.8). In several fragile countries in Africa, there are acute shortages of health professionals and supplies. Using Country Policy and Institutional Assessment (CPIA) ratings for the health services coverage component of the health status question, World Bank staff assessed that fragile countries have poor coverage for health services, and these services are often limited to capital cities. Many fragile countries are rated 2 or below on the scale of 1-5 (5 being the highest rating). Two-thirds of the countries with low scores for coverage are fragile countries, indicating that their populations do not have access to basic health services. Seventy percent of the countries that have high scores on service coverage (4 or above) are non-fragile states. In these countries, the majority of the population receives appropriate basic health services, and there is good coverage and quality of preventive and curative health services.

Health financing in Africa. The availability and allocation of financing for the health sector is a major concern in Sub-Saharan Africa, particularly the relatively high out-of-pocket expenses (figure 1.9). For example, total health expenditure per capita in the most recent year with data is US$32, which is less than half the levels recommended by the WHO for low-income countries (US$86). Health financing is mostly provided through the government budget and often funded by international donors. For example, Zambia's health sector financing mostly comes from the government and external donors—81 percent of the total current health expenditures, while out-of-pocket expenses are only 12 percent of current health expenditures. Donors finance about 43 percent of the total current health expenditures. Per capita health spending in Zambia is US$59 (World Bank 2019). In contrast to Zambia, out-of-pocket expenditures in Senegal remain high—51 percent of current health expenditures in 2016. In Nigeria, current health expenditure per capita has been declining since 2014: US$107 in 2014, US$98 in 2015, US$79 in 2016, and US$74 in 2017. Out-of- pocket expenses are very high in Nigeria—at 77 percent of current health expenditures. Mali, which spends only US$50 per capita on current health expenditures, is one of the 25 countries in the world with the lowest health financing per capita. The domestic

FIGURE 1.9: Per Capita Current Health Expenditure, 2016 (US$)



Low public health spending per capita often leads to high out-of-pocket expenses, making health services unaffordable.

Source: World Development Indicators, World Bank.

budget covers about 16 percent of current health expenditures, donors provide 36 percent, while the rest (46 percent) comes from out-of-pocket expenses. Madagascar is another country that spends less on health than most other low-income countries in Sub-Saharan Africa—around US$20 per capita—and a high proportion of health financing comes from out-of-pocket payments by households. In general, many African countries have out-of-pocket spending on health that exceeds the WHO recommended threshold of 20 percent.[5]

Restricted Access to Water and Sanitation

Frequent and proper hand hygiene is one of the most important measures that can be used to prevent infection with the COVID-19 virus. Public health officials recommend washing hands with soap and water for at least 20 seconds to eliminate viral particles on the hands. However, that recommendation is difficult to follow in African countries where access to water is restricted. The scarcity of water could be attributed to contaminated local water supplies, the distances to the nearest sources of water, droughts, or climate change. Further, people with suspected or confirmed COVID-19 disease need to have their own flush toilet or latrine with a door that closes to separate it from the patient's room. These toilets should operate properly and have functioning drain traps.

5 Recent CPIA ratings for health financing show that fragile countries have low health financing relative to other low-income countries. Many fragile countries received a score of 2 or below on the scale of 1-5 (where 5 being the highest ratings). Two-thirds of countries with low scores for health financing are fragile countries, indicating that health financing in these countries is not only limited but also not well-targeted and high out of pocket expenditures are being incurred by most of the population. On the other hand, over 70 percent of the countries with high scores (4 or above) are mostly non-fragile states. In these countries, public financing for health is relatively higher and targeted at priority public health programs. Moreover, these countries have appropriate health or social insurance policies that provide good coverage.

Lack of access to safe drinking water and sanitation services leads to increased health risks.

FIGURE 1.10: People Using Safely Managed Drinking Water Services, 2017 (%)

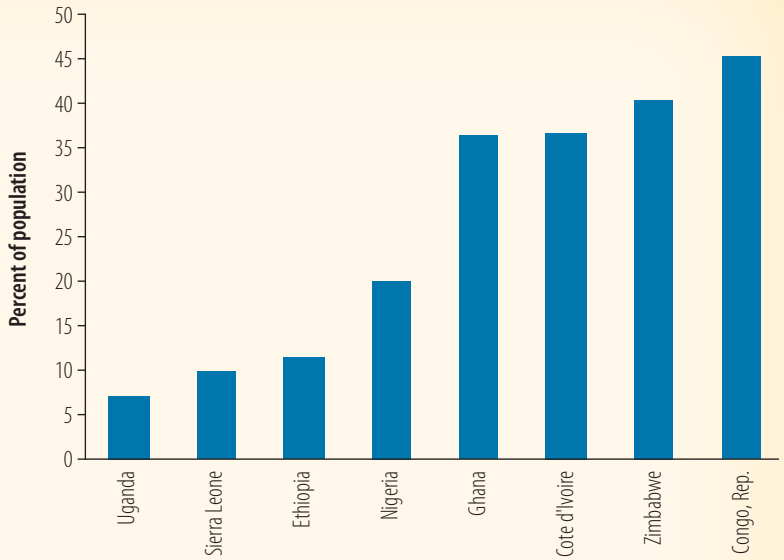
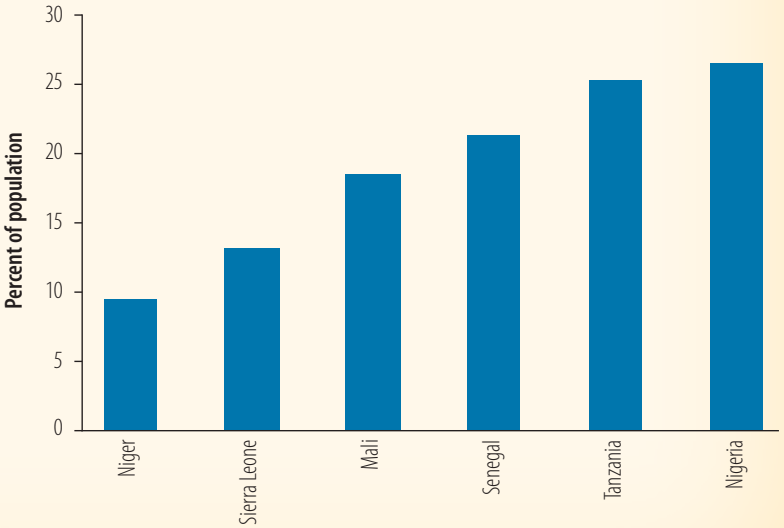


FIGURE 1.11: People Using Safely Managed Sanitation Services, 2017 (%)



Sources: World Development Indicators, World Bank.

To illustrate the challenges to proper hand hygiene as well as sanitation and plumbing, figures 1.10 and 1.11 depict the percentage of people using safely managed drinking water services and sanitation services, respectively. For the countries with data availability, access to safely managed water and sanitation services is poor but shows a wide range of variation. Less than 10 percent of the people in Uganda and Sierra Leone have access to safe water; in Zimbabwe and the Republic of Congo, more than 40 percent have access to safe water. In the case of access to sanitation services, the percentage of people using those services fails to exceed 30 percent for the countries with data availability. It exceeds 25 percent only for Tanzania and Nigeria.

Water that is safe enough to drink is ideal for handwashing. However, in the absence of improved water sources, small-scale solutions like a network of public handwashing stations could provide an alternative. Handwashing stations were set up in West Africa during the 2014 Ebola outbreak. Figure 1.12 depicts the percentage of people living in households that have a handwashing facility with soap and water available on the premises.[6] About half the population of Mali has access to basic handwashing facilities, while more than 40 percent of the people in the Republic of Congo, Tanzania, Namibia, South Africa, Mauritania, Nigeria, and Ghana have access to these stations. Only a small percentage of the population (less than 10 percent) has access to handwashing stations in the Democratic Republic of Congo, Rwanda, Chad, and Guinea-Bissau, among others.

6 Handwashing facilities may be fixed or mobile and include a sink with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing. Soap includes bar soap, liquid soap, powder detergent, and soapy water but does not include ash, soil, sand, or other handwashing agents.

FIGURE 1.12: People with Basic Handwashing Facilities, Including Soap and Water, 2017 (% of population)

A key preventive measure against COVID-19 is proper hand hygiene, yet most people do not have access to it.

Source: Word Development Indicators, World Bank.

Preparedness for Pandemics

The numbers of infected people and deaths in the Sub-Saharan Africa region are not as large as those in other regions. However, there is the possibility of underreporting the number of cases, as testing in the region has not been widespread. Additionally, the spread in Sub-Saharan Africa is of concern due to the fragility of health care systems, and the continent is already facing big public health issues—in particular, malaria, tuberculosis, and HIV/AIDS. Recent research shows that South Africa, Ethiopia, and Nigeria exhibit the greatest risk of importation of COVID-19. Nevertheless, the spread through the region is expected to be highly heterogeneous, depending on the distribution of cases within Chinese provinces and the flow of travel from these provinces to the different Sub-Saharan African countries. Travel restrictions would delay the risk that the outbreak spreads, but they will not prevent the risk of importation (Gilbert et al. 2020).

Simulations suggest that, based on current trends, almost all African countries are likely to exceed 1,000 confirmed cases by May 1 and 10,000 cases in the following few weeks.[7] If all African countries were to have advanced epidemics like South Africa, they would exceed 10,000 cases by the end of April (Pearson et al. 2020). The expansion of the virus is expected to be highly synchronized across countries in the continent, which calls urgently for new containment measures (including increased testing, contact tracing, and isolation of cases). Yet, there are large estimated differences between the unmitigated and suppression scenarios for Sub-Saharan Africa (see box 1.2). The unmitigated scenario predicts 1 billion infections and 2.4 million deaths, and the moderate suppression scenario calculates 450 million infections and 1.2 million deaths. A more aggressive suppression scenario implies 110 million infections and 300,000 deaths (Walker et al. 2020). In an environment with rationed testing, widespread randomized testing of the population will help inform policy on where it is most needed. It has been argued that

7 The authors use a branching process to simulate the epidemic by using the following parameters: (1) each case produces an average of two additional cases (Abbott et al. 2020), and (2) the average time between the onset of a case and the onset of a subsequent case infected by that case is 4.7 days (Nishiura et al. 2020). The accuracy of these forecasts depends on the availability of data in the WHO Situation Reports and the applicability of the global experience to Africa. The real timing of hitting the milestone number of cases may be earlier in the absence of data.

randomized testing should start in the hardest hit areas and move subsequently to the rest of the country (Stock 2020).

The management and control of COVID-19 cases relies heavily on the capacity of the health systems in the countries. According to the NTI and Johns Hopkins Center for Health Security (2019), national health security is weak around the world, and all countries have important gaps to address to be fully prepared for a pandemic. International preparedness is also fragile collectively. The average Global Health Security (GHS) Index is 40.2 (of a maximum of 100) for 195 countries worldwide.[8] The average for the region is 30.8, and only four countries in the region exceed the world average (South Africa, Kenya, Uganda, and Ethiopia).[9] Finally, most countries in the region have an influenza pandemic preparedness plan (35 of 47 countries in the continent). However, most of these plans are outdated—they were set up prior to the 2009 influenza A H1N1 pandemic—and are considered inadequate to deal with a global pandemic. The composite score for the completeness of the pandemic plans across the 35 countries was 36 percent. Country-specific scores on each of the thematic indicators for pandemic plan completeness varied, ranging from 5 percent in Côte d'Ivoire to 79 percent in South Africa (Sambala et al. 2018).

Overall, African countries have severe weaknesses in their ability to prevent, detect, and respond to health emergencies. They also display severe gaps in health systems—in terms of health capacity in clinics and hospitals, medical countermeasures and personnel deployment, access to health care, infection control practices and availability of equipment, and capacity to test and approve new medical countermeasures (NTI and Johns Hopkins 2019).

Protracted Impact on Human Capital Accumulation

The impact of COVID-19 on human capital goes beyond the direct effects on the health sector (doctors and nurses, among others). School closures have been mandated by 143 countries—with 130 countries imposing countrywide closures, while 13 countries introduced localized ones. The number of affected learners in countries with countrywide closures is billions of children and youth. If localized closures are expanded nationally, the number of affected learners would increase by 500 million students (World Bank 2020).

In addition to the economic impact from supply disruptions and the collapse in aggregate demand, COVID-19 will have important longer-term costs from a halt in human capital accumulation. Distance education, remote learning programs, and online training are being put in place at countrywide scale. Online learning has enormous potential. There is evidence that Indian children using the Mindspark app made more progress in basic language and math skills after four and a half months than those in the control group (Rajagopalan and Kothari 2017).

However, distance learning protocols will be difficult to implement in Sub-Saharan Africa, due to the region's modest internet penetration. On average, less than 20 percent of the African population has access to the internet—compared with 90 percent of the population in advanced countries and 60 percent in other developing countries (Calderon and Cantu 2020).[10] Innovative

8 The GHS Index examines the health security and capabilities of countries in the world across six categories: (1) preventions of the emergence or release of pathogens; (2) early detection and reporting for epidemics of potential international concern; (3) rapid response to and mitigation of the spread of an epidemic; (4) sufficient and robust health system to treat the sick and protect health workers; (5) commitment to improving national capacity, financing plans to address gaps, and adhering to global norms; and (6) risk environment and country vulnerability to biological threats. All these indices are normalized to a scale of 0 to 100, where 100 indicates the best health security condition.

9 Only one country in the region, South Africa (54.8), exceeds the average GHS index of the 60 high-income economies in the sample (51.9).

10 The regional average does not account for the wide variation in internet usage across countries in the region: Gabon (62 percent), South Africa (56), and Mauritius (55) are among the countries with the largest numbers of internet users; the Central African Republic and Guinea-Bissau (4 percent) are among the countries with the lowest percentage of users.

approaches are needed to avoid a larger pause in teaching and learning among low-income countries. Radio-, television-, and cell phone-based learning options can also be deployed. The longer is the duration of distance learning programs, the greater emphasis should be put on the language of instruction, content progressions, and relevance for students (van Fleet 2020).

Academic research argues that the direct epidemiological effects of school closures are uncertain and depend of the implementation strategies followed by districts or nations. However, there are estimates of the economic costs of school closures. Lempel et al. (2009) find that closing all schools in the United States for four weeks would cost between US$10 billion and US$47 billion (0.1-0.3 percent of GDP). The authors considered these estimates to be conservative, as the computed costs were based on earnings rather than total compensation.

THE TRADE CHANNEL

The COVID-19 outbreak has direct impact on the global economy through the trade channel. This is in stark difference compared with the 2008–09 global financial crisis where the impact on the global trade slowdown was indirect and the shock was mainly demand-driven. Although the effects of both crises were also transmitted to financial and nonfinancial sectors, this section focuses on how the COVID-19 outbreak is being transmitted to Sub-Saharan African economies through the trade channel.

Supply and demand shocks will impact trade in goods and services in Sub-Saharan Africa as a result of the COVID-19 virus.[11] First, the countries most affected by the pandemic account for a predominantly large share of world output and they are at the center of global value chains.[12] This introduces direct supply disruptions in African countries that are increasingly becoming more integrated to GVCs. This reinforces the shocks as countries even not affected by the pandemic find it difficult to supply their firms with imported intermediate inputs. The manufacturing sector in particular will be the hardest hit due to these supply shocks due to its strong linkages. Subsequently, exports are deemed to fall due to shortage of intermediate inputs.[13] The containment and mitigation measures introduced in the most-affected economies also means recessions leading to slowdown in global demand and hence trade. A mix of these lead to both supply and demand shocks reducing both imports and exports and hence income of most African economies. Even when the spread of the virus is minimal in most African countries, the trade channel would still impose large shocks to these economies.

Two stylized facts from the region's trade patterns would exacerbate the impact of the pandemic via trade: (1) primary commodities constitute the main export group of the region's trade with the rest of the world, and (2) China has become the main trading partner of most Sub-Saharan African countries. The 2008–09 global financial crisis immediately affected most countries in the world through the financial channels—as transmitted by global banks and captured by the sharp reduction in cross-border bank lending activity.[14] By contrast, the COVID-19 outbreak that started in China caused a sudden stop and slowdown in major business sectors integrated in GVCs, and a lower demand for commodities exported from Africa (thus, leading to a sharp

11 Baldwin and Tomiura, (2020)

12 Six countries - most affected (China, Korea, Italy, Japan, US and Germany) - account for 60% of world manufacturing and 50% of world manufacturing outputs (Baldwin and Tomiura, 2020).

13 Anecdotal evidence points to temporary shutdown of industrial zones in the region that are connected to Chinese GVCs.

14 The lack of financing that resulted from these financial channels slowed current and future FDI and sharply decelerated global trading. Consequently, this reflects not only cyclical weakness in global growth, but also underlying long-term structural shifts in the world economy—including the weak demand concentrated in highly-traded products, deceleration of trade liberalization worldwide, the slowing pace of international vertical specialization, and changes in the structure of the Chinese economy (Lewis and Monarch 2016; Constantinescu, Mattoo, and Ruta 2020).

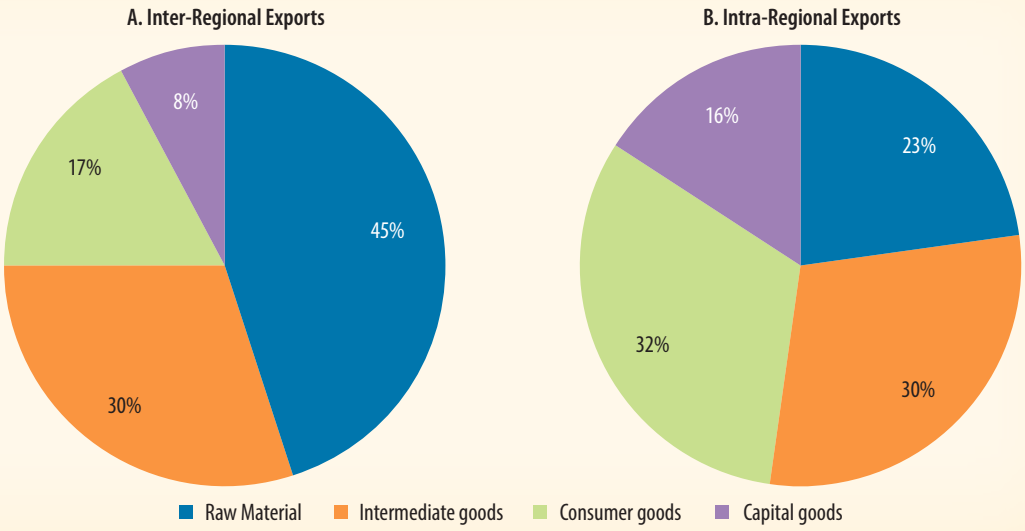
decline in their international prices). This section presents a classification of countries in Sub-Saharan African by their degree of exposure to the trade implications of COVID-19.

Over the past two decades, the patterns of market diversification in Sub-Saharan Africa have been changing, with South-South trading opportunities (in particular with China and other Asian economies) expanding rapidly in the aftermath of the 2008-09 global financial crisis.[15] For instance, there has been an important shift in Sub-Saharan Africa's export destinations. The region's top five export destinations in 1998 were the United States, the United Kingdom, France, Germany, and Belgium, and the amount of exports to these countries totaled US$26 billion. The configuration of the top five export destinations changed drastically by 2017: US$126 billion of the region's exports were sold to China, India, the United States, South Africa, and Switzerland.[16]

Sub-Saharan Africa has been increasing its participation in GVCs. Still, its predominant role is the provision of raw materials to GVCs (figure 1.13). Their region's export structure is still concentrated in raw materials despite recent progress in diversification. The diversification of the export product basket has recently improved slowly in Sub-Saharan Africa, and the pace of progress has varied across countries. For example, the Herfindahl-Hirschman index (HHI) of product diversification for the entire region went from 0.27 in 2000–04 to 0.21 in 2010–14. This diversification depends on the countries' extent of resource abundance or geographical area. Although there was progress in product diversification for oil abundant countries and non–resource abundant countries, the export basket became more concentrated for non-oil resource abundant countries (their HHI increased from 0.32 in 2000–04 to 0.39 in 2010–14). Across the region, patterns of export product diversification have varied over time: while the product basket became more concentrated in Central Africa (with an increase in the HHI from 0.4 in 2000–04 to 0.46 in 2010–14), it diversified at a faster pace in West Africa (with a decrease in the HHI from

Despite progress in diversification, the region's exports are mostly raw materials.

FIGURE 1.13: Africa's Interregional and Intraregional Trade: Products, by Stage of Processing, 2017



Sources: United Nations COMTRADE; Coulibaly, Kassa, and Zeufack 2020.

15 Emerging and developing Asia is trading more with Sub-Saharan Africa (in value) than the European Union since 2013 (Coulibaly, Kassa and Zeufack 2020).

16 An analogous change in the ranking of import origins has taken place. The top five import origins for Sub-Saharan African countries in 1998 were France, the United States, Germany, the United Kingdom, and Japan, with the region importing US$32 billion in goods and services from these countries. In 2017, approximately US$123 billion of the region's imports came from China, South Africa, India, the United States, and Germany.

0.43 in 2000–04 to 0.24 in 2010–14). Finally, the level of product diversification of the region as a whole is significantly lower than those of emerging and developing Asia and the Asian benchmarks —that is, Bangladesh, Cambodia, Indonesia, and Vietnam (Calderón, Cantú, and Zeufack 2020).

The integration of Sub-Saharan African countries in GVCs is not entirely circumscribed to exporting commodities. Intra-industry trade in intermediate goods has been increasing not only within the region but also with other emerging trading partners. The region has increased its intra-industry trade in intermediate goods with East Asia, as its export and import flows of industrial supplies have expanded significantly and at almost the same pace since 2005. However, Sub-Saharan Africa's exports of industrial supplies to the European Union were adversely affected by the global recession in 2009 and the commodity price plunge in 2014. Additionally, export and import flows in this category have not evolved at the same speed, which indicates that this trade was more biased toward metal and mineral products. For instance, the three main destination markets in transport equipment and parts (East Asia, North America, and the European Union) exhibit different patterns of trade with the region. East Asia appears to be primarily exporting transport equipment to Sub-Saharan Africa, whereas North America is increasing its imports of transport parts from Sub-Saharan Africa more than in exports of transport equipment to the region. The European Union has been gradually increasing its imports of transport parts from the region since 2014. The trends summarized in this paragraph signal the increasing participation of Sub-Saharan African firms in GVCs in the European Union, North America, and East Asia (Coulibaly, Kassa, and Zeufack 2020; World Bank 2020).

Sub-Saharan countries are more vulnerable to the trade channel of transmission of COVID-19 on economic activity because of the high intensity of the region's linkages with the global economy through exports of commodities and connectivity with China (including commodities and GVCs). This subsection presents a taxonomy of countries in the region based on the degree of exposure to China (as one of the axes of GVCs relevant for Sub-Saharan Africa) and to commodity exports. In this classification, a country in the region is defined as having "high" exposure to trade with China if its imports from or its trade with China as a percentage of GDP exceeds the world's 75th percentile—that is, 5.2 and 7.3 percent, respectively. A country in the region is also defined as having high commodity exposure if its exports of commodities as a percentage of GDP exceed the world's 75th percentile (21 percent).

There is a great deal of heterogeneity across Sub-Saharan African countries in trade exposure to China (figure 1.14).[17] The exposure to global commodity markets—as measured by the country's export intensity in agricultural raw materials, food, fuel, mineral ores, and metals—varies widely across Sub-Saharan African countries (figure 1.15).[18]

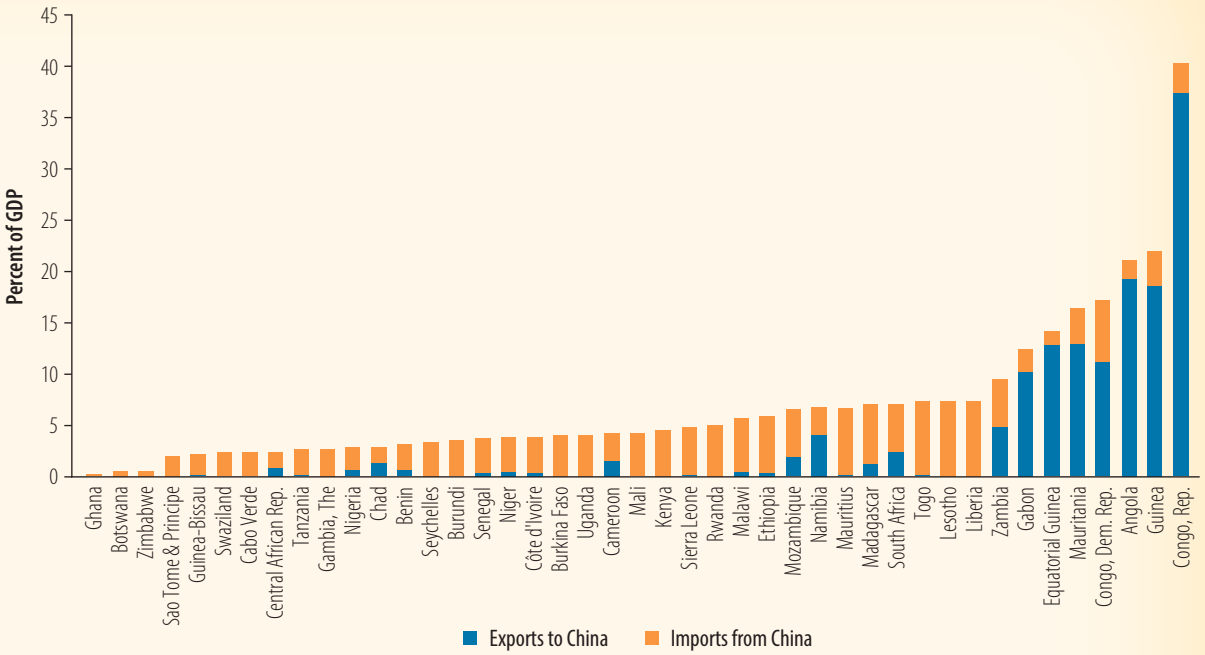
The information presented in figures 1.15 and 1.16 is combined to yield the taxonomy of Sub-Saharan countries according to their degree of exposure to the trade implications of COVID-19 (figure 1.16). Six countries in the region are not only highly exposed to China, but also to

17 The countries in the region with the highest exports to China (as a percentage of GDP) are oil abundant countries (Angola, the Republic of Congo, Equatorial Guinea, and Gabon) or mineral abundant countries (Guinea, Mauritania, Zambia, and the Democratic Republic of Congo). The countries with greater exposure in terms of imports from China are integrated in a supply chain (for example, Ethiopia, Lesotho, and South Africa).

18 Four of the top five countries with the largest commodity exports-to-GDP ratios are oil abundant countries (the Republic of Congo, Angola, Equatorial Guinea, and Gabon), and the commodity exports of these countries exceed one-third of their GDP. Other countries with greater exposure to global commodity markets are mineral and metal abundant countries (Mozambique, Zambia, and Mauritania).

Sub-Saharan African countries' trade exposure to China varies widely.

FIGURE 1.14: Foreign Trade of Sub-Saharan African Countries with China (% of GDP)

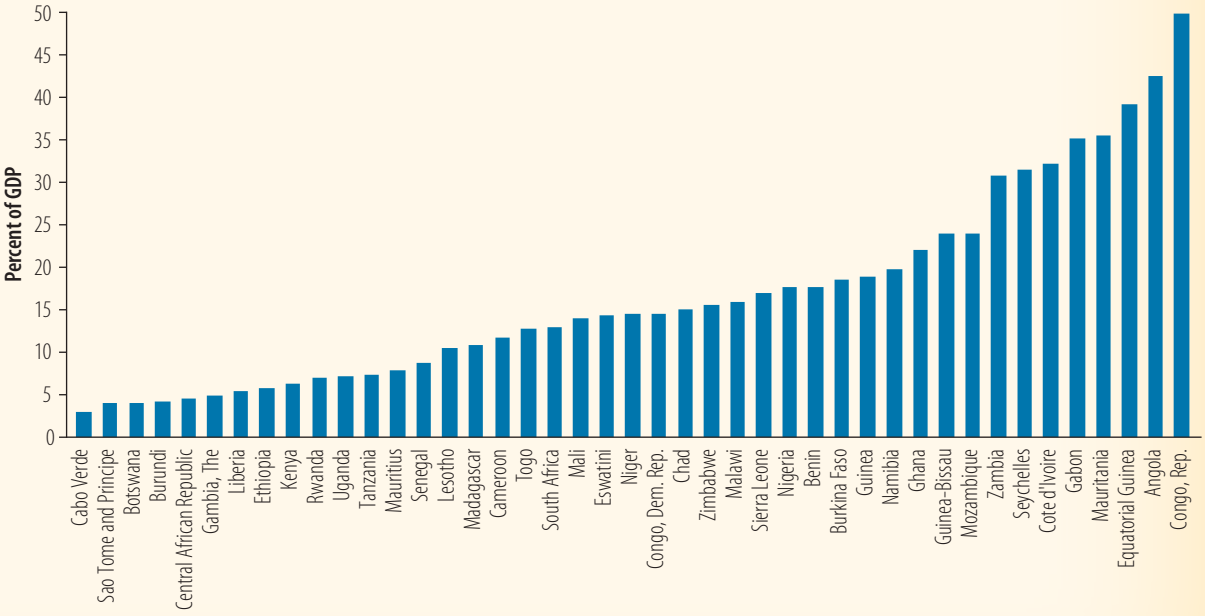


Sources: World Development Indicators, World Bank; Direction of Trade Statistics, International Monetary Fund.

Note: The figure depicts the value of exports to and imports from China over 2016–18 for each Sub-Saharan African country normalized by the country's output.

African countries are exposed to commodity price shocks due to large commodity exports.

FIGURE 1.15: Commodity Exports of Sub-Saharan African Countries (% of GDP)



Source: World Development Indicators, World Bank.

Notes: The figure depicts the value of commodity exports (agricultural raw materials, food, fuel, mineral ores, and metals) over 2016–18 for each Sub-Saharan African country normalized by the country's output.

FIGURE 1.16: Economic Exposure to COVID-19 of Sub-Saharan African Countries: The Trade Channel

African countries have varying degrees of vulnerability to COVID-19 based on commodity exports and trade exposure to China.

Commodity Exposure	China Exposure: Low	China Exposure: High
Low	Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Rep., Chad, Eswatini, Gambia, The, Kenya, Malawi, Mali, Namibia, Niger, Nigeria, Rwanda, Sao Tome & Principe, Senegal, Seychelles, Sierra Leone, South Africa, Tanzania, Uganda, Zimbabwe	Congo, Dem. Rep., Ethiopia, Guinea, Liberia, Lesotho, Madagascar, Mauritius, Togo
High	Côte d'Ivoire, Ghana, Guinea-Bissau, Mozambique	Angola, Congo, Rep., Gabon, Equatorial Guinea, Mauritania, Zambia

Sources: World Development Indicators, World Bank; Direction of Trade Statistics, International Monetary Fund.

Notes: A country has "high" exposure to trade with China if its imports from or its trade with China as a percentage of GDP exceeds the world's 75th percentile—that is, 5.2 and 7.3 percent, respectively. Additionally, a country has "high" commodity exposure if its exports of commodities as a percentage of GDP exceed the world's 75th percentile (21 percent).

commodities, namely, Angola, the Republic of Congo, Equatorial Guinea, Gabon, Mauritania, and Zambia. Eight countries have low commodity exposure but high exposure to China: the Democratic Republic of Congo, Ethiopia, Guinea, Liberia, Lesotho, Madagascar, Mauritius, and Togo. Four countries have greater exposure to commodity markets but low exposure to China: Côte d'Ivoire, Ghana, Guinea-Bissau, and Mozambique. Finally, the majority of Sub-Saharan African countries have low exposure to China and the world commodity markets.

FINANCIAL CHANNEL

Foreign financing inflows into Sub-Saharan African countries amid the COVID-19 outbreak are expected to decline due to push factors. For instance, the main investment partners in the region are experiencing a sharp decline in economic activity; the sharp drop in the international price of energy commodities (especially oil) as well as mineral ores and metals; and the behavior of global investors shifting their demand toward safe assets, which might contribute to the lower financing inflows. In addition, pull factors might contribute to lower foreign inflows, including the deceleration of economic activity in Sub-Saharan African countries, macroeconomic imbalances, and reduced impetus of structural reforms amid the COVID-19 crisis. To different extents, pull and push factors will affect flows of foreign financing that are vital to the functioning of African economies, namely, FDI (mostly in extractive sectors and those related to infrastructure projects), remittances, and aid inflows. Tourism receipts will also fall significantly.

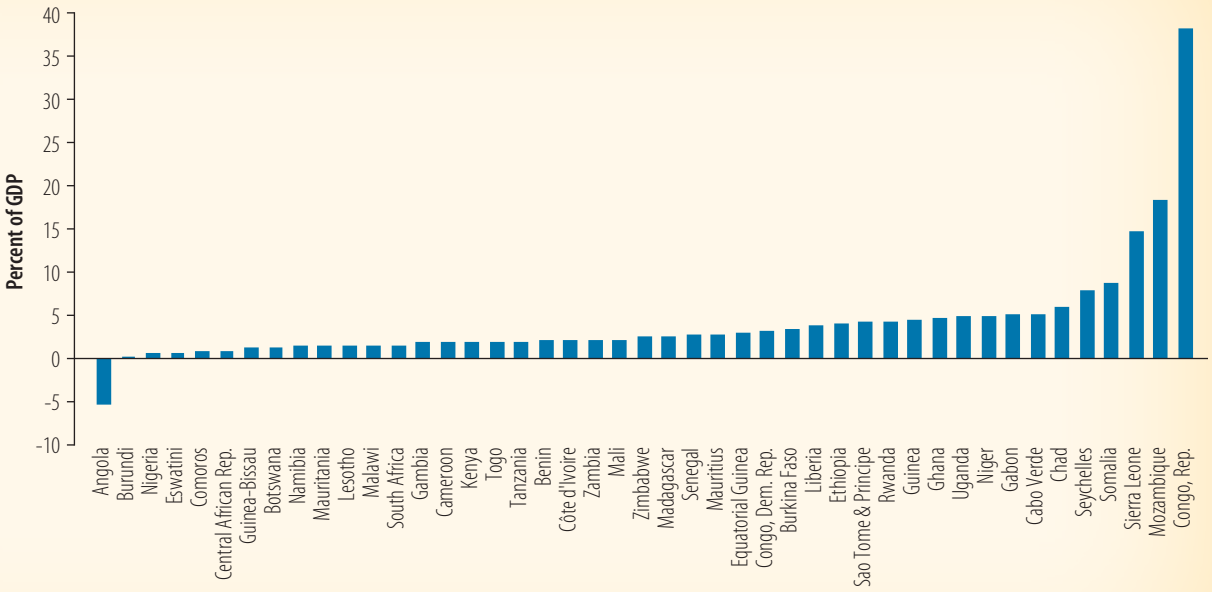
Foreign Direct Investment

In 2018, FDI inflows into Sub-Saharan Africa increased to US$ 32 billion in 2018 —after a sharp contraction for two years. Greater FDI into the region was primarily driven by an increase in resource-seeking FDI (thanks to rising prices and demand for some commodities) and a recovery of inflows to South Africa (especially, in the automotive and renewable energy sectors). This increase more than offset the significant drop in FDI inflows in several countries in the region due partly to political uncertainty and unfavorable economic fundamentals (for example, Nigeria and Ethiopia). One of the countries with the largest increase in FDI inflows was Kenya, which included investments in sizable infrastructure projects. The Republic of Congo recorded inflows mostly for oil exploration and production. In the case of the Democratic Republic of Congo, FDI inflows increased due to steady investment in minerals—especially cobalt. Mozambique also received higher inflows, with an 18 per cent increase pushing FDI to $2.7 billion. This increase was primarily attributed to intracompany transfers from companies already established in the country, mainly for oil and gas exploration (UNCTAD 2019).

There is wide heterogeneity in the amount of FDI flowing into Sub-Saharan African countries (figure 1.17). The 2018 regional average was 4.5 percent of GDP, and 11 countries have a ratio of FDI inflows to GDP that exceeds the regional average. The country with the largest amount of FDI inflows as a percentage of GDP is the Republic of Congo (38.3 percent of GDP in 2018), where crude petroleum represents about half of its export basket. Mozambique, a country that exports mainly mineral products and metals, receives almost one-fifth of its GDP in FDI inflows. The top FDI recipients in the region (as a percentage of GDP are mostly countries that are abundant in natural resources and/or investing in exploration—including Ghana, Uganda, Sierra Leone, and Chad, among others. The plunge in commodity prices—especially crude oil, metals, and minerals—will not only reduce their export proceeds, but also slash the amount of financing brought by foreign investors.

There is wide heterogeneity in the amount of foreign direct investment flowing into Sub-Saharan African countries.

FIGURE 1.17: FDI to Sub-Saharan African Countries, 2018 (% of GDP)



Source: World Investment Report, United Nations Conference on Trade and Development (UNCTAD)
Note: GDP = gross domestic product.

Remittances and Aid Flows

Remittances have become an important source of foreign financing for Sub-Saharan African countries. Remittances reached US$ 46 billion in 2018 (up almost 10 percent from 2017) and supported by strong economic conditions in high-income economies. Although the costs of transferring remittances have dropped over time, the average cost to send US$200 to Sub-Saharan Africa was 9.3 percent in the first quarter of 2019. Remittances are a more stable source of financing than other forms (such as FDI or portfolio inflows)—as they are acyclical or countercyclical to the level of economic activity in the worker's country of origin (the recipient of the remittance). However, these flows are procyclical with respect to the level of economic activity in the migrant's host country—that is, the sender of the remittances (Frankel 2011; World Bank 2015).

Remittance inflows are negligible for 18 of the 48 countries in the region—that is, they did not amount to more than 1 percent of GDP in 2019. South Africa, Angola, Botswana, Ethiopia, and Zambia are among the countries with very low ratios of remittances to GDP (figure 1.18). In 2019, 14 countries had a ratio of remittances to GDP that exceeded the regional average (4 percent of GDP). These countries are the most vulnerable to a sharp decline in remittances as the level of economic activity in the source country contracts and migrant workers are furloughed or laid off. For instance, workers' remittances to Nigeria, one of the top five recipients in the world, amounted to 5.7 percent of GDP, mostly coming from the United States, Europe, Cameroon, the United Arab Emirates, and China. Other West African countries that are large recipients of remittances in terms of GDP are Senegal (9.9 percent) and Togo (9.1 percent). A significant downturn in South Africa will affect the flow of financing to remittance-dependent countries like Lesotho (15.7 percent of GDP in 2019) and Zimbabwe (8 percent of GDP).

FIGURE 1.18: Remittances across Sub-Saharan African Countries, 2019 (% GDP)

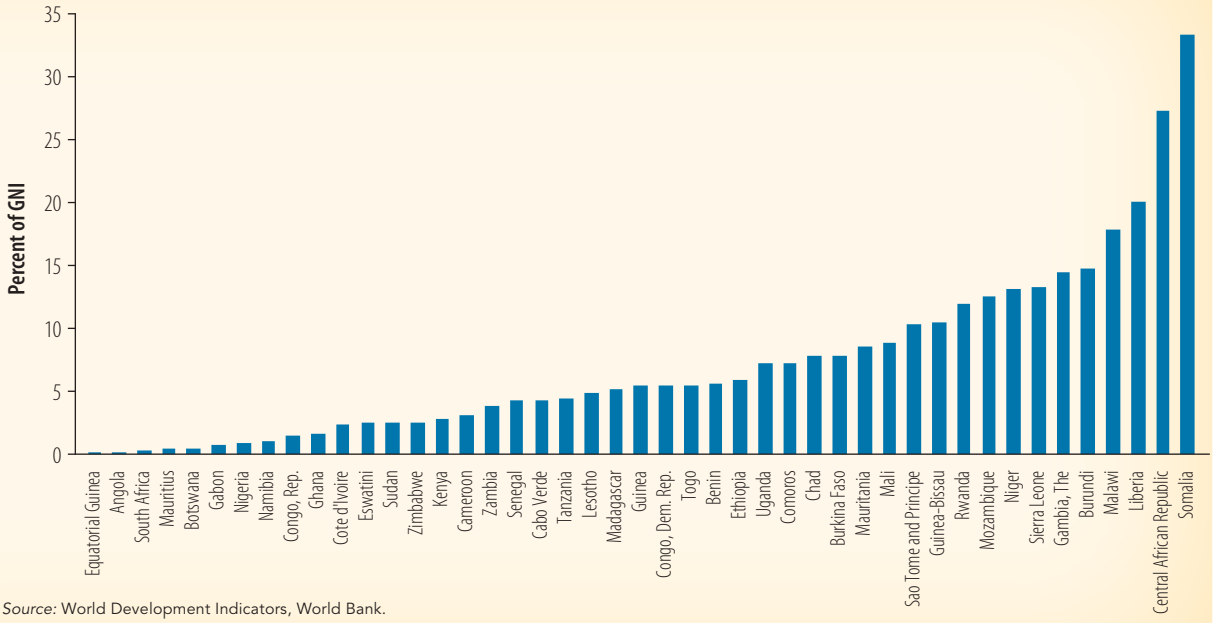
Nearly one-third of African countries are vulnerable to a decline in remittances.

Source: World Development Indicators, World Bank.
Note: GDP = gross domestic product.

Aid flows to African countries are also to expected to dwindle, as major donors are now at the epicenter of the COVID-19 outbreak and their governments will deploy their resources toward protecting the vulnerable segments of the population that are being affected by the economic consequences of the pandemic. Lower foreign aid inflows will affect mostly low-income countries, especially those in fragile contexts. The countries with the largest share of net official development (ODA) received in 2018 are Somalia and the Central African Republic—with a flow of ODA that exceeds 25 percent of their gross national income (GNI). Countries like Liberia (20.2 percent of GNI) and Sierra Leone (13.3 percent of GNI), which were hardly hit by the 2014–16 Ebola epidemic, received an important amount of ODA in terms of GNI (figure 1.19).

Nearly half of low-income countries in the region are highly vulnerable to foreign aid shocks, as many donors are experiencing severe effects from COVID-19 pandemic.

FIGURE 1.19: Net Official Development Assistance Received, 2018 (% of GNI)



Source: World Development Indicators, World Bank.
Note: GNI = gross national income.

Tourism

International travel is currently discouraged via avoidance effects and is hurting tourism sectors in Sub-Saharan Africa. The extent of the disruption in travel and tourism depends on: (1) the severity of the outbreak of COVID-19 within the region, and (2) the travel restrictions imposed by countries in the region on travelers from countries with greater numbers of COVID-19 confirmed cases (for example, China, the Republic of Korea, and Europe). Tourism might fall—even if the region remains relatively less affected by COVID-19—as travelers avoid air travel in general.

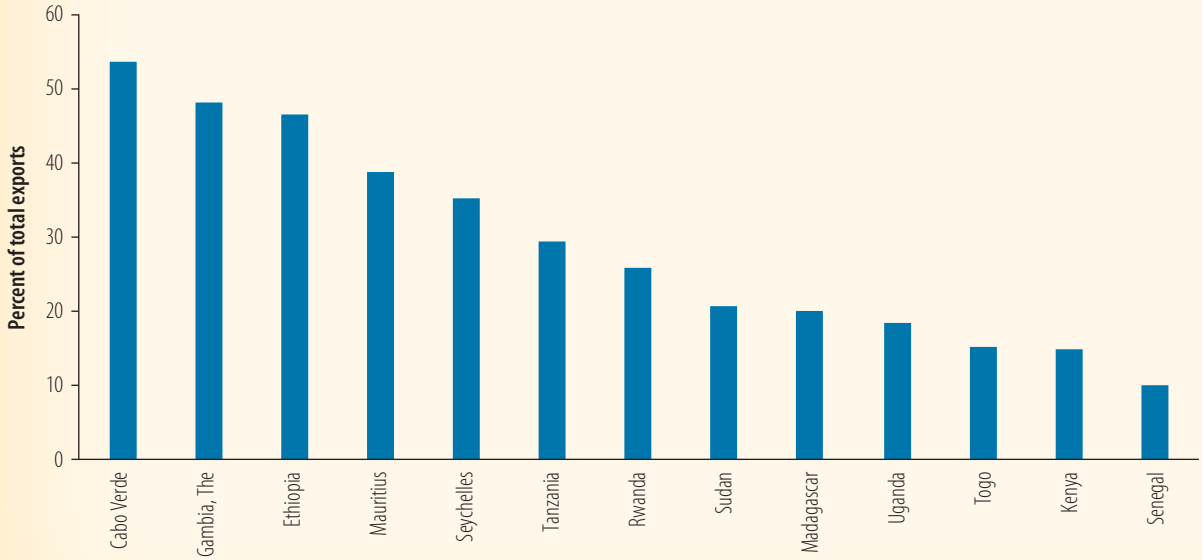
The COVID-19 epidemic is putting up 50 million jobs in the global travel and tourism sector at risk, and travel will likely slump in 2020, according to the Travel and Tourism Council. Figures 1.20 and 1.21 depict the dependence of tourism revenues across Sub-Saharan African countries. For instance, the tourism sector contributes more than 20 percent of GDP in countries like the

Seychelles, Cabo Verde, Mauritius, The Gambia, and São Tomé and Príncipe (figure 1.20) And international tourism receipts amount to more than 25 percent of export proceeds in Cabo Verde, The Gambia, Ethiopia, Mauritius, the Seychelles, Tanzania, and Rwanda (figure 1.21).

FIGURE 1.20: Total Contribution of Tourism (% of GDP)

Supply-side factors (e.g., fear of travel and travel restrictions) will lead to sharp declines in the tourism sector.

FIGURE 1.21: International Tourism Receipts (% of Total Exports)



Sources: World Development Indicators, World Bank; UNCTAD calculations based on World Trade and Tourism Council estimates and forecasts.

MACROECONOMIC POLICY SPACE IS NARROWER AMONG SUB-SAHARAN AFRICAN COUNTRIES

Sub-Saharan African countries need to conduct countercyclical policy actions to support economic activity combined with emergency measures to tackle COVID-19 outbreak (that is, distributing medical supplies and stabilizing the outbreak). However, the capacity of African countries to finance these countercyclical policy responses is weak due to limited liquidity, narrow policy space, and restricted access to external borrowing. International financial organizations, such as the World Bank and the International Monetary Fund (IMF), could provide financial support packages. Currently, Sub-Saharan African countries have some monetary space while their fiscal space continues to shrink. Despite decisive actions by policy makers to rebuild additional fiscal and monetary space, COVID-19 is spreading rapidly across the world, and the containment measures cut back on consumption and work. The rapid implementation of health and other relief packages would weigh on countries' fiscal budgets. Adding to the mounting fiscal pressures, public debt in the region has been increasing over the past decade, although, on average, it is below the level before the debt forgiveness initiatives. The profile of public debt in the region has become riskier due to lower concessional borrowing and rising obligations with non–Paris Club governments and private creditors. Consequently, macroeconomic vulnerabilities continue to increase in the midst of a less favorable environment and weak macroeconomic fundamentals

African Countries Continue to Have Greater Monetary Space, While Fiscal Space Continues to Shrink

African countries still have room to conduct countercyclical monetary policies. The median rate of inflation in the region is projected to rise from an estimated 2.8 percent in 2019 to 3.5 percent in 2020. Double-digit inflation rates were registered in eight of 47 countries in the period 2019-20. Metal exporters in the region (Liberia, Sierra Leone and Zambia) are confronting high double-digit inflation rates due to currency depreciation, monetization of fiscal deficits, and food price inflation. Zimbabwe is the only country in the region with triple-digit inflation amid rising food prices in the aftermath of successive weather shocks. In contrast, nearly half the countries in the region (23 of 47) have a rate of inflation that exceeds the average world inflation (3.5 percent in 2019–20).

However, fiscal space in African countries appears to be narrowing. The median fiscal deficit for the region is projected to widen from an estimated 2.9 percent of GDP in 2019 to 4.4 percent of GDP in 2020, mainly as a result of a sharp increase in the fiscal deficits of oil exporters.[19] During 2019–20, 31 countries in the region have registered a primary deficit (as a percentage of GDP). Of these 31 countries, nine have a primary deficit that exceeds 3 percent of GDP (their average fiscal balance is -4.9 percent of GDP). Prior to COVID-19, countries in the region like Sudan and Liberia were in dire need of strengthening their monetary and fiscal policy frameworks to create space for further action in the event of negative (external or domestic) shocks in the future.

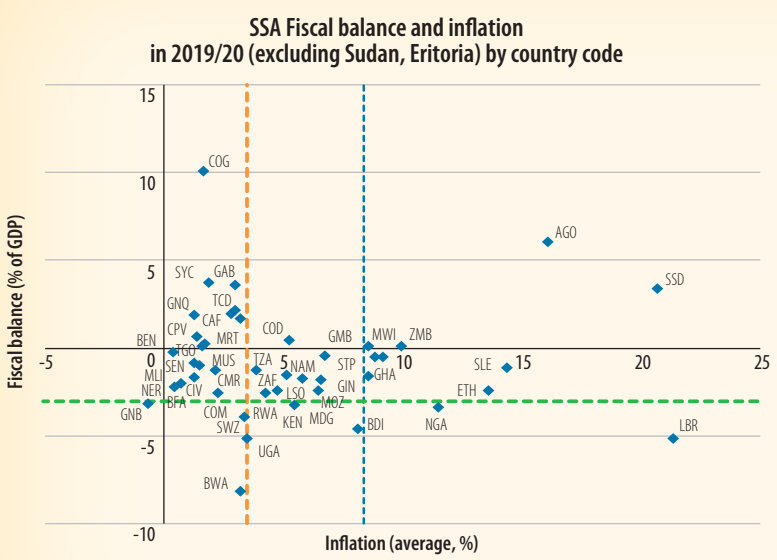
The ability to conduct countercyclical policies differs among Sub-Saharan African countries because their monetary and fiscal space varies widely. Figure 1.22 captures the extent of those

19 In many of these countries, the 2020 national budget is based on an oil price assumption that is now significantly above the average crude oil price. As a result, lower-than-budgeted revenues are exerting pressure on fiscal balances. In Angola, the fiscal balance is projected to switch from a modest surplus in 2019 to a large deficit in 2020. Nigeria's fiscal deficit is expected to widen to about 5.8 percent of GDP and, as a group, oil producers in the Central African Economic and Monetary Community will see their fiscal balance deteriorate sharply.

spaces by plotting the average rate of inflation against the primary balance (as a percentage of GDP) during 2019–20. The thresholds used to determine the degree of monetary and fiscal space are (1) rates of Consumer Price Index (CPI) inflation corresponding to the average world inflation (3.5 percent) and Sub-Saharan African inflation (8.4 percent) in 2019–20 (which are represented by the red and blue vertical dashed lines, respectively), and (2) primary balance of -3 percent of GDP (green horizontal dashed line at -3 on the y-axis). A country in the region with a rate of CPI inflation below the (world or regional) inflation threshold and a primary balance greater than its corresponding threshold is considered to have adequate fiscal and monetary space. Otherwise, the country may not have monetary space or fiscal space (or both). For example, some countries in the region have monetary and fiscal space to conduct countercyclical policies: 19 countries have inflation that is lower than the world average and a primary balance that exceeds -3 percent of GDP, including the 14 countries in the CFA franc zone (eight in West Africa and six in Central Africa). In contrast, four countries have low monetary and fiscal space. These countries have an inflation rate that exceeds the world average and a primary deficit that exceeds 3 percent of GDP, namely, Burundi, Liberia, Nigeria, and Sudan.

Resource abundant countries in Sub-Saharan Africa are among those with the greatest need to conduct countercyclical policies despite that their fiscal positions are deteriorating and fiscal pressures are mounting as commodity prices decline. For instance, the international price of crude oil has fallen about 60 percent, while that of natural gas has declined by 27 percent since January 1, 2020. Copper and zinc also had a year-to-date drop of nearly 20 percent. The decline in oil prices, resulting from lower global demand, has been exacerbated by the breakdown in the OPEC+ alliance and expectations of a deeper and more protracted recession across the world outside China, especially the United States and Europe. These pressures have pushed international oil prices below US$30 per barrel. The sharp decline of oil and metals prices may result in a fiscal crisis in the region, especially in the three largest and commodity-dependent economies (Nigeria, South Africa, and Angola). This shock will be hardest in Angola and Nigeria where energy commodities account for 88 and 76 percent of export earnings, respectively, and the budgeted oil prices

FIGURE 1.22: Inflation and Fiscal Balance in Sub-Saharan Africa



Space for countercyclical macroeconomic policies differs among countries in the region.

Source: World Development Indicators, World Bank.

Note: Consumer Price Index inflation and fiscal balance as percentage of GDP are the 2019–20 averages. The horizontal green dashed line represents the threshold fiscal balance of -3 percent of GDP. The vertical red and blue dashed lines correspond to the 2019–20 average inflation rate in the world (3.5 percent) and Sub-Saharan Africa (8.4 percent). GDP = gross national product.

are $55 and $57 per barrel, respectively, for 2020. This impact will transmit to other oil-dependent economies in the region, such as the Republic of Congo and Chad, where lower oil prices will contribute to deteriorating fiscal positions. Lower copper prices will also reduce growth prospects in countries such as Zambia, where raw copper accounts for almost half the country's export earnings, and the Democratic Republic of Congo. Other African economies (net oil importers) will benefit from lower oil prices, although this will not be enough to compensate the growth impact on large economies.

The fiscal crunch may be worsened by an increase in external borrowing costs. The plunge in oil prices and the dislocation of global capital markets have come along with a sharp increase in sovereign bond spreads of oil abundant countries. For instance, the year-to-date increase in Angola's EMBI sovereign spread was 2,005 basis points, while it increased in Gabon and Nigeria by 1,142 and 691 basis points, respectively. In South Africa, an emerging market with a very liquid bond market, the spread rose by 442 basis points year-to-date. Against the backdrop of a deteriorating fiscal position and weak trend growth, Moody's cut South Africa's sovereign credit rating to sub-investment grade (from Baa3 to Ba1). Increased costs of borrowing will further worsen debt sustainability prospects.

The policy space in the fiscal and monetary arenas will determine the countries' ability to conduct countercyclical policies. The buildup of liquidity buffers—as measured by the import coverage of reserves in Sub-Saharan African countries—can help defend the currency in the event of speculative attacks and/or guarantee the stability of the financial system. The monetary authority could also conduct macroprudential policies to stabilize financial quantities (for example, the amount of credit) or domestic financial prices (for example, bond yields and stocks, among others). In Sub-Saharan African countries, the import coverage of reserves has been decreasing over time (figure 1.23).[20] About half the countries in the sample (17 of 35) experienced a decline in reserve coverage during 2013–18—for example, it fell from 8.75 months in 2013 to 0.73 months in 2018 for the Republic of Congo, thus rendering the country vulnerable to speculative attacks.[21] This indicator signals not only the small availability of reserves to defend financial prices in the event of large swings, but also the inability of the country's export sector to generate sustained revenues.

Monitoring fiscal and external imbalances help in the design of better countercyclical policies—as the former may influence on the latter.[22] The current account deficits are widening in Sub-Saharan Africa. For instance, after decreasing to an estimated 4.6 percent of GDP in 2019, the median current account deficit in the region is projected to widen to 5.8 percent of GDP this year, reflecting a deterioration in the current account balances of oil exporters due to the sharp fall in oil prices.[23] About half the countries in the region (24 of 47) have a current account

20 The ratio depicted in figure 1.23 captures the number of months of imports of goods and services that international reserves could afford. Higher values of this ratio imply that a country has accumulated more foreign reserves to defend its currency and stabilize financial prices. This gives the monetary authority greater monetary and financial policy space.

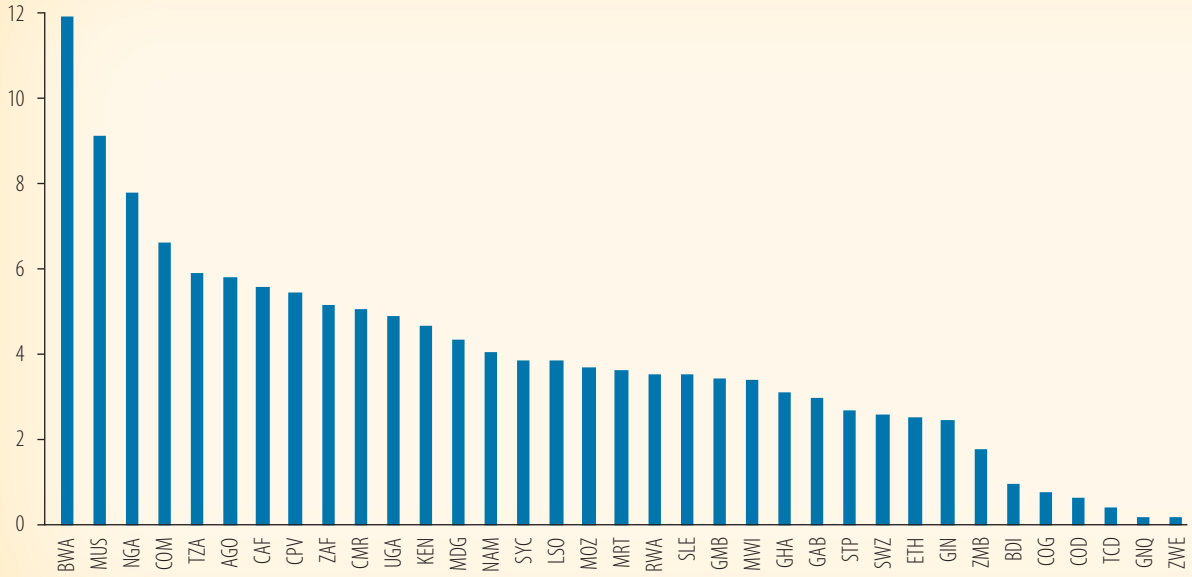
21 Botswana registers the largest coverage of reserves in Sub-Saharan Africa, with almost a year of imports (11.9 months), followed by Mauritius (9.1 months) and Nigeria (7.8 months). By contrast, Zimbabwe and Equatorial Guinea have the lowest import coverage of reserves (0.13 and 0.14 month, respectively). About one-third of the countries with data on international reserves in the region (12 of 35) had import coverage of reserves that was below adequate in 2018 (that is, less than three months).

22 A fiscal expansion financed by issuing public debt increases private disposable income and private consumption while it lowers national saving. The fiscal expansion raises domestic interest rates and crowds out private investment. Hence, the decline in national saving comes along with deterioration of the current account balance. This may lead to twin fiscal and current account deficits.

23 Among the region's largest oil exporters, Angola's economy could be hit hard due to its relatively high dependence on oil exports for revenues. The surplus in the current account balance is expected to swing into a deficit of 3 percent in 2020 as low oil production exacerbates the fall in prices. Although Nigeria is expected to experience a decline in exports, lower imports, due to its restrictive trade policies, could moderate the widening of the current account deficit. Oil producers in the Central African Economic and Monetary Community area will experience a sharp increase in the current account deficit, due to the limited diversification of their exports and the fragility of their economies.

FIGURE 1.23: Import Coverage of Reserves across Sub-Saharan African countries, 2018

Over half of the African countries have low reserve buffers, limiting their ability to mitigate monetary and financial shocks.

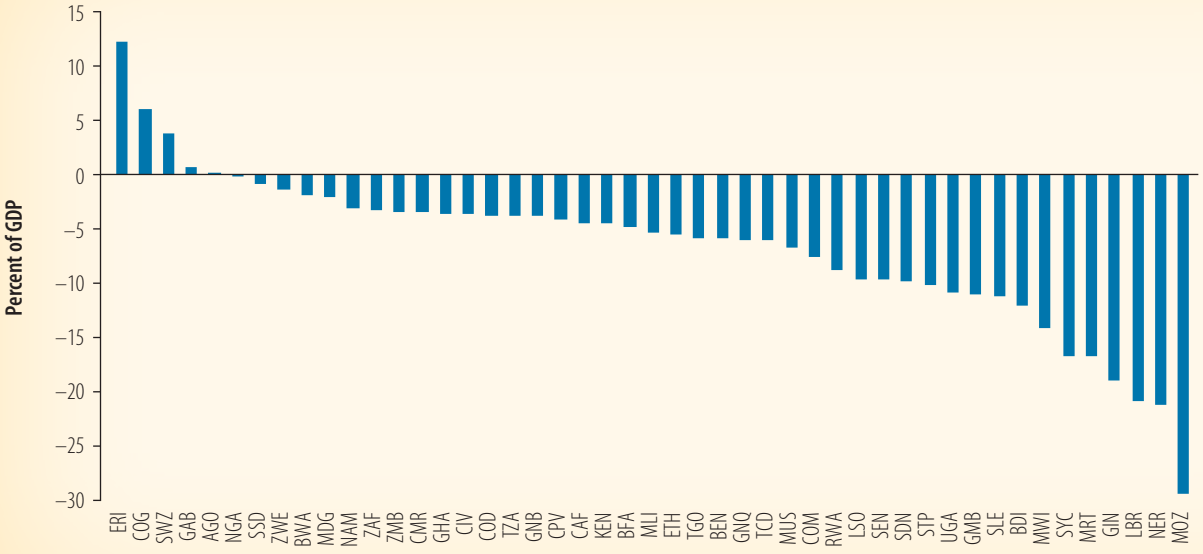


Sources: World Bank; Haver Analytics.

deficit that exceeds 5 percent of GDP—of which 13 countries have external deficits greater than 10 percent of GDP (figure 1.24). The countries with the largest external imbalance include Mozambique, Niger, Liberia, Guinea, Mauritania, Burundi, Sierra Leone, Uganda, and Sudan, among others. The larger is the external imbalance, the greater is the pressure for the domestic currency to weaken.

FIGURE 1.24: Current Account Balance, Average, 2019–20 (% of GDP)

One-quarter of the countries in the region have large a current account deficit (over 10 percent of GDP), which will be difficult to finance.



Sources: World Development Indicators; Macroeconomic and Poverty Outlooks, World Bank.

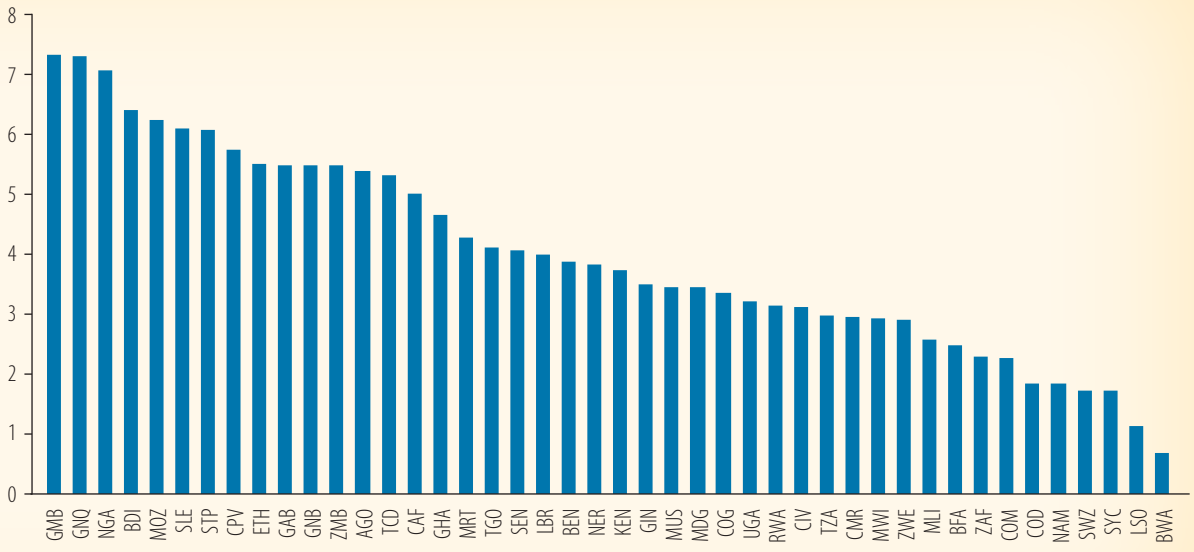
Heightened Concern about Debt Sustainability in Sub-Saharan Africa

Debt sustainability issues can pose challenges to the conduct of countercyclical policies. There is heightened concern about public debt sustainability in the region due to: (1) a rapid increase in public debt since 2013, and (2) the change in the composition of public debt, where a greater share of the public and publicly guaranteed (PPG) external debt is owed to private creditors and non–Paris Club governments. Section 2 of the current *Africa's Pulse* presents a detailed analysis of the trends in debt accumulation in the region by providing a taxonomy of borrowers. It classifies Sub-Saharan African countries by their pace of public debt accumulation into heavy, moderate, and light borrowers. It highlights the different debt strengths and vulnerabilities of these groups in terms of: (1) the level and composition of their total and external public debt, (2) the amount and composition of total external debt service, (3) the efficiency of debt financing (as captured by their differences in GDP growth, investment, and efficiency of investment), and (4) the level of institutional quality.

Public debt across countries in the region has increased at a faster pace since 2013, and that increase has come along with changes in the composition of government liabilities that have yielded a riskier debt profile (see section 2 for further details). This threatens debt sustainability in the region. Figure 1.25 plots a broad measure of debt sustainability across Sub-Saharan African countries in 2019.[24] The increase in public debt across countries in Sub-Saharan African countries over 2013–19 has come along with an increase in the number of years needed to repay the full debt for 38 out of 44 countries in the region. The average number of years for these 38 countries has increased by 1.5 years. The number of years declined for six countries —thus, signaling an

For nearly half the countries in Sub-Saharan Africa, it would take four tax-years to repay the public debt.

FIGURE 1.25: Debt Sustainability across Sub-Saharan African Countries, 2019



Source: World Economic Outlook, International Monetary Fund.

Note: The figure depicts the ratio of general government gross debt to (the permanent component of) tax revenues for each country in Sub-Saharan Africa in 2019. This ratio indicates the number of years it will take to repay the full public debt.

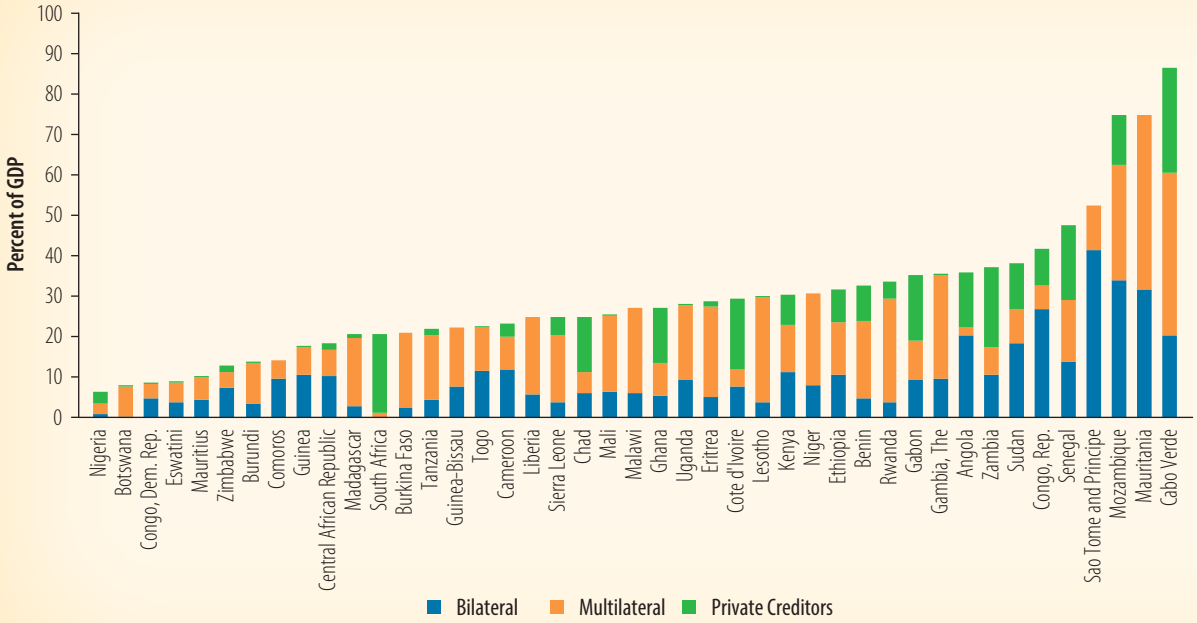
24 Debt sustainability can broadly be measured as the number of tax-years that takes the government to fully repay the general government gross debt. Empirically, this indicator is computed as the ratio of general government gross debt to the (Hodrick-Prescott filter) trend component of general government tax revenues. The trend component of the general government tax revenues is computed to eliminate the volatility associated with business cycles and provide a better measure of the tax base. A country's debt position is considered sustainable if it has the ability to repay its debts in a shorter amount of time, therefore, a larger ratio implies that it takes longer for tax revenues to repay the full amount of the public debt.

improvement in the sustainability of public debt for these countries.[25] Finally, it takes more than seven tax-years to pay the gross public debt for countries like The Gambia, Equatorial Guinea, and Nigeria. In the case of these countries, not only the amount of debt has increased, but also tax revenues have failed to increase amid lower commodity-related revenues.

Along with the increase in the amount borrowed by Sub-Saharan African governments, the composition of the debt has been changing over time. The emergence of new creditors in the debt markets of African countries (especially non–Paris Club governments) may have introduced opacity in the recording of debt and threatens countries' debt sustainability. The lack of transparency, hence, may result in levels of debt that are higher than those recorded (see section 2). Figures 1.26 and 1.27 depict the PPG external debt outstanding and total debt service by type of creditor across countries in Sub-Saharan Africa, respectively. Looking at the amount of debt outstanding and debt service as well as its composition—especially the share of bilateral official and private creditors—will help identify countries that have vulnerable debt positions. For instance, Ethiopia's public external debt appears to be moderate (around 32 percent of GDP in 2018); however, its composition is assumed to be risky because the share of external debt owed to bilateral official and private creditors represents nearly 60 percent (figure 1.26). Ethiopia's PPG external debt service also represents 25.3 percent of exports—the largest ratio of debt service to exports in the region. Notably, more than half of that debt service is paid to private creditors and about a third is paid to bilateral official creditors (figure 1.27).

FIGURE 1.26: Public and Publicly Guaranteed External Debt Outstanding, 2018 (% of GDP)

External debt stocks exceed 30 percent of GDP in more than half of the African countries.

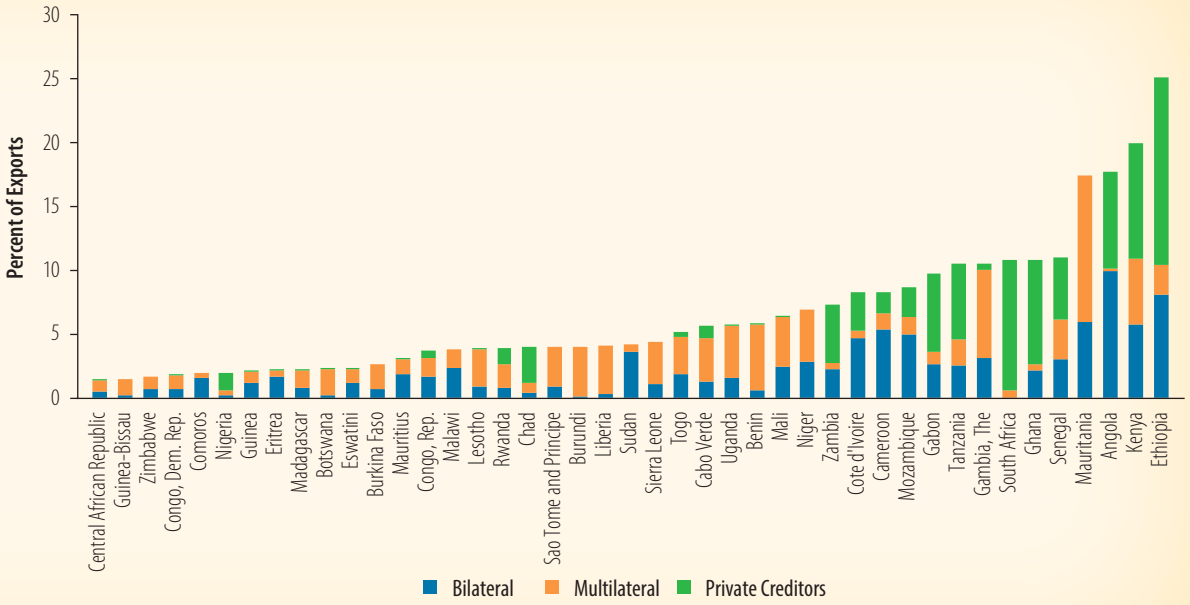


Source: World Development Indicators, World Bank.

25 The six countries are Botswana, the Democratic Republic of Congo, Guinea-Bissau, Madagascar, Malawi, and the Seychelles.

Nearly half of the countries in the region pay more than 5 percent of exports for external debt service.

FIGURE 1.27: Public and Publicly-Guaranteed External Debt Service, 2018 (% of Exports)



Source: World Development Indicators, World Bank.

The profile of debt outstanding and debt service reveals the heightened vulnerabilities of greater exposure to creditors that not only lend in foreign currency but also at shorter intervals and, in most cases, at higher interest rates. In the case of South Africa, its level of outstanding PPG external debt is relatively low in the region (20.9 percent in 2018); however, most of the borrowed funds are owed to private creditors (94.5 percent of PPG external debt). The country's debt service amounted to 10.8 percent of exports in 2018 —which, again, is mostly paid to private creditors (94.7 percent of PPG external debt service). In both cases (Ethiopia and South Africa), the level of debt is moderate; however, the composition of their outstanding debt and related service may disclose certain vulnerabilities in their debt sustainability framework.

The amount of PPG external debt (as a percentage of GDP) is not a sufficient indicator of debt sustainability. For instance, Mauritania and Mozambique exhibit a similar external debt burden (75 percent of GDP); however, their debt composition is quite different. Although Mozambique's external debt is primarily owed to official creditors (with shares of 45.3 percent to bilateral creditors and 38.2 percent to multilateral creditors), about 16.5 percent of its PPG external debt is owed to private creditors. By contrast, Mauritania's debt is only held by official creditors—and, mostly, multilateral ones with a share in total external public debt of nearly 58 percent. External debt service in Mauritania is double that of Mozambique (17.6 and 8.8 percent of exports, respectively); however, more than 25 percent of the debt service in Mozambique is owed to private creditors. Risk differences between these two countries result from the greater interests paid to private creditors as well as the lack of transparency of some of the debt operations conducted by Mozambican authorities with nontraditional creditors.

The countries that are most vulnerable to debt sustainability problems in the region are those with higher debt service and riskier (and/or less transparent) debt profiles—even if their level of outstanding external debt is relatively manageable. The share of Kenya's outstanding debt (30.6 percent of GDP) owed to bilateral official and private creditors amount to 62.4 percent (37.5 percent to bilateral and 24.8 percent to private creditors). Its debt service is 20.1 percent of exports, the second highest among Sub-Saharan African countries, and it is paid primarily to private creditors (with a share in debt service of 45.3 percent), followed by bilateral creditors (29 percent). Consequently, the riskier debt profiles could put debt sustainability in jeopardy through breaches in debt service.

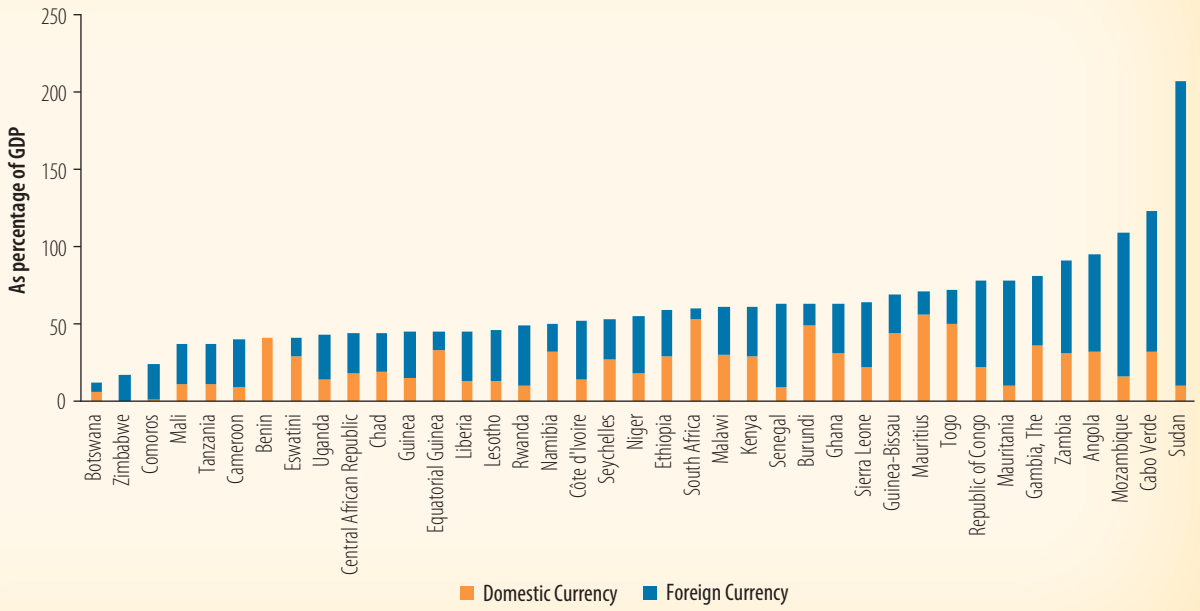
Six countries in the region have a level of PPG external debt that exceeds 40 percent of GDP—and their levels of external public debt fluctuate between 42 percent (the Republic of Congo) and 87 percent (Cabo Verde). The average level of debt of these six countries is 63.4 percent, and the share of this debt owed to official bilateral creditors and private creditors is 44 and 17 percent, respectively. However, there is some variation in the share of debt owed to these types of creditors across these six countries (figure 1.26). In the case of debt service, nine countries in the region have a level of PPG external debt service that exceeds 10 percent of exports—and the amount serviced varies from 10.6 percent (Tanzania) to 25.3 percent (Angola). The average level of debt service of these nine countries is 15 percent of exports, and the shares of the debt service paid to official creditors and private creditors in total external debt service amounts to 30 and 45 percent, respectively (figure 1.27). Combining both criteria, Senegal and Mauritania have levels of debt outstanding and debt service that exceed the 75th percentile of the distribution across Sub-Saharan African countries, thus putting pressure on the sustainability of their public debt. The important difference between their debt positions is that Senegal has resorted to emerging and more expensive creditors.

The currency composition of public debt is an important factor that influences the sustainability of debt positions. Figure 1.28 shows the general government gross debt by currency (domestic versus foreign currency) across Sub-Saharan African countries in 2019. It has been argued that sharp exchange rate movements could lead to balance sheet problems in countries that have a substantial public debt burden in foreign currency. For instance, Sudan had the highest public debt burden in the region in 2019, at 207 percent of GDP, and most of this debt is denominated in foreign currency (about 95 percent of the debt). Mozambique also holds a substantial level of public debt (108.8 percent of GDP), the third largest public debt burden in the region, and the majority of that debt is denominated in foreign currency (85.4 percent). The same goes for Angola (public debt of 95 percent of GDP and more than two-thirds of the debt is denominated in foreign currency). Consequently, these countries face potential currency risks due to the combination of large public debt that is mostly denominated in foreign currency. In contrast, the public debt of South Africa (60 percent of GDP in 2019) is mostly denominated in domestic

currency. Although debt issuances in domestic currency help reduce currency risks, a large portion of this debt is held by foreign investors that participate in the local securities markets (mostly in short-term investments). Therefore, foreign investments could induce sudden outflows at any moment. These outflows could exacerbate exchange rate volatility and lead to a depreciation of the rand against major currencies.

The share of public debt in foreign currency is larger in nearly half of the African countries, thus rendering them vulnerable to sharp exchange rate movements.

FIGURE 1.28: General Government Gross Debt by Currency Composition across Sub-Saharan African Countries, 2019 (% of GDP)



Source: World Economic Outlook, International Monetary Fund.

1.3 IMPACT OF COVID-19 ON THE NEAR-TERM OUTLOOK

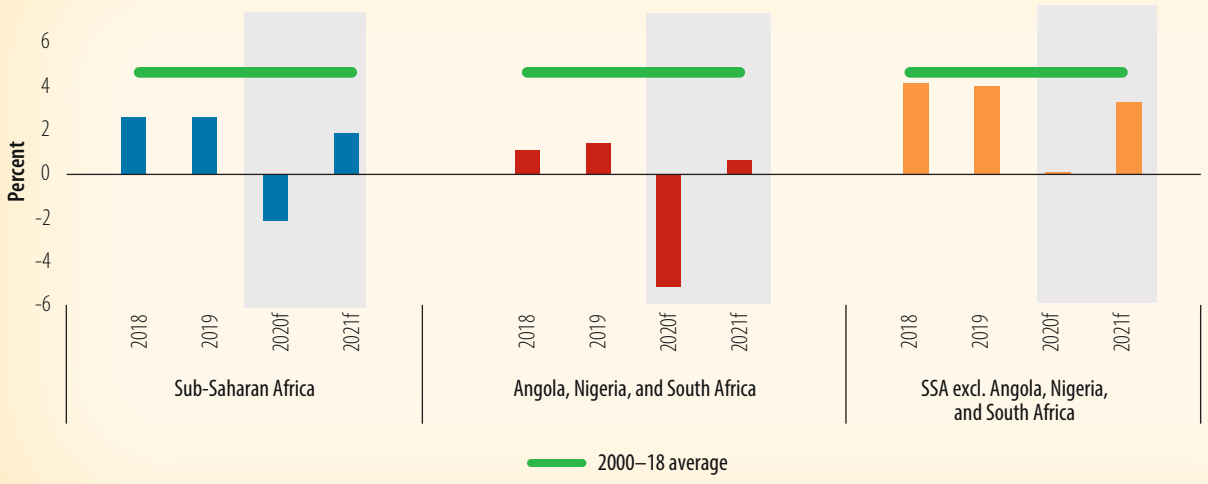
This subsection examines the potential effects of the COVID-19 outbreak on Sub-Saharan Africa's growth prospects in the near term. The analysis contains two main scenarios. The first, a baseline scenario, looks at the impacts of a severe but contained outbreak, globally and at the regional level. The second, a downside scenario, analyzes the potential economic effects if the COVID-19 outbreak lingers and spreads more intensively than is assumed in the baseline scenario. The analysis shows that growth in Sub-Saharan Africa is set to weaken substantially this year and recover slowly in 2021.

Baseline Scenario

This scenario assumes that after a rapid spread, outbreaks begin to slow such that, in advanced economies, containment measures can be lifted after two months. During the containment period, a sizable share of domestic private consumption that requires social interactions ceases. It is also assumed that the pandemic fades and activity recovers slowly in China amid a global slump. Despite prompt and massive liquidity provision, policy rate cuts to their effective lower bound and unconventional monetary policies by central banks, bouts of financial market turmoil persist for several weeks amid heightened volatility. Amid plunging global growth and financial market turmoil, oil prices decline further in 2020Q2 before recovering as activity stabilizes. Nonenergy commodity prices also fall sharply. In all major economies, large-scale fiscal support is promptly delivered to liquidity-constrained households and firms.

Simulations show that, compared with a no-COVID base case, growth in Sub-Saharan Africa could fall by up to 5.2 percentage points. On this basis, real GDP growth in the region is projected to decline up to -2.1 percent in 2020 from 2.4 percent in 2019, mainly on account of large contractions in South Africa, Nigeria, and Angola (figure 1.29). Confirmed cases in Sub-

FIGURE 1.29: Growth in Sub-Saharan Africa Is Set to Weaken Substantially in 2020



Source: World Bank Macroeconomic and Fiscal Model, World Bank staff estimates.

Saharan Africa are relatively low but rising rapidly in some countries, prompting governments to implement strict containment measures and introduce economic policies to increase public health care capacity and support businesses.

The downward revision in 2020 reflects macroeconomic risks arising from the sharp decline in output growth among the region's key trading partners, including China and the euro area, the fall in commodity prices, reduced tourism activity in several countries; as well as the effects of containment measures. The sharp decline in commodity prices will undermine growth among the region's oil and metals exporters, while contagion fears alongside travel and work restrictions weigh on domestic demand. Several non-resource-intensive countries in the region depend significantly on tourism for income, export revenues, and employment and will be heavily affected by disruptions to international travel. Usually, lower oil prices can be expected to boost activity in oil-importing countries via the consumption and investment channels; however, heightened uncertainty about the COVID-19 virus is mitigating these positive effects by moderating spending. Growth is expected to rebound in 2021 but remain below its 2019 level in many countries, suggesting that the COVID-19 outbreak will continue to disrupt economic activity in the region in 2021.

Downside Scenario

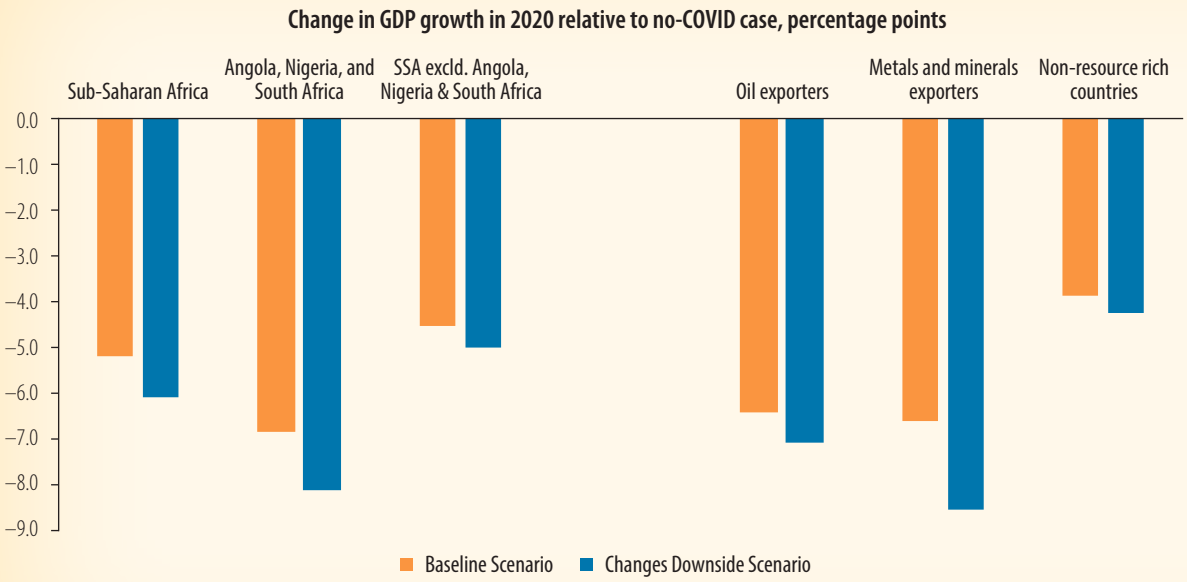
The downside scenario builds on the assumption that in each country the COVID-19 crisis would be experienced as a two-stage crisis, with a first acute phase beginning in the middle of March and lasting three months, and a second chronic phase that begins afterwards and lasts six quarters.

During the acute phase services, notably tourism, mass transport, and nonessential retail shopping services, are expected to decline by more than the fall in industrial activities, due to social distancing and business restrictions. In EMDEs, social distancing measures are less binding economically than in high-income countries, due to institutional weaknesses, the much larger informal economy and the importance of agriculture, which could slow the recovery. In the chronic phase, it is assumed that countries have addressed many of the organizational and medical issues associated with managing COVID-19 that will allow them to keep the contagion under control with less economic disruption. As demand is subdued in all economies, domestic shocks also transmit to global trade, further weighing on the outlook of trading partners. Commodity prices are assumed to remain weak.

Simulations under the downside scenario suggest Sub-Saharan Africa's real GDP could be reduced by 6.3 percentage points from the no-COVID baseline more than the 5.2 percentage-point decrease obtained in the base-case scenario (figure 1.30). A deterioration in prospects of this magnitude would lower real GDP growth up to -3.0 percent in 2020, compared with -2.1 percent in the baseline scenario and it could push many economies into recession. Economies that depend heavily on oil exports and mining would be hit hardest.

FIGURE 1.30: Illustrative COVID-19 Growth Scenarios in Sub-Saharan Africa

Illustrative scenarios highlight the adverse impact of the COVID-19 outbreak on growth in the region.



Source: World Bank staff estimates based on simulations with the MFMOD model.

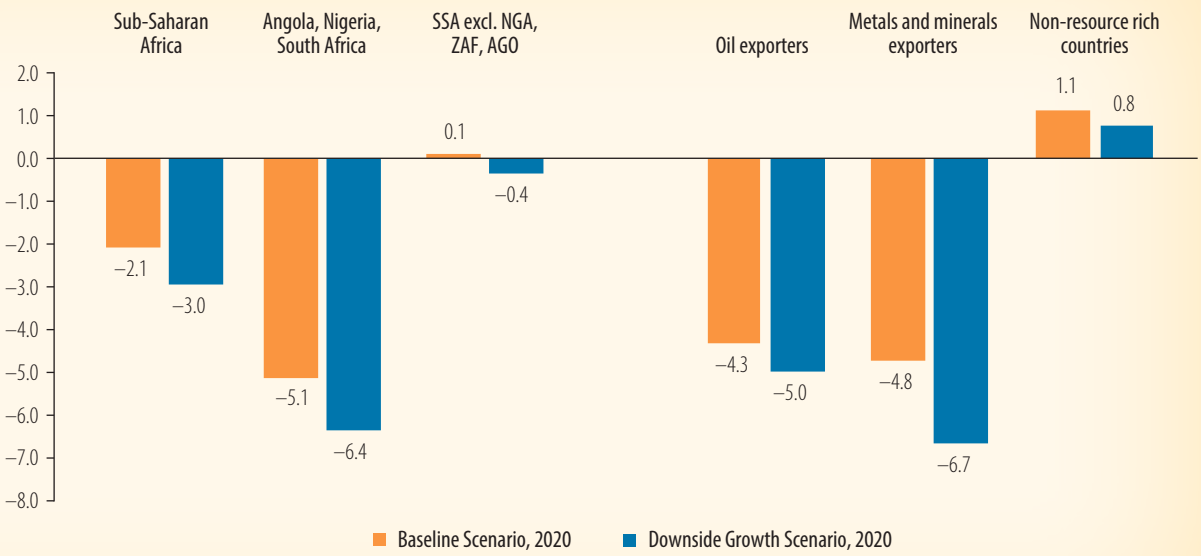
Note: These charts were generated on the basis of specific assumptions about the inherently uncertain progress of COVID-19 and the policy responses to it. As such, they should be interpreted as illustrative rather than predictive.

A more persistent impact of COVID-19 on the global economy will scale back growth in the region through different channels: first, a longer disruption in trade and value chains and larger-than-expected declines in commodity prices. Delays in the reactivation of the global economy may put further downward pressure on energy and mining commodities, and countries with robust value chain connections—particularly, in agribusiness and apparel (Ethiopia and Kenya), manufacturing goods (Tanzania and South Africa), and mineral exporters participating in the electronics value chain (the Democratic Republic of Congo and Zambia). Second, a sudden stop in foreign financing flows into Sub-Saharan African countries —in particular, FDI inflows in extractive sectors (energy and mining) and foreign investments in infrastructure. Aid flows, international tourism receipts and remittances will also slow if it takes a longer time for the source countries of these inflows to reignite their economic activity. Finally, a more protracted decline in oil prices and a more persistent impact of COVID-19 could trigger further capital flight from Africa. Greater-than-expected portfolio outflows may take place, especially in countries where investors purchased local currency securities —for example Ghana, Nigeria, and South Africa.

The downside scenario shows that the decline in growth could be deeper and more widespread as outbreaks intensify and spread more widely across the region (figure 1.31). The risk of an explosion of COVID-19 cases in Sub-Saharan Africa is high, and the human cost of the pandemic could rise significantly. Limited access to safe water and sanitation facilities, urban crowding, a greater proportion of children with malnutrition and stunting, and a large informal economy pose challenges to the containment and mitigation measures imposed by governments and

The downside scenario shows that the decline in growth in the region could be deep and more widespread.

FIGURE 1.31: The Downward Scenario Illustrates the Adverse Impact on Growth



Source: World Bank staff estimates based on simulations with the MFMOD model.

Note: These charts were generated on the basis of specific assumptions about the inherently uncertain progress of COVID-19 and the policy responses to it. As such, they should be interpreted as illustrative rather than predictive.

the responses of individuals. Yet, the magnitude of the impact will depend on the population's reaction within countries, the spread of the disease, and the policy response. This could lead to reduced labor market participation, capital underutilization, lower human capital accumulation, and long-term productivity effects.

Country-Level Impacts

Growth prospects will vary across countries. The COVID-19 is hitting the region's three largest economies—Nigeria, South Africa, and Angola—in a context of persistently weak growth and investment. Compared with a no-COVID base case, average real GDP growth in these countries could be reduced by up to 6.9 percentage points in 2020 in the baseline scenario, and by up to 8 percentage points in downside scenario.

- South Africa's economy was already fragile as it entered the COVID-19 shock, despite a pickup in economic activity at the start of the year. Interest rate cuts and quantitative easing announced by the South African Reserve Bank will provide some support to consumer spending and encourage lending and investment. However, a combination of low commodity prices, capital outflows (mainly, portfolio investment), reduced tourism activity, and a major slowdown in key trading partners is expected to weigh heavily on economic activity. The 21-day lockdown announced by the Head of State on March 24 will significantly affect retail sales and the mining sector, two key sources of growth for the economy.

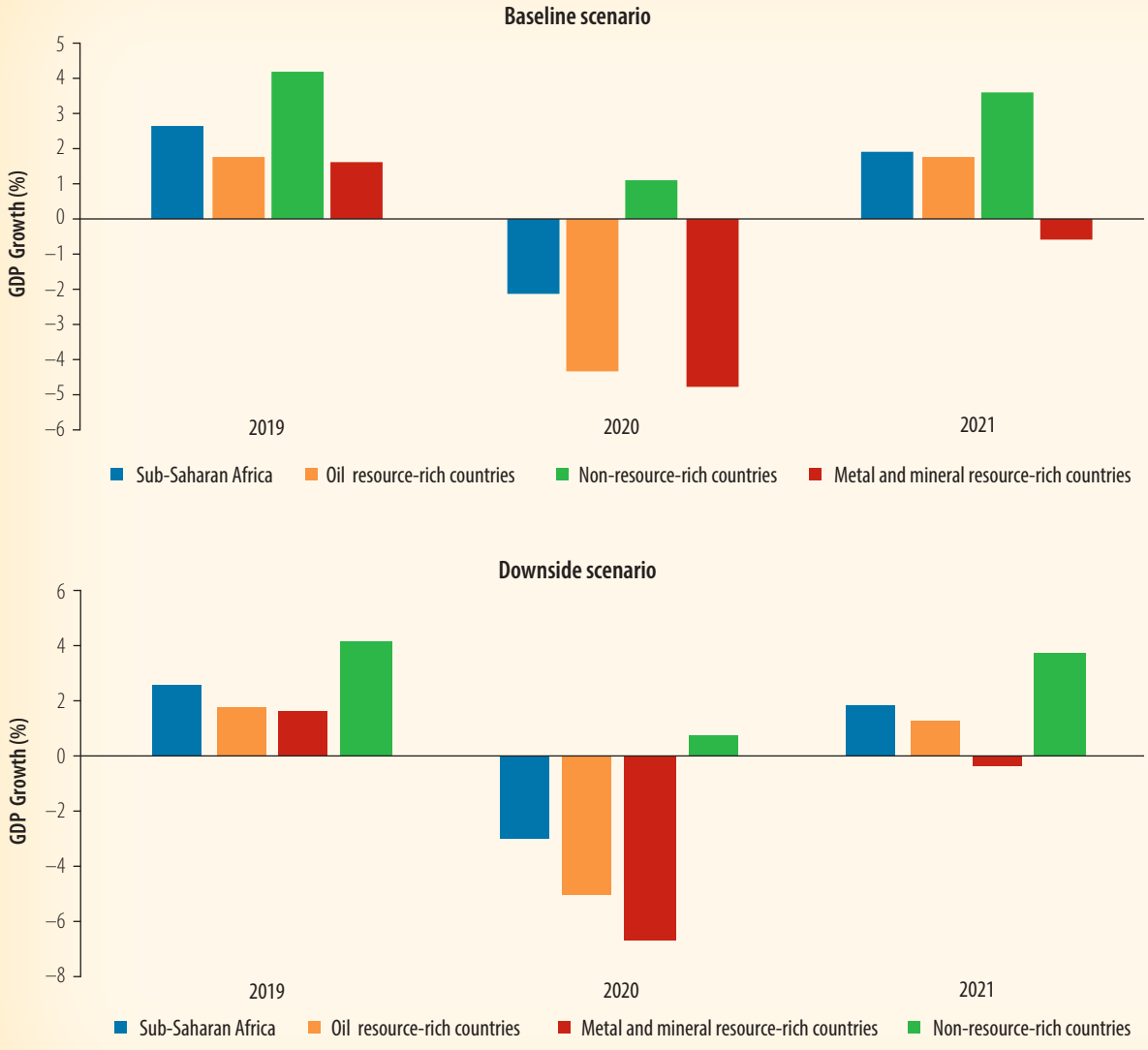
- In Nigeria, growth had rebounded to 2.2 percent in 2019, supported in part by stable oil production. With an average crude oil price at half the level of 2019, the oil sector is expected to contract sharply as production falls, oil fields close due to low profitability, and investment is delayed. Spillovers from the contraction in the oil sector will weigh on domestic activity, compounding the effects of lockdown measures taken by the government.

- In Angola—the region's second largest oil producer—the economy remained in recession in 2019 and entered 2020 with low growth momentum. The economic recession is expected to deepen in 2020, driven by a sharp contraction in exports and investment. This partly reflects spillovers from low growth in China, a major trading partner for Angola. High inflation, partly owing to currency depreciation, will weigh on private consumption.

The growth prospects for the rest of the region have been revised down significantly in 2020. Prior to the arrival of COVID-19, activity in the rest of the region was expanding at a solid pace, although growth was softer than in the recent past. Growth among resource-intensive and non-resource-intensive countries is expected to weaken substantially as a result of the COVID-19 shock (figure 1.32).

FIGURE 1.32: Growth Prospects Will Weaken across Resource Groups in 2020

While growth prospects will decline across the region, oil and metals producing countries will see the largest declines in growth.



Source: World Bank staff estimates based on simulations with MFMod model.

Note: These charts were generated on the basis of specific assumptions about the inherently uncertain progress of COVID-19 and the policy responses to it. As such, they should be interpreted as illustrative rather than predictive.

- In resource-intensive countries, growth could fall by up to 7 percentage points in oil-exporting countries and by more than 8 percentage points in metals exporters, compared with the no-COVID base case. The Central African Economic and Monetary Community area, which includes most of the region's other oil exporters, will see growth fall in 2020 as government revenues decline sharply and investment slows. Similarly, even excluding South Africa, activity is expected to contract in metals-exporting countries as mining production drops.

- Among non-resource-intensive countries, growth is expected to slow but remain positive. In many of these countries, activity was robust prior to COVID-19 outbreak. However, in the West African Economic and Monetary Union (WAEMU) area, where outbreaks are spreading rapidly, growth is projected to halve, as weak demand from trading partners causes exports to fall and measures to contain the outbreak take a toll on activity. Similarly, growth in the East African Community is expected to weaken substantially, with a marked slowdown in Ethiopia, Kenya, and Rwanda. In Ethiopia, a locust invasion has severely disrupted agricultural production, compounding the effects of the COVID-19 on the economy. In Kenya, growth is expected to decelerate due to lower demand from its trading partners, and disruptions of supply chains and domestic production. In tourist-dependent countries such as Cabo Verde, Mauritius, and the Seychelles, activity could contract significantly as earnings from tourism fall sharply.

The downside risk scenario suggests that with uncertainties surrounding the duration and spread of the pandemic, the economic impact could intensify further. In the baseline and downside scenarios growth falls well below the region average population growth rate of 2.7 percent indicating that, in the absence of appropriate measures to mitigate its effects, the COVID-19 outbreak will negatively impact the welfare of large populations in the region. The GDP per capita contraction will be particularly pronounced among resource-intensive countries, reflecting the sharp decline in output growth in Nigeria and South Africa, where many of the poor people in the region live. Among non-resource-intensive countries, the slowdown in GDP per capita growth is expected to be less pronounced, although weaker external demand and reductions in business and tourism are likely to weigh on household incomes.

1.4. THE IMPACT OF COVID-19 IN SUB-SAHARAN AFRICA: A CGE MODEL SIMULATION

This section evaluates the impact of the COVID-19 epidemic using simulations with ENVISAGE, a global computable general equilibrium (CGE) model developed by the World Bank for analysis of the impact of policy changes and economic shocks in developing countries. CGE models are well-suited to assess the impact of natural disasters (including pandemics) for the following reasons: (1) they are sufficiently flexible and detailed to deal with the wide variety of transmission channels of shocks (labor market, capital, FDI, trade, and productivity); (2) they rely on input-output tables and assume behavioral functions for agents (firms and households); (3) they offer a comprehensive evaluation of the effects of shocks, capturing direct and indirect effects as well as second- and third-round effects; and (4) they can capture the effects along several dimensions —including national accounts (GDP, consumption, and investment), the fiscal framework (government revenue, deficits, and debt), the external account (trade, FDI, and the current account), industries, factors of production, and households that would be most adversely affected by the shock.

Methodology

The current version of ENVISAGE largely relies on the GTAP 9 database (Global Trade Analysis Project 2014). The data include social accounting matrices and bilateral trade flows for 141 countries/regions and 57 sectors. This analysis relies on 14 African countries/regions based on (1) the availability of data in the GTAP data base (only 32 African countries are represented in the GTAP database), (2) the size of the economy (the priority is to assess the largest African economies represented in the GTAP data base), (3) key transmission channels (oil, mining, other commodities, global supply chains, and tourism and travel), and (4) currently affected countries. The non-African groups considered include China, the EU 27, the United States, other Organization for Economic Co-operation and Development (OECD) countries, and the rest of the world. Annex A provides a list of the sectors, factors of production, and regions identified in the model and their mapping to the original GTAP sectors, factors, and regions.

Scenarios

Three scenarios are considered based on the following factors: (1) regions and countries affected by the outbreak, (2) the effectiveness of policy responses, and (3) the anticipated length of the crisis. All the three scenarios assume a severe crisis in China, the United States, the European Union, and the rest of the world (table 1.1).

Scenario 1: Global spread and severe cases in Africa. This scenario assumes that containment measures in advanced countries are only lifted after two months as outbreaks slow. A sizeable

share of domestic private consumption (as well as businesses) that requires social interaction ceases during this period. It is also assumed that the pandemic fades and activity recovers slowly in China amid a global slump. Under this scenario, global growth will fall by up to 3.5 percentage points in 2020, reflecting a sharp slowdown in the United States, the euro area, and China, before picking up in 2021 as the effects of the COVID-19 virus fades and global activity gradually recovers.

This scenario assumes that the surveillance systems are ineffective and that the COVID-19 outbreak will spread to all countries in Sub-Saharan Africa. It also assumes that the policy response is fast and effective, so that new cases no longer occur within three months (as appears to have been the timing in China). In this scenario, the outbreak ends by early July 2020. It also assumes that the propagation profile of the epidemic would be close to the 2014 Ebola outbreak in Guinea, where the number of cases reached 2,707 in 2014 and 1,097 in 2015. [26] Therefore, the economic impact of the 2014 Ebola crisis in Guinea is used as a proxy to calibrate the exogenous domestic shocks for this scenario. The size of the shocks are scaled for each affected country according to the Epidemic Preparedness Index (EPI): The higher the EPI is, the less the country's economy is affected by the pandemic.

Scenario 2: Global spread and a catastrophic outbreak in Africa. As in scenario 1, this scenario assumes that the outbreak will spread to all 54 African nations. However, the policy response is slow and ineffective in affected countries, leading to a much larger number of cases and deaths in 2020, as well as additional cases in 2021, before the virus is contained. The number of cases and the death toll are worse than in Scenario 1. It is assumed that the propagation profile of the pandemic under this scenario will be close to the 2014 Ebola outbreak in Sierra Leone (the most affected country) where the number of cases reached 9446 in 2014 and 4676 in 2015. Therefore, the economic impact of the 2014 Ebola crisis in Sierra Leone is used as a proxy to calibrate the exogenous shocks for this scenario. The shocks are again scaled using the EPI.

Scenario 3: Global spread and non-cooperative African response. This scenario assesses the effect of a non-cooperative African response to the COVID-19 virus. The scenario is similar to scenario 2, in that it assumes that the outbreak is just as severe, spreads to all 54 African nations and lasts through 2021. As in scenario 2, Sierra Leone's experience during the Ebola crisis is used to calibrate the magnitude of the COVID-19 shock, scaled by the EPI. The only difference compared with scenario 2 is that a blockade on sub-regional trade in Africa is imposed (table 1.1).

26 Most of the damage is done through fear factor which would be the same as Ebola given the fast global spread and higher death rates.

TABLE 1.1: Scenario assumptions

Scenarios		Severity of epidemic in Africa	Length of the crisis	Transmission channels	Type of cooperation
1	**Global Spread-severe in Africa**	**Medium** - China and the rest of the world severely affected - 54 African countries severely affected - Limited number of cases - Lockdowns and border closures	Rapidly contained (3 months as in China)	1) **Global shocks** (oil, mining, agro commodities, tourism flow) 2) **Domestic short-term shocks** (labor market participation, trade cost increase, investment reduction) Domestic shocks calibrated based on the effect of the 2014 Ebola crisis in Guinea (the least affected economically) and scaled by the Epidemic Preparedness Index	No trade blockade
2	**Global spread-catastrophic in Africa**	**High** - China and the rest of the world severely affected - 54 African countries severely affected - High number of cases - Lockdowns and border closures	Slowly contained (crisis continues through 2021)	1) **Global shocks** (oil, mining, agro commodities, tourism flows) 2) **Domestic short-term shocks** (labor market participation, labor productivity, trade cost increase, investment reduction) Domestic shocks calibrated based on the effect of the 2014 Ebola crisis in Sierra Leone (the most affected country during the 2014 crisis) and scaled by the Epidemic Preparedness Index	No trade blockade
3	**Global spread and non-cooperative in Africa**	**High** - China and the rest of the world severely affected - 54 African countries severely affected - High number of cases - Lockdowns and border closures	Slowly contained (crisis continues through 2021)	1) **Global shocks** (oil, mining, agro commodities, tourism flows) 2) **Domestic short-term shocks** (labor market participation, labor productivity, trade cost increase, investment reduction) Domestic shocks calibrated based on the effect of the 2014 Ebola crisis in Sierra Leone (the most affected country during the 2014 crisis) and scaled by the Epidemic Preparedness Index	Regional trade blockade

Main Assumptions to Determine the Magnitude of the Shocks

The impact of COVID-19 on African economies simulated by the model considers two categories of transmission channels: *(1) channels related to international shocks, and (2) channels related to domestic shocks.* A key challenge for this exercise is to determine the magnitude of the shocks for each transmission channel (see table 1.2).

TABLE 1.2: Main Assumptions in the Scenarios

Channels	Scenario 1: Low		Scenario 2: High		Scenario 3: High non cooperation	
	All affected Africa	Other Countries	All Africa	Other Countries	All Africa	Other Countries
Commodity prices	Reduced to match PG price projections		Reduced to match PG price projections		Reduced to match PG price projections	
1. Labor participation	Ebola effect in Guinea	Zero	Ebola effect in Sierra Leone	Zero	Ebola effect in Sierra Leone	Zero
2. Tourism	Reduced to match tourism flow reduction during SARS		Reduced to match tourism flow reduction during SARS		Reduced to match tourism flow reduction during SARS	
3. FDI	Ebola effect in Guinea	Zero	Ebola effect in Sierra Leone	Zero	Ebola effect in Sierra Leone	Zero
4. Trade	Ebola effect in Guinea	Zero	Ebola effect in Sierra Leone	Zero	Ebola effect in Sierra Leone	Zero
5. Capital utilization	Ebola effect in Guinea	PG growth projection	Ebola effect in Sierra Leone	PG growth projection	Ebola effect in Sierra Leone	PG growth projection
6. Labor Productivity	Ebola effect in Guinea		Ebola effect in Sierra Leone		Ebola effect in Sierra Leone	PG growth projection
7. Regional Trade	None		None		Trade frictions between SSA countries	None

Note: FDI = foreign direct investment; PG = Development Prospects Group; SARS = severe acute respiratory syndrome; SSA = Sub-Saharan Africa.

A. International Channels. The following assumptions are made:

Oil prices. To simulate the impact of recent changes in the global oil market, we assume that oil production in rest of the world would increase by 20 percent due to the use of idle capacity following the lift of the cap on oil production for the main oil producers. The size of the shocks is defined to match the difference between the current commodity price projections (with the crisis) and commodity price projections of end-2019 (before the crisis) by the World Bank's Development Prospects Group (DECPG).

Tourism flows. The magnitude of the shocks is defined as the difference between current tourism flow projections (with the crisis) and the tourism flow projections of December 2019 (before the crisis). The tourism shocks applied to our simulations (table 1.3) reflect the impact on tourism observed during the SARS crisis. The simulation is implemented as an increase in the transaction cost and a 2 percent decline in total factor productivity in the tourism sector due to weakening demand. The transaction cost is modeled as the traditional "iceberg effect," where transport is treated as an exogenous friction that is fixed and proportional to the value shipped, with the value added by transportation services treated as pure waste. For African countries, the simulation is based on the calibration of the level of iceberg transaction costs that would generate the targeted reduction in tourism flows (10 to 15 percent, depending on country context).

Foreign direct investment. FDI declines because of increased uncertainty about the future and interruptions to international travel and communication. Further, many foreign investments rely on expatriates from advanced countries, and these people are likely to be less willing to travel at all, or to travel to areas with weaker health systems. For African countries, the magnitude of the shocks simulated corresponds to the reduction in FDI inflows observed during the 2014 Ebola pandemic in West Africa (table 1.3).

B. Domestic Channels

In addition to the international transmission mechanisms, the scenario reflects domestic responses by governments to prevent infection from spreading and to cushion the impact of the outbreak on the economy. It also captures "avoidance behavior," as fear of the disease causes behavioral changes in the main economic actors. Following the World Bank reports on the Ebola outbreak in Western Africa (World Bank, 2015), and the Democratic Republic of Congo (World Bank, 2019), this study assumes that these behavioral changes impair the efficiency of markets, which slows economic activities and has medium and long-term effects. The main implications of avoidance in economic interactions are limitations on access to markets and increased risk and uncertainty. The domestic channels through which economies would be affected by avoidance behavior are as follows:

Labor market participation effect. Fear, controls, and restrictions on the movements of workers are likely to affect the household labor supply decision negatively, at least for the households that can afford to stop working. Ultimately, labor force participation would decline. The size of the shock corresponds to the level of change observed in West Africa during the Ebola crisis in 2014 for African countries, and it is not implemented for other countries, since the total impact on labor markets is introduced through labor productivity for these countries.

Capital utilization. Avoidance of workplaces by workers will inevitably cause capital, such as machinery and so forth, to be left idle for longer periods of time, which will result in lower capital utilization in the economy. Further, increased uncertainty would cause some investments to be postponed or canceled. Two types of shocks are considered to implement the fall in capital utilization. For African countries, the size of the shock is calibrated to correspond to the level of change observed in West Africa during the Ebola crisis in 2014 (table 1.4). For other countries, the capital utilization shock is calibrated to generate the level of GDP projected by PG under the crisis scenarios (table 1.3).

Labor productivity effect. This effect captures the loss in labor productivity due to the restrictions on the mobility of people. Two types of shocks are considered to simulate the reduction in labor productivity. For African countries, the magnitude of the productivity shock is determined based on the decline in labor productivity observed during the West Africa Ebola crisis in 2014. For

other countries, changes in labor market participation are calibrated to generate the level of GDP projected by PG under the crisis scenarios, also allowing for the capture of effects such as decline in labor force participation.

Trade. It is assumed that trade transaction costs increase for goods and services from all countries. The effect is again modeled using the "iceberg" approach, where this time the size of the shock is calibrated to match the increase in unit export and import prices during the West African Ebola crisis.

Regional trade. In the last scenario, trade between Sub-Saharan African countries is reduced around 90 percent, to reflect the consequences of a noncooperative approach, again by increasing trade costs.

As indicated above, domestic shocks will be calibrated based on changes to the main variables in Guinea and Sierra Leone during the 2014–16 Ebola crisis, as calculated by World Bank (2019):

TABLE 1.3: International shocks

Variables	Low Case	High Case
Tourism flows	-15.0	
Economic Slow Down in:		
United States	-6.9	
China	-7.0	
European Union	-7.5	
Rest of the world (ROW)	-6.6	
Oil Production in ROW	20.0	

TABLE 1.4: Percentage Deviation from 2000–13 Trend during the 2014–16 Ebola Crisis

Variables	Low Case	High Case
LFP	-0.3	-0.9
GFCF	-6.6	-41.8
FDI	-40.0	-34.9
Export unit value	10.9	16.9
Import unit value	9.7	12.0
Labor productivity	-5.7	-19.9

The figures in the table 1.4 has been scaled according to country-specific conditions. For example, World Bank (2019) uses the share of the regions affected by Ebola in national GDP to scale those shocks. In this study we assume that all countries would be affected differently, depending on the density of urban population and the country preparedness for the epidemic. Therefore, we scaled the above shocks according to the Epidemic Preparedness Index. For an example, see https://gh.bmj.com/content/4/1/e001157.

RESULTS: SIMULATION ANALYSIS

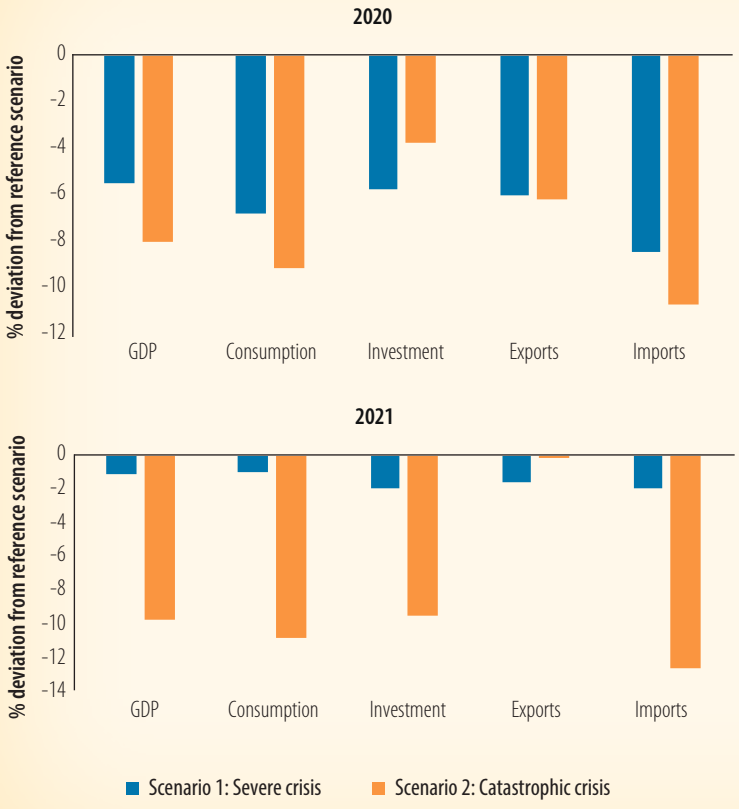
Short and Medium-Term Economic Effects of COVID-19

a. Growth effect of COVID-19

Continent wide effect

Our estimates suggest that the immediate impact of COVID-19 on growth in Sub-Saharan African economies would be substantial, even under the most optimistic scenario of a quick and efficient response. Assuming the crisis in Sub-Saharan Africa is limited to three months (scenario 1), the CGE estimates show that GDP would be lower than in the reference scenario (the scenario developed before the advent of COVID-19) by about 5.7 percent in 2020 and 1.0 percent in 2021 (figure 1.33). On this basis, growth in the region would decline from 2.6 percent in 2019 to -2.5 percent in 2020 because of COVID-19 (figure 1.34).

FIGURE 1.33: Impact of COVID-19 on Real GDP, 2020–21
(% deviation from baseline)



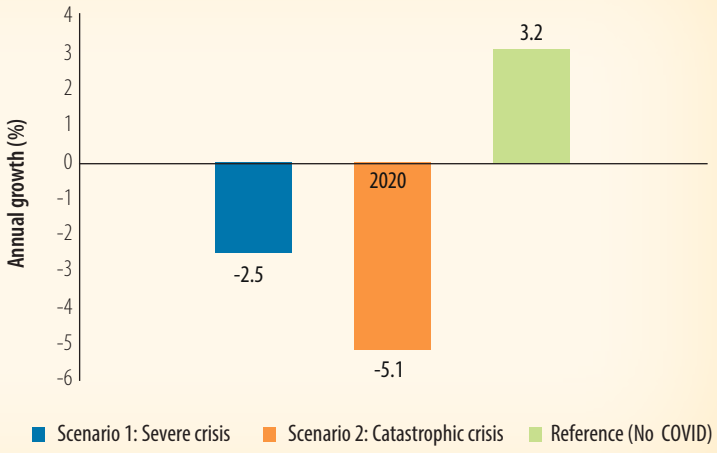
Source:

The immediate impact of COVID-19 on GDP in Sub-Saharan African economies would be substantial.

The decline in Sub-Saharan Africa's GDP in 2020 (figure 1.33), in scenario 1, compared with the no-COVID-19 scenario, is due to lower exports (4 percent lower), private investment (8 percent), and private consumption (6 percent). The change in exports is due to higher trade costs (figure 1.35). Investment is lower for at least two reasons: (1) the reduction in FDI and postponement of domestic investments (figure 1.35), and (2) lower government savings (an increase in the deficit) and lower household savings, as lower labor market participation combined with lower productivity reduces household income. The deterioration in the fiscal balance due to COVID-19 increases interest rates and thus suppresses private investment. However, imports are substantially lower than in the reference scenario (no COVID-19) (about 8 percent in 2020), which makes a positive contribution to GDP (figure 1.35).

The devastating effect of COVID-19 would likely lead to a deep recession in Sub-Saharan African economies in 2020.

FIGURE 1.34: Effect of COVID-19 on Sub-Saharan Africa's Growth Rate (real GDP annual growth rate, %)



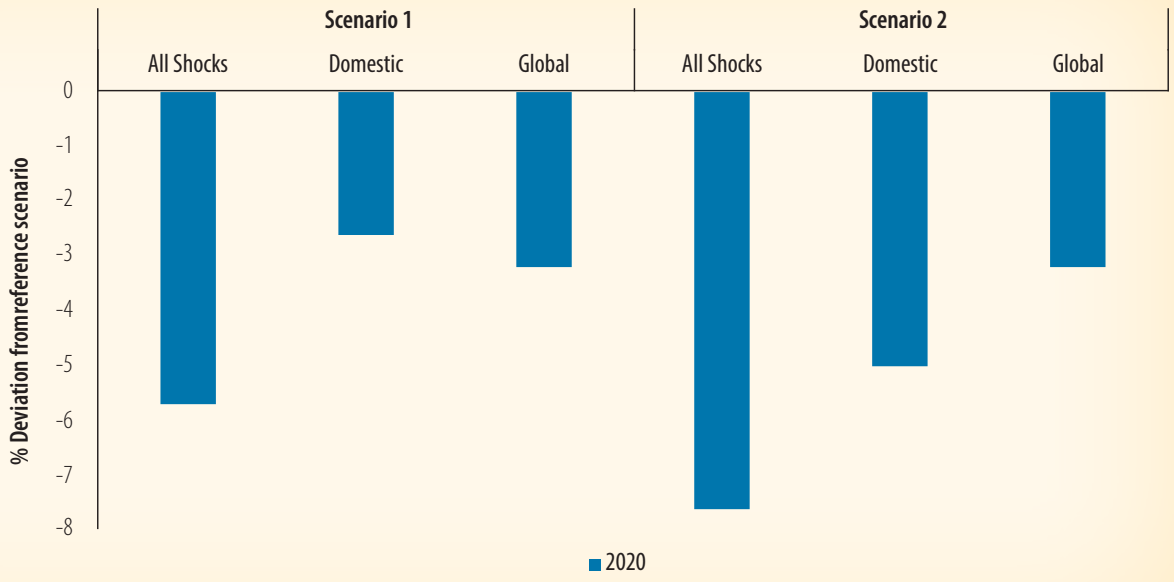
Source: Authors' construction using the CGE model (ENVISAGE).

If the COVID-19 epidemic lasts through 2021, the decline in Sub-Saharan Africa's GDP would be much more dramatic. Under the pessimistic scenario (scenario 2), the CGE estimates show that Sub-Saharan Africa's GDP would be 7.6 percent lower than in the baseline in 2020 and 9.8 percent in 2021 (figure 1.33). On this basis, growth in the region would decline from 2.4 percent in 2019 to -5.1 percent in 2020 because of COVID-19.

The impact of COVID-19 on Sub-Saharan Africa is driven by international and domestic shocks. On average across countries, 45 percent of the impact of COVID-19 on Sub-Saharan Africa's GDP is driven by domestic shocks under the scenario 1, reflecting lockdown measures such as cancellations of events, limitations on movements, and restrictions on access to services due to effective social distancing (figure 1.35). However if the medical crisis is not rapidly addressed, the negative effect of domestic restrictions will become worse. Our estimates show that about 65 percent of the impact of COVID-19 on Sub-Saharan Africa's GDP would be driven by domestic shocks under a "catastrophic" scenario (scenario 2) assuming that the crisis would last through 2021 with a severity compared to the 2014 Ebola outbreak in Sierra Leone (figure 1.35). The most important transmission channel of these effects

While international shocks are exogenous and generally beyond the control of African countries, the negative effects of domestic shocks could be influenced by rapid and effective policies.

FIGURE 1.35: GDP Impact by Source of Shocks, Domestic versus International



Source: Authors' construction using the CGE model (ENVISAGE).

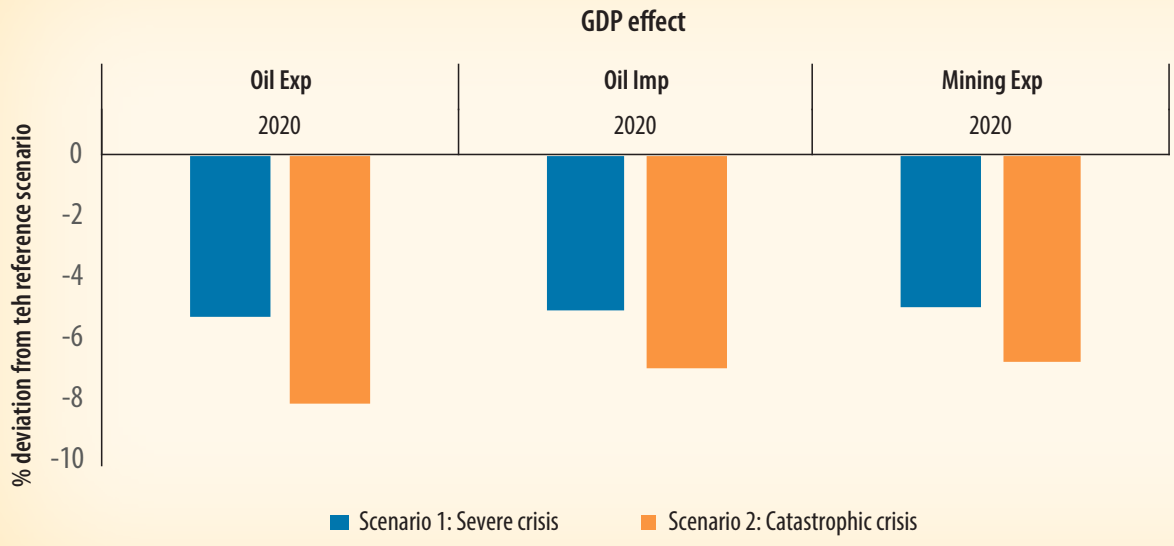
at the national level is the reduction in productivity, followed by reduced capital utilization and increased trade transaction costs. Labor market participation has the least impact among these variables; most people in poor countries that lack effective formal social security systems cannot afford a complete interruption of activity. The commodities channel, led by the fall in the oil price, is the main driver of international shocks. However, reduced FDI flows and declining tourism also play an important role in reducing growth.

Sub-Regional Growth Effect

The short-term impact of COVID-19 on growth will vary across countries according to trade openness, dependence on commodities, tourism, and epidemiologic preparedness. In terms of resource groups, the CGE estimates show that oil-dependent countries are hit the hardest due to a combination of a fall in international price and demand (figure 1.36). Similarly, growth among metals-exporting countries would decline sharply, as reduced global demand leads to a fall in mineral production. Under the optimistic scenario (scenario 1), our CGE estimates suggest that GDP will decline by 5.6 percent in oil-dependent countries and 4.5 percent in metals-dependent countries compared with the no-COVID scenario in 2020. Although the oil-dependent countries can compensate some of the losses due to lower global oil prices, such benefits would far from compensate the losses due to the COVID-19 crisis.

The impact of COVID-19 on the region's three largest economies—Nigeria, South Africa and Angola—is substantial, reflecting lower prices for crude oil (Angola and Nigeria) and industrial metals (South Africa), capital outflows, and the effects of containment measures. The CGE estimates that the COVID-19 crisis under scenario 1 (optimistic scenario) would reduce South Africa's GDP by 5.35 percent compared with the reference scenario (no-COVID scenario) in 2020 (figure 1.36). The impact of domestic shocks on South Africa would be lower than that in many other countries in the region, thanks to the country's higher EPI (62.2). The CGE estimate points

FIGURE 1.36: Impact of COVID-19 in Sub-Saharan Africa by Resource Group



Oil-dependent countries are hit the hardest by COVID-19, due to the combination of a fall in international price and demand.

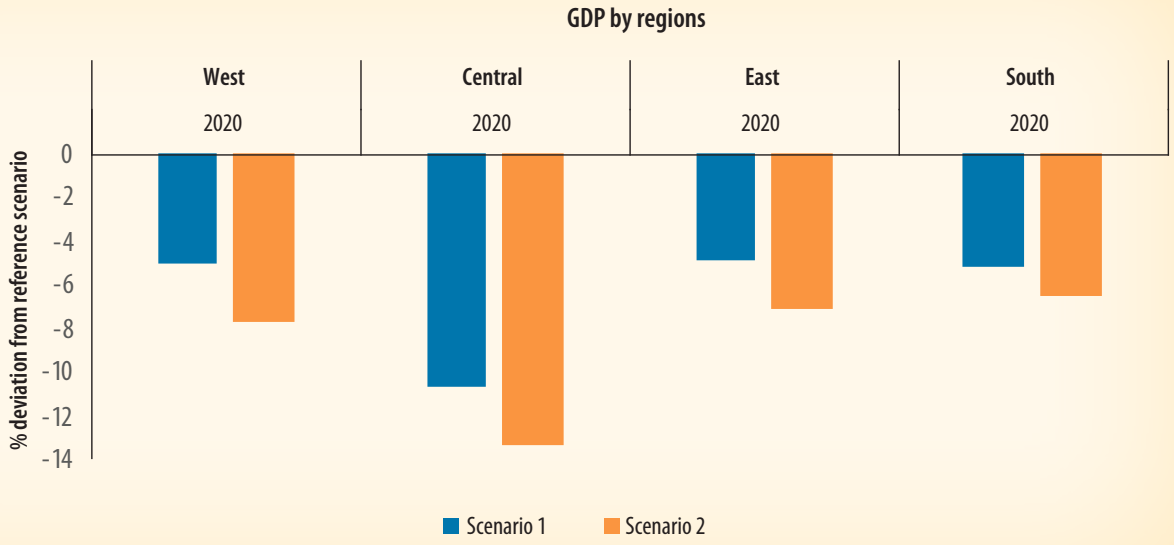
Source: Authors' construction using the CGE model (ENVISAGE).

to a 4.72 percent reduction in Nigerian GDP in scenario 1 compared with the no-COVID scenario in 2020 (figure 1.36). The effect of international shocks related to COVID-19 on Nigeria is less pronounced compared with Angola and South Africa, given Nigeria's low level of openness. However, Nigeria is hit the hardest by domestic shocks, as country's low EPI signals a lower capacity to mitigate the effects of the crisis.

Among the four sub-regions considered in this study, Central Africa, which includes most of the region's other oil exporters (Equatorial Guinea, Gabon, Cameroon, the Republic of Congo, and Chad), is the most affected. Under the optimistic scenario (scenario 1), our CGE estimates suggest that Central Africa's GDP would decline by 10.8 percent compared with the no-COVID scenario in 2020. Central Africa's vulnerability is not only due to international shocks related to the sub-region's high dependence on oil products, but also to poor preparation for an epidemic, as indicated by low EPIs (table A2.3). These countries' limited ability to manage the crisis would result in a relatively high negative effect from domestic shocks. The effect of domestic shocks in Central Africa would cause a 3.3 percent decline in GDP compared with the no-COVID scenario in 2020 (Figure 1.37).

East Africa seems to be the least affected subregion, thanks to its low exposure to the decline in oil prices.

FIGURE 1.37: Impact of COVID-19 by Subregion



Source: Authors' construction using the CGE model (ENVISAGE).

East Africa is the least affected subregion. Under the optimistic scenario (scenario 1), our CGE estimates suggest that East Africa's GDP would decline by 4.5 percent compared with the no-COVID scenario, a better performance than in any other subregion. Intraregional trade is a larger share of total trade in East African countries than in other subregions, and most East African countries are net oil importers that benefit from the decline in oil prices. Most importantly, East African countries seem to be better prepared to manage the crisis than are most other subregions (second to Southern Africa).

In West Africa, where outbreaks are spreading rapidly, the impact of COVID-19 is very severe due to the region's exposure to mining products and tourism, as well as the poor level of preparation

for an epidemic. Our CGE estimates suggest that under the optimistic scenario, the GDP of the WAEMU countries would decline by 5 percent compared with the no-COVID scenario in 2020 (Figure 1.37).

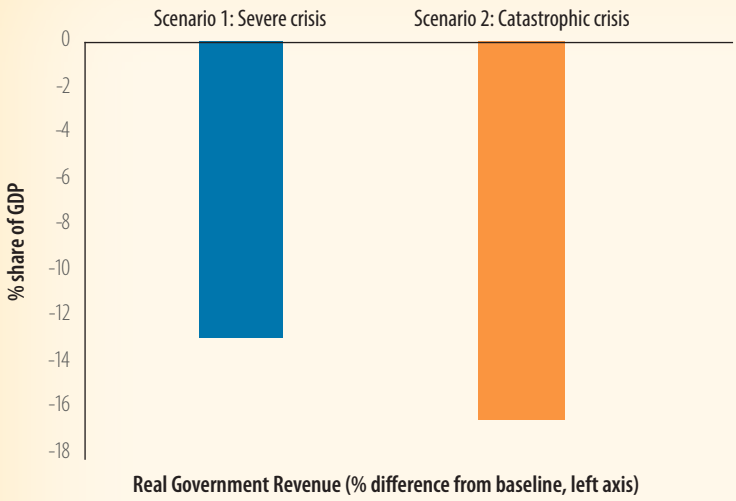
b. Fiscal Effects of COVID-19

The COVID-19 pandemic is likely to have a substantial impact on the fiscal accounts of African economies. Under the optimistic scenario (low case), the revenue collected by Sub-Saharan African countries would be 12 percent lower than in the reference scenario (no-COVID scenario) due to the COVID-19 crisis (figure 1.38). As the level of spending is kept high by necessity to fight COVID-19, a decline in revenue would lead to a substantial deterioration of the overall fiscal balance. The overall deficit would be around 2.7 percentage points of GDP higher compared to the non-crisis scenario (figure 1.39).

However, if the crisis were to worsen and the epidemic continue to spread through 2021, the efforts needed to control the epidemic and related damage to economic activities would cause a more severe deterioration of the fiscal framework. Under the pessimistic scenario (scenario 2), which assumes numbers of cases and deaths in the magnitudes observed in Sierra Leone during the 2014 Ebola crisis, public finance would take a big hit. The revenue would be about 16 percent lower in 2020 compared with the no-COVID-19 scenario (figure 1.38), leading to an increase of 3.5 percentage points in the overall deficit compared with the reference scenario (no-COVID-19).

FIGURE 1.38: Fiscal Effect of COVID-19 in Sub-Saharan Africa: Revenue Loss in 2020 (% of GDP)

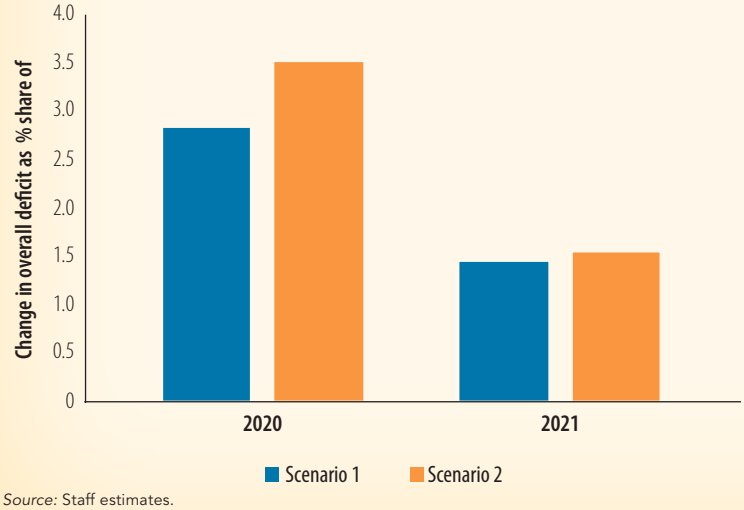
The COVID-19 pandemic is likely to cause a devastating loss of revenue for Sub-Saharan African budgets.



Source: Staff estimates.

FIGURE 1.39: Fiscal Effect of COVID-19 in Sub-Saharan Africa: Overall Balance in 2020 and 2021 (% of GDP)

The COVID-19 crisis is likely to cause significant debt distress.



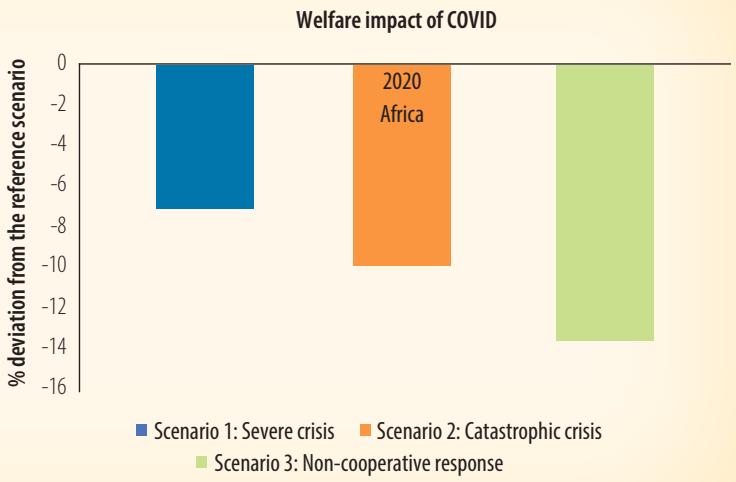
Source: Staff estimates.

c. Welfare Effects of COVID-19

The negative impact of the COVID-19 crisis on household welfare would be equally dramatic.[27] Welfare in the optimistic scenario (scenario 1) would be 7 percent lower than in the reference scenario (no-COVID scenario) in 2020 (figure 1.40). Under the more pessimistic scenario (scenario 2), assuming a lengthy crisis, Sub-Saharan Africa's welfare would be 10 percent lower than in the reference scenario **(**no-COVID scenario**)** in 2020 (figure 1.40). Lower terms of trade due to reduced commodity prices, coupled with lower employment result in a pronounced welfare loss for households. The fall in the terms of trade essentially means that Africa would have to export more resources, goods, and services to maintain the same real level of imports. Consumer prices rise because the impacts of declining production and increasing transaction costs more than offset the moderating influence of lower demand on prices. Higher consumer prices, in turn, reduce household purchasing power.

The impact of COVID-19 is likely to have a substantial impact on household welfare.

FIGURE 1.40: Impact of COVID-19 on Household Welfare (% deviation from baseline)



Source: Staff estimates using the CGE model (ENVISAGE).

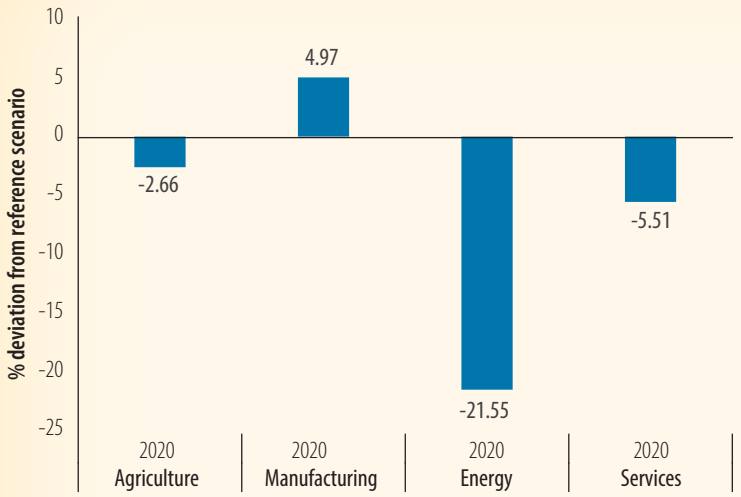
d. Distributional Effect of COVID-19

The COVID-19 crisis would adversely affect nearly every sector of the economy, including agriculture and non-tradable services, where most of the poorest workers are employed. In the three scenarios, COVID-19 would hit almost all sectors' activities through its adverse impact on key production factors, productivity, and domestic and international demand. The oil and mining sector, as the main tradable sector that relies the most on international market demand, suffers the largest decline in production. Under our most optimistic scenario, the energy sector production would be about 21.5 percent lower than in the no-COVID-19 scenario in 2020. The services and agricultural production sectors also shrink significantly (figure 1.41). Lower investment is an important driver of the decline in the services sector, while the decline in agriculture is mainly attributable to lower household consumption. Under our most optimistic scenario, service production would be 6.5 percent lower than in the no-COVID-19 scenario in 2020. Agricultural production would be 2.6 percent lower during the same period. The sharp declines in the services and agriculture sectors are indications that the crisis would severely hit the poorest and the most vulnerable, and in particular it would greatly affect women, who depend heavily on these activities in Africa. Our estimates indicate that the

27 Welfare is measured by household real consumption.

manufacturing production would increase as a result of COVID-19 outbreak. Under our most optimistic scenario (scenario 1), manufacturing sector production would be about 5 percent higher than in the no-COVID scenario in 2020 (figure 1.41). The manufacturing sector seems to benefit from the increased transaction cost of international trade that is making local production more competitive.[28]

FIGURE 1.41: Effect of COVID-19 on Key Sectors' Value Added (% deviation from reference scenario)



Source: Staff estimates using the CGE model (ENVISAGE).

The sharp declines in the services and agriculture sectors are indications that the crisis would severely hit the poorest and most vulnerable.

TABLE 1.5: Imports of Agricultural and Food products in Sub-Saharan Africa in 2020 and 2021 (percentage deviation from the no-COVID scenario)

		Scenario 1	Scenario 2	Scenario 3
Agriculture	2020	-13.08	-12.62	-21.03
	2021	-3.47	-14.36	-22.52
Food	2020	-13.31	-14.24	-25.28
	2021	-2.14	-15.94	-26.69

Source: Staff estimates using the CGE model (ENVISAGE).

The COVID-19 crisis has the potential to create a severe food security crisis in Africa. Our results point to dramatic fall in imports of agricultural and food products. The decline in imports of food products in 2020 ranges from 13 percent in optimistic scenario (assuming rapid and effective response to the crisis) to 25 percent in the pessimistic scenario due to a combination of the increase in transaction costs and the reduction in domestic demand (see table 1.5).

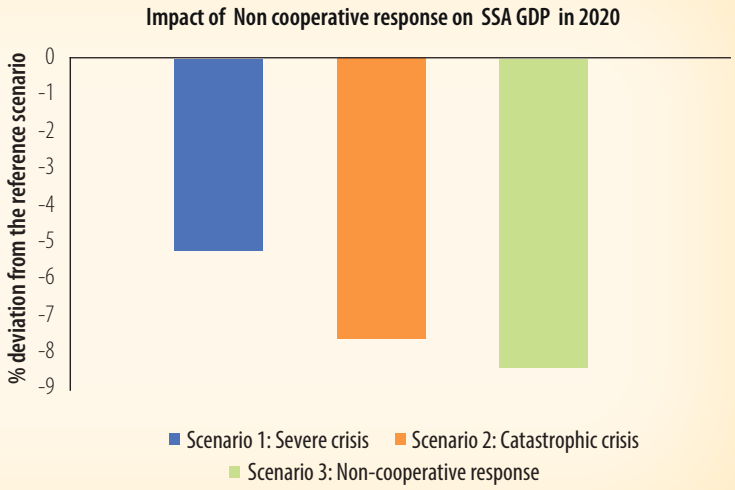
e. Effects of Non-Cooperative Policy Responses

A disorderly, non-cooperative response to the pandemic would accentuate the negative impact of COVID-19 among countries in Sub-Saharan Africa (figure 1.42). Scenario 3 assumes that the absence of cooperation among African regional trade partners would lead to trade blockage. The trade blockade is simulated by the introduction of an exorbitant iceberg cost that would reduce regional trade to almost nil. Coming on top of reduced global demand, a regional trade blockade would be devastating. The level of GDP under this scenario would be 8.5 percent lower than in the baseline in 2020, a significant degradation compared with the 7.8 percent reduction in the scenario without a trade blockage (scenario 2). The blockade of regional trade would also disproportionately affect the poor, particularly agricultural workers and unskilled workers in the

28 Another factor driving the increase in the manufacturing sector is the reverse Dutch disease effect related to the sharp decline in commodity exports.

Trade restrictions across borders will accentuate the negative impact of COVID-19 and contribute to the risk of a food security crisis in Sub-Saharan African countries.

FIGURE 1.42: Impact of Noncooperative Response to the Crisis



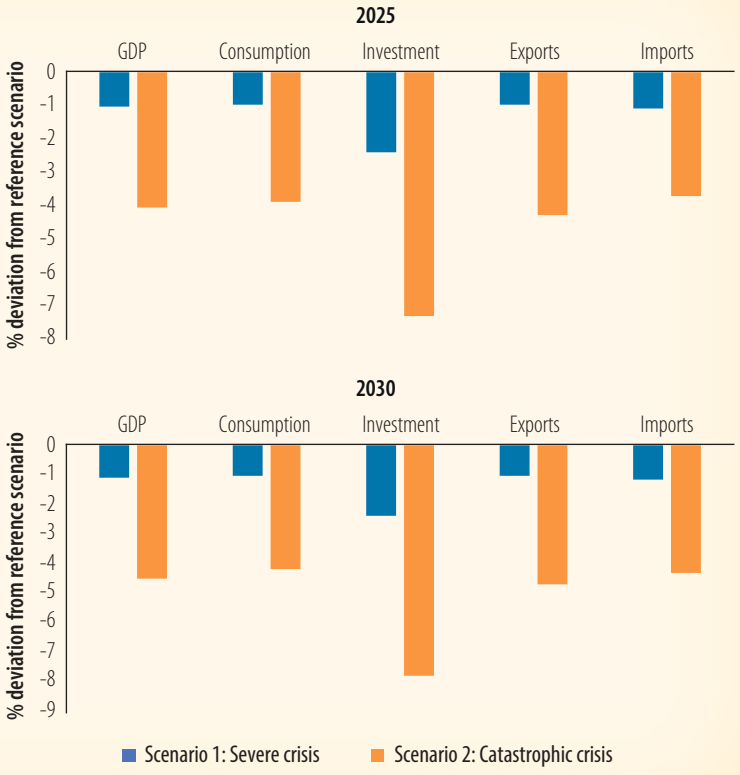
Source: Staff calculations using the CGE model (ENVISAGE).

informal sector. An extensive literature demonstrates that regional trade in Africa is dominated by informal activities and the exchange of commodities across land borders, and is engaged in mostly by the poorest and the most vulnerable, particularly women (World Bank 2017).

A disorderly, non-cooperative response to the pandemic, leading to an increase in trade restrictions, will contribute to the risk of food security crisis in SSA countries. Our estimates show that a non-cooperative response leading to sub-regional trade blockage in Africa, which is traditionally very intensive in agricultural and food products, will disproportionally impact import of food and agricultural products (see table 1.5).

The growth effect of the COVID-19 outbreak remains substantial in the long term.

FIGURE 1.43: Long-term Effect of COVID-19 on Sub-Saharan Africa's Real Gross Domestic Product (% deviation from the reference scenario)



Source: Authors' construction using the CGE model (ENVISAGE).

Long-Term Economic Effects of COVID-19

Most of the effects of the pandemic, notably demand shocks, will be temporary and vanish in the long term. However, depending on the severity and the length of the crisis, it could have some lasting impacts on capital accumulation and productivity, due to a deterioration in the health system (as it is difficult to replace doctors and nurses who become ill or die) and in the level of human capital more generally (see Huber, Finelli, and Stevens 2018). Based on past experiences of similar crises, notably the 2014 Western

Africa Ebola crisis, COVID-19 is likely to create a lasting impact on labor productivity due to its adverse effect on human capital and infrastructure.[29] The World Bank Global Computable General Equilibrium (CGE) model, ENVISAGE, is used to assess the long-term impacts of COVID-19. The same three scenarios are assessed. The implementation of the scenario relies on the same assumptions as in the short-term analysis. However, the analysis focuses on the long-term impacts from 2022 to 2030.

The growth effect of the COVID-19 outbreak remains substantial in the long term (figure 1.43). Our estimates suggest that GDP would be 1 percent lower than in the no-COVID scenario in 2025 in the optimistic scenario, where the disease is rapidly contained. In the catastrophic scenario where the crisis lasts more than 18 months, GDP would be 4 percent lower. This finding indicates that if the human capital destruction and disruptions of public infrastructure caused by COVID-19 are not quickly reversed, the decline in productivity would become permanent. The worsening of the GDP effect under the pessimistic scenario is driven by severe disruptions of activities due to fear of the disease. The COVID-19 epidemic generates avoidance behavior that prompts households to postpone consumption and stay away from the labor market and leads firms to postpone investments.

29 World Bank (2019) assesses the validity of this assumption in the context of the West Africa Ebola crisis, calculating labor productivity for the post-Ebola period (2016–18) in the same way it is calculated for the Ebola crisis (2014–15). In Guinea, labor productivity starts recovering after the Ebola crisis; however, in Liberia, labor productivity worsens after the crisis, and in Sierra Leone, it improves but is still significantly below the long-term average.

1.5. POLICY RESPONSE: WHY COPYCAT MAY NOT WORK IN SUB-SAHARAN AFRICA

Facing a fast-changing situation with great uncertainty and so many unknowns, most governments around the world have resumed to similar approaches to contain the COVID-19 pandemic. Some African countries including but not limited to South Africa, Ghana, Rwanda, Kenya, have reacted quickly and decisively to curb the potential influx and spread of the COVID-19 virus very much in line with emerging international experience. As the situation evolves, there are more questions about suitability and likely effectiveness of some of these policies such as strict confinement.

As African governments deploy a series of emergency measures, structural features of African economies should shape the policy responses that are designed and implemented to fend-off COVID-19. There are multiple reasons why economic policies implemented in Sub-Saharan Africa should be different from those adopted in advanced countries and (some) middle-income countries.

First, informal employment is the main source of employment in Sub-Saharan Africa, accounting for 89.2 percent of all employment (ILO 2018). Excluding agriculture, informal employment accounts for 76.8 percent of total employment respectively. Based on the number of entrepreneurs (own-account workers and employers) who are owners of informal economic units, the vast majority of economic units in the region are informal (92.4 percent). Informal workers lack benefits such as health insurance, unemployment insurance, and paid leave. Most informal workers, particularly the self-employed, need to work every day to earn their living and pay for their basic household necessities. A prolonged lockdown will put at risk the subsistence of their households. Additionally, the majority of workers hired are in a precarious situation, and most of these jobs are temporary and with low remuneration, do not offer social security, and put workers at a greater risk of injury and ill health.

Second, small and medium-size enterprises (SMEs), an important driver of growth in economies across the region, account for up to 90 percent of all businesses and represent 38 percent of the region's GDP. Access to finance is one of the main challenges facing SMEs in normal times—with the majority of these firms lacking the finance needed to grow. Prior to COVID-19, the finance gap for SMEs in the region was estimated at US$331 billion (IFC 2018).

Third, concerns about the negative economic impact of the COVID-19 outbreak prompted interest rate cuts in several African countries in line with monetary policy actions around the world.[30] However, this type of monetary stimulus may not be effective for two reasons: (1) the prevalence of supply effects at the height of the containment measures (i.e. reduced labor supply and closed businesses, especially in contact-intensive sectors),[31] and (2) the weak monetary transmission in countries with underdeveloped domestic financial markets. In this context, there is the need for a different type of central bank intervention, one that provides liquidity support —through direct credit lines or guaranteed commercial loans— to formal and informal businesses that can continue producing in the future.

30 In February, the Central Bank of The Gambia lowered its benchmark interest rate by 50 basis points. In March, the Bank of Mauritius cut its policy rate by 50 basis points, and the Central Bank of the Democratic Republic of Congo slashed the benchmark interest rate by 150 basis points, while the Bank of Ghana, the South African Reserve Bank, and the central banks of Eswatini, Kenya, and the Seychelles lowered their policy rates by 100 basis points, respectively. For Kenya and South Africa, it was the second straight rate cut this year, amid growing uncertainty over the impact of the coronavirus crisis on already slowing economic growth. Meanwhile, at its March meeting, the Central Bank of Nigeria left its monetary policy rate unchanged despite rising inflation.

31 Macroeconomic stimulus measures such as the ones adopted during the 2008–09 global financial crisis may not work in the short term this time around, as some sectors of the economy are shut down—especially those that are contact-intensive (Guerrieri et al. 2020).

It is also important to highlight that the types of shocks currently affecting the global economy are different from those operating during the 2008–09 global financial crisis. The COVID-19 pandemic, unlike the global financial crisis, has implications for aggregate demand and supply. From an aggregate demand perspective, the virus exposes individuals who purchase goods and the associated suppression measures (social distancing, self-quarantine, and shelter-in-place practices) tend to reduce private consumption. On the supply side, the virus can affect workers and the shutdown of economic activity as a result of the suppression measures—especially, on contact-intensive activities—leads to a reduction in the supply of labor (Eichenbaum, Rebelo, and Trabandt 2020). The supply shock, as manifested for instance by the closing of retail activities, is compounded by the lack of e-commerce platforms that can help these businesses remain partly operative. This response reflects the lack of internet connectivity across many countries in the region.

Africa should develop a two-pronged strategy of saving lives and protecting livelihoods. In this context, policymakers in the region need to design effective strategies that include (short-term) relief measures and (medium-term) recovery/stimulus measures. The reduced effectiveness of (traditional) monetary stimulus implies that this two-pronged strategy to combat the COVID-19 pandemic will have to rest on the shoulders of fiscal policymakers. African policymakers should aim at strengthening health systems, providing income support to (formal and informal) workers, providing liquidity support to viable (formal and informal) businesses and guaranteeing the provision of public and government services. Fiscal stimulus in the recovery phase should avoid procyclicality. Given that the bulk of the relief and recovery measures will come mostly from the fiscal side, a question that emerges is how African countries will find the fiscal space to fund such a package amid mounting fiscal pressures (especially among oil-abundant countries) and heightened debt vulnerabilities (with a large portion of debt obligations owed to non–Paris Club governments and private creditors).

Combating COVID-19 in Sub-Saharan Africa —a region with fewer resources, narrower policy space, and poor capacity to respond to the pandemic, would require international assistance. The global nature of the current shock facing the economy will require international coordination not only in the containment and mitigation measures (especially in issues related to trade and migration) but also in health and economic policy. Financing relief and recovery measures will require assistance from multilateral organizations and bilateral official creditors in a region that is already facing public debt vulnerabilities. Conducting effective policies while preserving macroeconomic stability in Sub-Saharan Africa may require a suspension of sovereign debt payments or debt relief.

Finally, African policy makers need to think ahead about the exit strategy from COVID-19. Once the containment and mitigating measures are lifted, economic policies should be geared toward building future resilience. African economies still need to design policy pathways to achieve sustainable growth, economic diversification, and inclusion. The economic sustainability of African economies depends on their ability to transform their depleting stock of natural wealth into other reproducible capital assets such as physical capital, infrastructure, and human capital. The long-term economic package should also include investments that account for resilient infrastructure, cities, and societies. Ambitious infrastructure projects in energy, transport, water, and urban development should include the development of green infrastructure —including an expansion of electric vehicle charging infrastructure, bus and bike lanes, electricity transmission

and distribution systems, water and sanitation service coverage, and making neighborhoods more livable and less energy intensive. Finally, policies to achieve economic diversification should aim at increasing the sophistication of export products and the creation of or integration to regional value chains—as intra-industry trade is fostered by the African Continental Free Trade Area (AfCFTA) agreement.

DESIGNING POLICIES TO FIGHT COVID-19: IT'S MOSTLY FISCAL!

Short-term fiscal policy should aim at redirecting government expenditure to increase the capacity of the health system to provided adequate and affordable medical attention to the people affected by the COVID-19 pandemic. It should also provide income support to the most vulnerable segments of the population—especially those working in sectors where containment measures prevent them from undertaking their labor tasks. Fiscal authorities should also assist the affected firms and sectors of production through tax relief, temporary credit lines (at favorable rates of interest and repayment terms), and delays on debt repayments (Loayza and Pennings 2020).

Reinforcing Africa's First Line of Defense against COVID-19: Strengthening Public Health Capacity

The aftermath of recent epidemics and pandemics—such as, SARS, H1N1, MERS, and Ebola—has put emphasis on the need to strengthen public health capabilities and infrastructure —the first line of defense against the COVID-19 virus. The Ebola epidemic that hit Western and Central African countries in recent years provides a series of lessons for the region in the prioritization of measures to combat COVID-19 in the areas of effective communication, community engagement, and comprehensive care even in difficult environments. Massive community engagement enabled the flow of credible information to the population. Community-level problem solving in Liberia was key at the height of the Ebola crisis —including organizing to get water and soap for hand washing, and practicing social distancing. These solutions tend to arise when the government lacks or has lost credibility with the population.

Given the fiscal constraints, most governments in Sub-Saharan Africa are redirecting resources to public health spending and/or putting together emergency response plans for the health sector that includes strengthening the human and technical capabilities of public hospitals, expending testing capacities and purchasing medical supplies, and increasing the number of hospital beds. Amid the spread of COVID-19, governments need to earmark existing or additional funds to reinforce their epidemiological and biological surveillance (for example, testing kits, creation of free call centers, and the rehabilitation and/or set up of laboratories), increase the supply of protective personal equipment (PPE) for physicians and nurses, and strengthen the capacity of pharmaceutical industries and financing for research on the virus. At the organizational level, setting-up a national-level command center led by highly respected scientists, and ensuring coordination within the government (top executive, Health, Economics and Finance as core), and with private sector organizations will be critical for success.

Despite its late arrival, the COVID-19 virus is spreading rapidly across the region. The reported cases are still low compared to other world region. This presents an opportunity to limit the spread of the virus by adopting and expanding testing, tracing, and isolating measures —especially in countries where the numbers are relatively low. It also reinforces the view that there is a false trade off and

that limiting the spread of the virus is key to both saving lives and safeguarding the economy. Early extensive investment in health systems to test, trace and isolate reduces the odds of adopting stringent containment measures later, measures that would result in significant impacts on people's livelihoods given the features of these economies. More recent experiences of countries and studies from the 1918 Flu Pandemic suggest that places that implemented early and extensive interventions to slow the spread of the pandemic also reduced the severity of the economic disruption.

In fragile countries, governments are approving supplemental financing and requesting rapid credit facilities from international financial institutions to strengthen the government response to the crisis, which includes better early detection methods and greater technical and operational coordination within the government, improved surveillance at ports of entry, provision of high-quality (affordable) medical care to infected patients, the development of effective preventive communication strategies, and the enhancement of medical logistic platforms. Some governments are planning the construction of mobile hospitals as well as health centers in remote areas (Chad). Other countries are preparing the deployment of surge staff to perform contact tracing activities, rapid response teams, and training of responders (Liberia). Other measures might include the call for volunteers to participate in medical response teams —as it was the case of Guinea during the 2014–16 Ebola outbreak.[32]

Other health-related interventions include securing the provision of water and sanitation services to the population. Hand hygiene is a highly recommended practice to fend off the virus. In this context, setting up a network of public handwashing stations could prove an effective solution for areas of the country that lack running water and sanitation. This was implemented by West African countries during the 2014–16 Ebola outbreak. Handwashing stations were placed in public buildings, schools, and markets in Ebola-affected areas. These stations have been set up again at airports and outside public buildings (including the Ministry of Health) in Liberia and Sierra Leone. To keep handwashing stations safe from becoming a hot spot for disease transmission, social distancing nudges are being introduced on the ground (for example, red dots painted on concrete or stones if the surface is uneven).[33]

Policy Priority: Protecting the Livelihoods of Sub-Saharan African Workers and Businesses

Fiscal policies need to be geared in the short term to provide income support to the workers who are most affected by/vulnerable to COVID-19. In this context, 106 countries have enacted or adapted social protection and jobs programs to combat COVID-19 at the start of April 2020. A total of 418 programs are in place worldwide: social assistance programs (noncontributory transfers) are the most widely used (241 programs), followed by social insurance (116) and supply-side labor market interventions (61). Among the social assistance programs, most governments have relied on cash transfer programs, with 71 countries having a program in place and 36 of them being an initiative to cope with COVID-19. So far, 15 countries in Sub-Saharan Africa have introduced social protection responses to COVID-19 (Gentilini, Almenfi, and Orton 2020).[34]

32 Kpanake et al. (2019) find that volunteer recruitment, if needed in future epidemics, should adopt a multifaceted motivational approach that focuses on patriotic values and moral responsibility.

33 See Gharib (2020).

34 The group of countries in the region that have introduced social protection measures includes Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Ghana, Guinea-Bissau, Kenya, Liberia, Mali, Namibia, Niger, Senegal, South Africa, Togo, and Uganda.

Cash transfers are the most used instrument in the social protection toolkit for the majority of developing countries—including some Sub-Saharan African countries. Cash transfers are not only easy to implement but also can reach the informal sector. In this context, the government should provide support to the vulnerable segments of the population—especially, the self-employed in low-wage jobs and often residing in dense slums—whose livelihoods and incomes are being disrupted by COVID-19. Some developing countries are using online payments to support workers who have lost their jobs due to the pandemic (India). In countries with more limited infrastructure to support cash payments, in-kind support through direct distribution of food can provide relief to the poor. The subnational governments of Lagos and Kaduna in Nigeria have announced the provision of food support to people in their states as part of stay-at-home initiatives.

Most social protection programs have been implemented in two Southern African countries—South Africa and Namibia. In South Africa, the social security agency agreed to provide early payments of social grants to older people and those with disabilities from March 30-31, 2020. The government will pay sick leave to those workers affected by the 21-day lockdown or those becoming ill during the outbreak. Unemployment insurance benefits will be paid to affected workers through the new National Disaster Benefit and the existing Illness, Reduced Work Time, and Unemployment Benefits.

The Government of Namibia implemented several measures to cope with economic hardship and increased health spending due to COVID-19. For instance, employees who lost their jobs in the formal or informal sector and are not receiving any other grants will receive a one-off payment of N$750. Taxpayers can borrow one-twelfth of their tax payment in the previous tax year to be repaid one year after at favorably low interest rates on the back of a government guarantee. Finally, the government will guarantee that water points are kept open without the need for water cards amid the lockdown. NamWater and local authorities will subsidize the service.

In Kenya, the National Treasury appropriated an additional KSh 10 billion (approximately US$100 million) to support the elderly, orphans, and other vulnerable people with cash transfers. The government approved fee waivers on person-to-person mobile money transactions on M-PESA, and it is planning to implement a 100 percent tax relief for people earning less than KSh 24,000. Ghana suspended financial charges of all mobile money transfers that do not exceed GH¢100 for the next three months (Gentilini et al. 2020). The Central Bank of West African States is providing more flexible measures to open mobile money accounts and conduct personal transfers, to promote the use of electronic payment tools in Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo. In Liberia, school feeding programs will switch to take-home meals—as was the practice during the Ebola epidemic.

The National Social Security Fund (NSSF) of Uganda announced measures that allow distressed businesses and employers to reschedule NSSF contributions for the next three month without penalties. Finally, Cabo Verde is the only country in the region that is providing support to wage-earning individuals. Specifically, employees will get 70 percent of their gross salary if their labor contract is suspended. Half of this amount is funded by the employer and the other half is paid by the National Institute of Social Security.

Strengthening and Adapting Existing Social Protection Systems

The growing number of social safety nets (SSNs) across Sub-Saharan African countries provides a foundation for addressing the socioeconomic impacts of the COVID-19 pandemic. The number of countries with SSN programs in the region increased from 18 in 2000 to 45 in 2017 (Beegle and Christiaensen 2019). Yet, the region has the lowest coverage of social protection, as 80 percent of the population in the region is not covered by any pension, safety net, or social protection program. African policy makers should therefore seek to achieve minimum disruptions to existing systems and their beneficiaries. They will need to ensure that social safety nets for the poorest and support to the most vulnerable continue to be provided. This can be achieved by strengthening existing flagship programs and using multiple schemes simultaneously.

Given the low coverage of social protection systems in normal times, the governments will need to expand coverage in these extraordinary times. Self-employed/informal workers and individuals living in high-density urban areas are particularly at high risk. Currently, social insurance programs such as pensions in Africa target formal employees and elderly retirees, and SSN programs predominantly target households with children (Srivastava 2020).

The social protection policy toolkits of African governments include other options to be used in particular circumstances (box 1.3). For instance, supply-side labor market programs can help formal sector employees. Wage subsidies are being implemented to encourage employers not to lay off their staff in Bulgaria, Jamaica, and Cabo Verde. Other options include the adoption of utility subsidies and the postponement or waiver of fees for basic services, such as the waivers for electricity tariffs announced by the Republic of Niger.

BOX 1.3: Digital Solutions Can Help the Expansion of Social Assistance

Digital technologies can provide a solution for the disbursement and expansion of social assistance to African individuals and households during this COVID-19 emergency. Sub-Saharan Africa has the largest number of registered mobile money accounts in the world, at around 400 million, and most unbanked adults own a mobile phone. In several African countries, governments already transfer cash to their citizens' mobile accounts. Challenges include the interoperability of various network providers, since it is common for people to subscribe to more than one mobile network, due to connectivity issues.

A low-hanging fruit for African governments is the reduction of regulatory barriers to scaling up social assistance. In the past few years, some African governments have imposed regressive taxes on mobile money and other digital financial transactions. These taxes disproportionately affect low-income earners who mostly transact in small values and are sensitive to these costs (Ndung'u 2019). Therefore, a review of such regulations, say by temporarily suspending these charges, would be a quick and effective way to put cash back into the pockets of the poor and encourage cashless transactions for the purpose of enforcing social distancing. This is happening already. In Kenya, Safaricom, in consultation with the government, is implementing fee waivers on person-to-person mobile money transactions under 1,000 Kenyan shillings, about $10, on M-PESA (Bright 2020).

The limited social protection coverage across African countries can be attributed to the low levels of social spending. Low levels of revenue mobilization, other competing policy priorities (such as infrastructure provision and security), and inefficient social spending explain the low levels of public investment in social protection (Choi, Dutz, and Usman 2019). In the case of oil-exporting countries, the collapse of oil prices further reduces the fiscal space available to finance social assistances to their citizens during this pandemic. Three possible policy options emerge for these countries: first, reallocate public expenditure toward COVID-19 emergency relief spending for the most vulnerable. An expenditure item that can be considered low priority in this situation is the petroleum subsidy—especially, in Angola and Nigeria. Second, a closer collaboration with the private sector. For instance, the Solidarity Fund of South Africa coordinates the contributions from high net worth individuals and companies toward relief efforts and to cushion the socioeconomic impact of the pandemic on the vulnerable (Solidarity Fund 2020).[35] Nigeria, with a vibrant private sector, is also receiving and coordinating contributions from private individuals and firms (Onu 2020).

Development partners can also help. Bilateral and multilateral development assistance provides, on average, 55 percent of SSN financing in most African countries. The World Bank Group is deploying up to US$160 billion in long-term financial support over the next 15 months to help countries protect the poor and vulnerable from the pandemic, support businesses, and bolster economic recovery. In addition, the IMF and World Bank issued a joint call for all official bilateral creditors to suspend debt payments owed to them from low-income countries, many of which are in Africa. The suspension of debt service payments could create some fiscal space for African governments to increase social protection spending for their citizens.

Short-Term Support Is Needed to Keep Firms Viable[36]

Governments need to support firms addressing their immediate liquidity problems, limit the number of firm closures or bankruptcies (especially if the more productive firms are at greater risk of exiting the industry), and avert massive unemployment. These measures need to be transparent, rapid, and set over a determined time frame. They also need to mitigate the disruptions arising from the COVID-19 virus instead of keeping nonviable firms in the industry. In normal times, firms in hard-hit sectors by COVID-19 (retail, food services, and hospitality sectors) have exit rates that are two to three times as high as the exit rates in manufacturing or skill-intensive services (World Bank 2020).

Most firms in Sub-Saharan African are small and mostly informal, have few paid employees, are highly-dependent on community-based financing, and many of them are owned by women. To facilitate relief payments and remittances, measures are required to support the functioning and expansion of individual transaction accounts—including online systems for account enrollment, and introducing a no-charge policy for mobile money transactions up to a threshold. Community-based financial institutions should be considered essential services during the crisis and should be provided emergency liquidity if they are within the perimeter of regulation and supervision. Partnerships between banks and mobile network operators should be promoted to

35 The Fund is seeded by an R150 million donation from the South African government and will allow individuals and organizations to support these relief efforts through secure, tax-deductible donations.

36 The policy discussion on the short-term support of firms heavily draws from "Assessing the impact and policy responses in support of private-sector firms in the context of the COVID-19 pandemic" elaborated by the FCI Global Practice (World Bank 2020).

provide loans to subscribers. Finally, customer data on mobile phones can be used to identify women entrepreneurs who are vulnerable to the COVID-19-related crisis and target them with relief payments.

A series of measures should be implemented to alleviate the cash flow problems of micro, small, and medium-size enterprises (MSMEs) and, particularly, mitigate the shortages of working capital. These measures include accelerated depreciation on specific or all types of assets and providing tax credits, deferrals, and refunds. Reducing payment delays can help MSMEs that provide goods or services to the government. Export financing and credit insurance mechanisms can be implemented for MSMEs inserted in GVCs. Finally, countries can consider a moratorium on debt payments of firms along with the implementation of regulatory forbearance.

Governments can play a crucial role in stimulating bank lending to firms so that they keep paying workers and suppliers. For instance, commercial banks are providing emergency loans to SMEs with flexible repayments, even on existing loans (Malaysia). Governments could provide and diversify partial credit guarantee schemes for loans provided by private banks, and they could also mobilize funds through state development banks (SDBs)—including through concessional loans (Brazil). Funding from SDBs needs transparent eligibility criteria and to be conducted through second-tier lending to crowd-in private lenders. Some countries have central banks extending credit guarantees to financial institutions to lend to SMEs for working capital (Peru), while other central banks are planning to provide credit lines to banks for on-lending to MSMEs under well-defined preconditions.

Access to SME financing can be enhanced by FinTech solutions. Digital technologies can simplify the loan application process and provide alternative methods and data to facilitate and expedite credit decisions by state development banks. Financial institutions could leverage online platforms for reverse-factoring transactions that ease supply-chain financing for MSMEs and shorten the maturity of the payments involved (Mexico).

Finally, addressing the solvency problems of SMEs in the event of a prolonged crisis requires complementary measures. In this context, the emergency actions need to be complemented with direct compensation through grants to viable firms and/or sectors that were hit hard by COVID-19, indirect support through loss-sharing mechanisms, and other forms of leverage funding, and stimulating private equity investment. These policy options need to have a transparent sunset clause and exit strategy; otherwise, they may lead to outright nationalizations and can be onerous in terms of fiscal resources.

Policy Stimulus for the Recovery

Relief measures to fight COVID-19 in Sub-Saharan African countries are focused on strengthening the medical lines of defense against the virus (by raising the capacity of their health systems), but also protecting the individuals and businesses that are more vulnerable to this health shock and its economic implications. As countries start "flattening the curve" and containment measures are gradually lifted, policy makers may have to resort to policy tools that stimulate aggregate demand. As argued above, these policies may be ineffective at the height of the containment measure—as the supply shock still has not subsided. However, these types of policies—due to their lags in implementation and impact—can be planned to boost aggregate demand in the future.

The effectiveness of discretionary stimulus, however, remains under intense scrutiny. Yet, discretionary actions to stimulate short-term aggregate demand (via consumption) should be distinguished from those that increase productive capacity (public investment in infrastructure). Estimates of short-term aggregate government spending multipliers in developing countries are small. On average, the one-year government spending multiplier fluctuates between 0.5 and 0.7 (Barro and Redlick 2011; Kraay 2012). This implies that expanding government expenditure will take place at the expense of private expenditure—that is, it will most likely crowd out private investment. However, the magnitude of the spending multiplier will depend on the country's initial conditions. Multipliers tend to be higher in recessions than in booms (Auerbach and Gorodnichenko 2012). They are larger when interest rates are near zero—a context that is highly unusual in African countries (Christiano, Eichenbaum, and Rebelo 2011).

The effectiveness of government spending in building productive capacity goes beyond the horizon of output impact multipliers. Public investment projects—and, in particular, infrastructure projects—can have lasting positive effects on output, investment, and productivity, especially in countries with a relatively low aggregate stock of infrastructure capital (Calderon, Moral-Benito, and Serven 2013). The short-run impact of government investment is 0.6 in developing countries, while its cumulative impact rises to a long-run value of 1.6 (Ilzetzki, Mendoza, and Végh 2013). In the case of low-income countries, an additional dollar of government investment raises private investment by nearly two dollars, and output by 1.5 dollars (Eden and Kraay 2014).

Public infrastructure projects require coordination among different levels of government, and they undergo an extensive planning, bidding, contracting, construction, and evaluation process. Public infrastructure stimulus may not automatically translate into commensurate increases in the supply of infrastructure services if the projects in the pipeline are limited or low-quality and if there are inefficiencies or delays in the selection, preparation, and implementation of these projects. The disconnect between spending and asset accumulation is particularly acute when governance and fiscal institutions are weak, as is the case of many developing countries (World Bank 2013).

Policies should also change gears to helping firms to return to their pre-crisis production and employment levels and set the foundations for longer-term productivity-driven growth. This is an opportunity to address pre-crisis constraints on firms. Governments can provide credit and tax support measures to promote investment and reactivate supply chains. Stimulus measures should also include temporary job creation programs and the establishment of government programs to foster firm and productivity growth —for example, tax credits for investments in job training, management training, and technology adoption (World Bank 2020).

Securing Access to Food for the African People[37]

Lives and livelihoods are at risk, as the COVID-19 pandemic threatens to affect food security through disruptions in labor availability and the supply chain. According to the United Nations Food and Agriculture Organization (FAO), a food crisis is looming unless measures are rapidly taken to protect the most vulnerable, keep global food supply chains alive, and mitigate the pandemic's impacts across the food system.

37 This section was mostly adapted from FAO on-line post "Q&A: COVID-19 pandemic – impact on food and agriculture" (link: . http://www.fao.org/2019-ncov/q-and-a/en/)..

Developing countries are particularly at risk, as COVID-19 leads to a reduction in the labor force, affecting incomes and livelihoods as well as labor-intensive forms of production (agriculture, fisheries/aquaculture). Sub-Saharan Africa is of particular concern with the highest percentage of undernourishment on the planet. The COVID-19 virus has proved especially deadly for those who are elderly or whose health is already compromised. This likely includes people suffering from malnourishment as well. Economic decline, poverty, and food insecurity often accompany one another.

Border closures, quarantines, and market, supply chain, and trade disruptions could restrict people's access to sufficient, diverse, and nutritious sources of food, especially in countries hit hard by the virus or already affected by high levels of food insecurity. Agriculture is considered essential work under the shelter-in-place orders expanding across many countries, but farmers must still adhere to social-distancing requirements. Farmers can be affected by regulations and other changes along the food supply chain. Recruiting seasonal workers will become harder. Although the global stocks of cereals appear to be at an all-time high, policy makers around the world need to be careful not to repeat the mistakes made during the 2007–08 food crisis and turn this health crisis into an entirely avoidable food crisis. The food price spikes of 2007–08 demonstrate that export restrictions, market speculation, and panic behavior were, in part, responsible for the dramatic increase in global food prices in that period—measures we are not protected against today.

A majority of households, including in rural areas, are net food buyers, and the poor spend most of their income on food. The food security conditions in areas affected by fragility, conflict, and violence- and other vulnerability "hotspots" (areas affected by locusts, droughts, and so forth) are already serious, and COVID-19 responses pose exceptionally high risks in these circumstances. The pandemic's impacts on vulnerable communities already grappling with hunger or other crises present further challenges. Vulnerable groups particularly include small-scale farmers, pastoralists, and fishers who might be hindered from working on their land, caring for their livestock, or fishing. They will also face challenges accessing markets to sell their products or buy essential inputs. Informal laborers will be hard hit by job and income losses in harvesting and processing. Millions of children are already missing out on the school meals they have come to rely upon, many of them with no formal access to social protection, including health insurance.

Quarantines and panic during the Ebola virus disease outbreak in Sierra Leone, for example, led to a spike in hunger and malnutrition. The suffering worsened as restrictions on movement led to labor shortages at harvest time, even as other farmers were unable to bring their produce to market. Epidemics such as SARS and the Middle East respiratory syndrome (MERS) have also had negative impacts on food and nutrition security—particularly for vulnerable populations, including children, women, the elderly, and the poor. Every major outbreak in recent memory—Ebola, SARS, and MERS—has had direct and indirect negative impacts on food security.

The food supply chain is a complex web that involves producers, consumers, agricultural and fishery inputs, processing and storage, transportation and marketing, and so forth. There are already challenges emerging in terms of the logistics involving the movement of food and

inputs (not being able to move food from point A to point B), and the pandemic's impact on the livestock sector due to reduced access to animal feed and slaughterhouses' diminished capacity (due to logistical constraints and labor shortages), similar to what happened in China.

Blockages of transport routes are particularly obstructive for fresh food supply chains but also affect basic grains and staples. Transport restrictions and quarantine measures are likely to impede farmers' and fishers' access to markets, curbing their productive capacities and hindering them from selling their produce. Shortages of labor could disrupt production and processing of food, notably for labor-intensive industries. Spikes in prices are not expected in major staples where production is likely capital intensive, but are more likely for high-value commodities, especially meat and fish in the very short term and perishable commodities. On the other hand, where production is available and demand collapses like in some fisheries, prices are expected to collapse too.

When it comes to maintaining food systems during the pandemic, Sub-Saharan Africa will certainly face significant challenges in the coming months that will require thoughtful attention from policy makers. Early warning systems for famines—and associated emergency food provisioning systems—will have to be adjusted to increase attention on rural and urban areas. Some government capacity could be enhanced if debt service is suspended and COVID-19-related multilateral assistance comes without unnecessary strings attached. Avoiding disruptions in critical food supply chains, and keeping logistics open, and emphasizing public sector measures to keep trade for both inputs and food products moving are important strategies to consider. Digital technologies can aid in anticipating problems and smoothing temporary shortages as well as building the resilience of food chains, are important strategies to consider. New technologies could facilitate the interface between supply and demand, as well as boosting social protection systems to combat the impacts of the pandemic on people's livelihoods.

Role of Trade Policy in the Short Term: Relief Measures to Fight the COVID-19 Pandemic

More open trade in goods and services plays a key role in overcoming the pandemic and limiting its health and economic impacts, especially on the poor. Freer trade flows are critical in providing access to essential medical goods—including inputs for their production—and services to help contain the pandemic and treat those affected; ensuring access to food to maintain and enhance the nutritional intake of the poor, which will boost immune systems and contribute to the ability to resist the virus; providing farmers with necessary inputs, including seeds, fertilizers, pesticides, equipment, and veterinary products, for the next harvest; and supporting jobs and maintaining economic activity in the face of a global recession, since substantial disruption to regional and global value chains will reduce employment and increase poverty.

As African countries take stringent measures—imposing restrictions on the movement of people and goods—to protect their borders from the virus, the subsequent slowdown in trade will have significant economic implications. African countries are highly dependent on global trade and will be negatively impacted by the fall in trade and the global recession. The negative effects of trade shocks associated with commodity prices, disruptions in GVCs, and falling demand for exports are reinforced by measures taken to counter the pandemic.

Borders need to be kept open as much as possible for trade while being consistent with a strategy of containment, and in line with the multilateral provisions of transit. Although it is deemed necessary to contain the spread of the virus, closed borders make it difficult for medical supplies and other necessities of life to reach people. As of March 29, 2020, 31 African countries have closed their borders.[38] Small-scale cross-border trade contributes to the livelihood of about 43 percent of the region's population, predominantly the poor and women. Dominated by agricultural and livestock products, such trade is also essential to maintain food security and hence welfare and poverty reduction. Countries need to minimize the health and economic fallout by selective border relaxation to enable the flow of essential goods.

Export restrictions will raise the price and limit the supply of COVID-19-related goods and food to critically affected areas/hotspots. Experience from previous crises shows that imposing export restrictions on medical and food products limits their access particularly to the poorest, who will be adversely affected the most. Export restrictions adopted by African and other countries during the crisis affect not only the costs and availability of COVID-related medical supplies, but also necessities, mainly food.[39] African countries depend heavily on imports of medical supplies, with 94 percent of pharmaceuticals in the region imported from outside the region.[40] Export bans within the region prevent the continental supply from being allocated to where it is needed the most.[41] Within the region, export bans on food lower domestic prices, which reduces the incentive to grow food crops in the next season.

Import bans that are not based on scientific evidence will limit the availability of certain foodstuffs and increase prices for local consumers. A few African countries have recently instituted import bans on food items from China, causing a rise in prices of these items.[42] However, these measures were not based on scientific evidence. Measures should be taken to maintain and not disrupt food supply chains to reduce the impact on livelihoods, especially on the poor and most vulnerable.

Trade Measures to Limit Damaging Impacts of the Crisis

Trade policy reforms constitute a key component of the response to the crisis by reducing the cost and improving the availability of COVID-19 goods and services; reducing tax and administrative burdens on importers and exporters; reducing the cost of food and other products heavily consumed by the poor; contributing to the macro-economic measures introduced to limit the negative economic and social impact of the COVID-19-related downturn; and supporting the eventual economic recovery and building resilience to future crises. Box 1.4 provides trade policy responses that governments in Africa can take during the crisis.

Measures to streamline trade procedures and facilitate trade at borders can contribute to the response to the crisis by expediting the movement, release, and clearance of goods, including

38 Africa CDC, March 29, 2020

39 About 60 countries have announced a ban on the export of medical gear including personal protective equipment. These include many OECD countries who account for a large share of the export of these goods - South Korea, Taiwan, France, Germany, Russia and India among others. The EU has also restricted export of personal protective equipment, requiring authorizations.

40 UNCTADstat, 2020

41 For example, Egypt, Libya, Kenya and Morocco have blocked exports of medical masks, while Malawi has blocked re-exports of medical products, particularly masks. Egypt has also restricted exports of rubbing alcohol and Libya sterilization tools.

42 Cameroon has recently instituted import ban on fresh and frozen fish products from China, while Egypt has done the same on imports of garlic, carrots and green ginger leading to rise in prices.

goods in transit, and enabling exchange of services. Reforms can be designed to reduce the need for close contact between traders, transporters, and border officials to protect stakeholders and limit the spread of the virus, while maintaining essential assessments to ensure revenue, health, and security. Interventions to sustain and enhance the efficiency of logistics operations are also critical in avoiding substantial disruption to distribution networks and hence to regional and global value chains.

BOX 1.4: Positive Trade Policy Reforms and Trade Facilitation Measures for the COVID-19 Crisis

To facilitate access to essential COVID-19 related medical goods and supplies

- reduce to zero import tariffs on COVID-19 related medical goods[43]
- exempt from VAT imports of COVID-19 related medical services and goods
- waive withholding taxes (advance income taxes) on imports of COVID-19 related goods
- commit to refrain from imposing export bans or taxes on COVID-19 medical goods or services

To support consumption of essential items and limit negative impacts on the poorest

- reduce to zero import tariffs on all food products
- waive withholding taxes on imports of food products for the duration of the crisis
- refraining from imposing export bans or taxes on critical food staples.[44]

To support exporters to maintain jobs and foreign exchange earnings

- remove bans, quantitative restrictions and taxes on exports
- waive withholding taxes on exports
- review all export applications, licenses and permits and remove those that not required to maintain market access or to protect health, safety and security
- reimburse exporters that have lost overseas sales VAT that was paid on inputs in the expectation that it would be refunded on export

To contribute to macroeconomic policy efforts to shield the economy from COVID related downturn, for the period of the crisis

- reduce to zero import tariffs on all goods and streamlining regulations affecting trade in services
- waive withholding taxes on imports of all goods and services
- allow importers to defer VAT payments[45]

43 The Government of Ethiopia, for example, has exempted from tax the importation of materials and equipment used in the "prevention and containment of #COVID-19".

44 If export restrictions must be used, then they should be targeted, proportionate, transparent, and temporary and ensure that they do not create unnecessary barriers to trade or disruption to global supply chains, and are consistent with WTO rules

45 A few countries in Africa have made changes to VAT to support firms during the crisis; Uganda on 29 March postponed VAT compliance requirements, Nigeria on 27 March delayed the VAT returns deadline, and Kenya on 26 March cut VAT from 16 to 14 percent. See https://www.avalara.com/vatlive/en/vat-news/world-turns-to-vat-cuts-on-coronavirus-threat.html

BOX 1.4 *continued*

To streamline regulatory and border procedures to facilitate access to COVID-19 related medical goods and essential food products

- remove the need for applications, permits, and licenses for products that pose minimal risk to human health, environmental safety or consumer protection. Streamline the procedures for those that are required and prioritize the issuance and regulatory approval of imports of all covid-19 related medical goods, essential food items and perishables
- recognize certificates or systems of conformity for medical equipment, essential food items and farming inputs from accredited agencies in countries with similar or higher standards
- implement risk management to allow low-risk critical supplies to quickly pass clearance controls
- support increased internal and external border agency collaboration. For example, customs and agencies responsible for Sanitary and Phytosanitary (SPS) standards should work together to expedite clearance for essential medical goods, food products and farming inputs
- enhance business continuity through greater use of ICT, flexible working schedules, longer border opening hours, expanded access to telephone and online enquiry points; all of which can increase efficiency and limit the physical presence and interaction of logistics workers and officials at facilities and border crossing points

To ensure effectively functioning trucking and logistics services and minimal supply chain disruption

- maintain transit rights and take measures to expedite transit of essential medicines and medical equipment, food and other essential items
- ensure no additional taxes and fees are imposed on transit traffic and reduce existing duties where possible on COVID-19 medical goods and food.
- limit impacts on the main trade corridors and set up COVID19 "container clinics" at key nodes in the network to reduce contamination and spread.

WE ARE IN THIS TOGETHER: THE ROLE OF THE INTERNATIONAL COMMUNITY

International Financial Institutions Are Moving Rapidly to Help Countries Respond to COVID-19[46]

International financial institutions are moving rapidly in providing resources to African countries so they can boost their capacity to respond to the COVID-19 pandemic, and reduce the time to economic and social recovery. For instance, the World Bank Group is prepared to deploy up to US$ 160 billion over the next 15 months to support COVID-19 measures that enable countries respond to the health consequences of the pandemic and prop up economic recovery and growth. The IMF is ready to provide $50 billion in flexible and rapid-disbursing emergency funds for developing countries, with as much as $10 billion available at zero interest rates.

The World Bank has approved a first set of emergency support operations for developing countries via the fast-track facility for COVID-19 response. The first group of projects will assist 25 countries (of which 10 countries are in the Sub-Saharan African region) and amounts to US$ 1.9 billion. Using this facility, new operations are being prepared for more than 40 countries. Moreover, the World Bank is redirecting existing projects to fight COVID-19, through restructuring, reallocation, triggering emergency components of existing projects, and activating of Catastrophe Deferred Drawdown Options.

In the Africa region, emergency response projects under the fast-track facility were funded for 10 countries; namely, Cabo Verde, the Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Mauritania, São Tomé and Príncipe, Senegal, Sierra Leone, and The Gambia. The funding of these projects amounts to US$265 million. In the case of Ethiopia, US$82 million was delivered to boost the country's preparedness and response to COVID-19, which includes the provision of medical equipment, capacity-building of health systems, and support to set up treatment centers. The US$47 million package for the Democratic Republic of Congo will enable the country to prepare containment strategies, train medical staff, and provide equipment to allow rapid case detection and contact tracing.

Emergency relief and recovery measures to help private companies affected by COVID-19 and prevent massive layoffs will be financed by the International Finance Corporation (IFC) (up to US$8 billion). These measures include extending trade finance and working capital lines to partner financial institutions, as well as supporting existing clients in the infrastructure, manufacturing, agriculture, and services industries that are vulnerable to the pandemic. The IFC has so far committed 470 transactions in the amount of $545 million in trade finance lines through its Global Trade Finance Program, 54 percent of which was in low-income and fragile countries and 29 percent in Sub-Saharan Africa and the Middle East and North Africa. Finally, the broader financial support includes US$6 billion in guarantees from the Multilateral Investment Guarantee Agency, which provides political risk insurance and credit enhancement to private sector investors and lenders.

46 The support measures approved and planned by the World Bank are taken from the Press Release No. 2020/157/EXC "World Bank Group Launches First Operations for COVID-19 (Coronavirus) Emergency Health Support, Strengthening Developing Country Responses."

Regional Coordination in Africa Can Enhance the Response to the COVID-19 Pandemic

Deeper regional coordination in trade and responding to COVID-19 is necessary, to limit the spread of the pandemic in the region, as well as minimize the economic fallout. Africa can leverage the recent momentum within the African Union and the AfCFTA and regional economic communities to enhance the effectiveness of interventions in the region. The following are key areas for coordinating action in the region:

- Coordination in the purchase of medical supplies would be more effective in sourcing supplies and at lower prices than countries sourcing these products individually.
- Regional coordination on monitoring of standards and regulatory approval of COVID-19 medical products helps in the effective deployment of scarce technical and health resources
- Coordination can foster effective real-time information sharing to support common understanding and awareness of the spread of the virus and emerging hot-spots and more effective (and timely) resource sharing and implementation of responses. Africa CDC has been actively coordinating with WHO to provide guidance and information and support core capacity building in surveillance and response in the region. Africa can reignite its existing infrastructure that was used to fight earlier health disasters such as HIV/AIDS and Ebola. The African Union could play a significant role in facilitating coordination of responses and facilitating the mobilization of international support to the region.
- Coordination in setting up COVID-19 "container clinics" along Africa's key transport corridors is essential. One of the lessons from the HIV/AIDS epidemic 30-40 years ago in Africa was that it spread along the main transport corridors. In response, the World Bank and other partners designed corridor-centric interventions targeting drivers (for example, Abidjan-Lagos Corridor Organization in West Africa), including setting up container clinics. Truck drivers are prone to become critical vectors of transmission, so a setup of similar clinics along transport corridors would be useful.
- Through the African Union or other forums, African countries should push for more open trade, limiting restrictions on exports of key medical supplies and food items by OECD countries. Only a stronger and united voice could make a dent in the diplomatic efforts to escalate global pressure against trade restrictions that make it harder for poorer countries to access essential medical supplies and other necessities during times of dire need.
- A regional push for a temporary exemption of intellectual property rights protections on COVID-19-related medical goods could help increase domestic production of these items.
- The pandemic reinforces the urgency to push for increased regional coordination and cooperation in trade, and overall response efforts. It provides additional impetus to follow up on the scheduled implementation of the AfCFTA, since such actions contribute to efforts to limit the short-term health and economic impacts, as well as build resilient trading systems for the long haul.

Beyond relief measures, implementing the existing regional trade commitments —including the AfCFTA— can help reduce the costs of trading in goods and services. The effects on the economy from COVID-19 can be compounded by trade blockages across countries in the region. Closing borders to trade in goods are likely to lead to dramatic welfare losses (up to 14 percent from the no-COVID scenario). Border closings in Africa, a region that is traditionally very intensive in agricultural and food products, will affect disproportionally the import of good and agricultural products. African policy makers countries need to take this opportunity to strengthen regional value chains in the context of the African Continental Free Trade Area. The AfCFTA could provide a forum and be a vital mechanism in pulling countries through the inevitable recession and in the subsequent recovery by increasing opportunities for growth through the expansion of regional markets.

THINKING AHEAD: SOWING THE SEEDS OF FUTURE RESILIENCE OF AFRICAN ECONOMIES

The COVID-19 policy response needs to sow the seeds of future resilience. It is a condition sine qua non to avoid another lost decade in African development. Africa's commodity-exporting countries are facing difficult times ahead, as the COVID-19 pandemic looks set to depress prices for potentially years to come. Actions taken in the coming months by the governments to ease the economic crisis and make investments for Africa's economic future will shape the nature of the long-term economic trajectory of these countries.

Policy makers and development partners need to think ahead and be mindful of economic policies that build greater resilience and would allow African economies to recover faster and thrive after COVID-19. This long view, although counterintuitive in periods of emergency, could be decisive for African countries. Beyond the much-needed quick fixes, the policy response should consider strategies to boost water and sanitation, address the human capital crisis especially in the health sector, leverage digital technologies for trade and government effectiveness during confinement and beyond, maintain a healthy level of investment for analog complements such as electricity, and foster intra-Africa value chains under the umbrella of the AfCFTA for import substitution.

More broadly, this challenging environment therefore presents an opportunity for deliberate and carefully considered policy choices that may help spur Africa's economic transformation.

A greener recovery. Africa will emerge from this crisis with the urgent need to invest in infrastructure, including in the energy sector, driven by the persistent infrastructure gap and the growing population. Meanwhile, the urgency of the carbon transition to mitigate the worst effects of climate change will inevitably rise back up the global agenda. Taken together, this presents a risk and an opportunity. Nine percent of Africa's total wealth is held in carbon dioxide polluting fossil fuels (Cust and Manley 2018), but the future value of this asset is becoming increasingly uncertain as richer countries adopt more stringent carbon policies and the cost of low-carbon energy technologies continues to fall. Instead, countries can use the rents from exports of oil, gas, and other minerals to accelerate their transition to a greener economy driven by low-carbon, high-quality, and low-cost energy sources, including widening access to grid electricity. Low domestic fuel prices create an ideal political context for the removal of carbon

subsidies, such as on domestic gasoline. Such subsidies can constitute a regressive fiscal policy and their removal therefore can be pro-poor, especially when the revenues are instead used for progressive policies and programs.

A more sustainable recovery. Over half the Africa region—26 of the 48 countries—is deemed to be resource-rich according to the IMF definition of resource dependency (IMF 2012). This means that the countries typically rely on nonrenewable extractive resources for over 20 percent of their exports or government revenues. Given the finite nature of these resources, economic sustainability depends on their ability to transform the depleting stock of wealth into other forms of national wealth, such as human and physical capital, or improved natural capital (Lange et al. 2018). New research suggests that government actions, through carefully designed policy measures, such as the acquisition of human capital, public and intellectual capital, as well as promoting firm dynamism, can help promote diversification of the economy away from resource dependence. Lashitew, Ross, and Werker (2020) argue that Indonesia is an important example of how an oil-rich and mineral-rich country can substantially increase the value added in other export sectors, such as manufacturing, while continuing to produce primary subsoil commodities at scale.

A more resilient recovery. Africa will emerge from this crisis under growing risk from the impacts of global climate change. It is therefore imperative that any long-term economic package includes investments that are mindful of the need for resilient infrastructure, cities, and societies. Programs such as river restoration, energy efficiency measures, and green transportation have been successful, such as part of Korea's post-2008 stimulus package (Hallegatte and Hammer 2020). Furthermore, large-scale public works programs can benefit the poor via job creation, while allowing the creation of resilient infrastructure. Many such programs in other regions have focused on irrigation, afforestation, soil conservation, and watershed development. In Ethiopia, the Productive Safety Net Program is helping to increase resilience and adaptation by investing in the creation of community assets to reverse the severe degradation of watersheds and provide a more reliable water supply (Hallegatte and Hammer 2020). Ambitious infrastructure projects in energy, transport, water, or urban development are usually difficult to include in a stimulus package because they take a long time to prepare. But the unique nature of this crisis may give time to build a green infrastructure pipeline for when the stimulus is needed. These could include a big expansion of electric vehicle charging infrastructure, bus and bike lanes, electricity transmission and distribution systems, water and sanitation service coverage, or making neighborhoods more livable and less energy intensive (Hallegatte and Hammer 2020).

Section 2: Finding the Fiscal Space to Fight COVID-19 Amid Heightened Public Debt Vulnerabilities

The COVID-19 pandemic is putting unsustainable pressure on governments with large fiscal deficits, heightened debt vulnerabilities and weak health systems. The massive fiscal costs could lead several governments to default on their debt. Approximately, 17 governments have bond spreads that exceed 1,000 basis points (bps), a threshold value that typically preceded defaults.[1] Sovereign Emerging Markets Bond Index spreads have already exceeded this threshold in Angola, Ghana, Nigeria, and Zambia.

Along with the global measures of contain COVID-19, plunging commodity prices (especially, the price of crude petroleum) have led to lower export revenues for countries like Angola, Nigeria and Zambia. They have led to a widening of fiscal deficits and rising fiscal pressures in these countries. Since the beginning of the year, the international prices of oil, natural gas, copper and zinc have sharply declined. This drop is partly attributed to a lower global demand. Additional supply pressures (i.e. the breakdown in the OPEC+ alliance) have pushed the international price of oil below US$ 30 per barrel. The shock will be harder in oil producing countries, where energy commodities account for a large percentage of their export earnings and where the budgeted price of oil for 2020 ranges from US$ 55 to US$ 57 per barrel. Budget rigidities are an additional source of fiscal stress for some of these countries —as a large proportion of their expenses is devoted to wages and interest payments. The potential expenditure losses of oil prices being cut from the budget reference value to US$ 30 per barrel would amount, on average, to 7 percent of gross domestic product (GDP) (see table 2.1).

TABLE 2.1: Budgeted Oil Price and Fiscal Position of Oil-Abundant countries in Sub-Saharan Africa

	Budgeted	Expenditure	Oil-related	General Government		General Government		Fiscal Balance		General Government		Oil
	Oil Price	Budgeted	Expend. Loss	Interest Payments		Commodity Revenues		Overall	Primary	Gross Debt		GDP
	2020	2020	2020	2019	2019	2019	2019	2019	2019	2019	2019	2019
Country	(US$ / bbl)	(% GDP)	(% GDP)	(% Expense)	(% GDP)	(% Total)	(% GDP)	(% GDP)	(% GDP)	(% GDP)	(# tax yrs)	(% Total)
Angola	55	20.2	6.7	32.24	5.13	60.75	12.13	0.76	5.89	94.99	5.07	28.48
Chad	55	19.0	3.7	10.75	1.10	35.15	5.48	0.31	1.41	44.74	4.71	19.15
Congo, Rep.	55	24.6	8.5	9.50	1.78	63.27	19.92	8.56	10.28	78.49	2.68	61.58
Equatorial Guinea	57	16.7	5.9	7.33	0.80	66.67	11.65	0.90	1.70	45.42	8.65	30.20
Gabon	..	..	..	16.64	2.15	36.06	6.60	1.61	3.76	56.38	4.76	31.58
Nigeria	57	6.6	1.6	15.86	1.61	46.22	3.56	-4.98	-3.36	29.78	7.34	8.57
South Sudan	55	32.2	15.6	1.45	0.41	88.55	27.66	2.42	2.83	34.35	11.37	63.35

Source: World Development Indicators, World Bank. World Economic Outlook, International Monetary Fund. Notes. The oil-related expenditure loss is calculated as the potential reduction in total government expenditure if oil prices were cut from the budget reference value to US$ 30 per barrel.

If the bulk of the policy responses to COVID-19 will be shouldered by African fiscal policymakers, it bears to asking how countries in the region will find the space needed to finance these actions. Assuming that deficits in excess of 5 percent of GDP put macroeconomic stability in

1 This number of governments excludes those are already amid sovereign debt defaults, such as Argentina, Lebanon, and República Bolivariana de Venezuela.

jeopardy, it can be broadly gauged how much African governments can expand their spending by comparing their 2019 fiscal balances with the threshold deficit mentioned above. In 2019, the majority of Sub-Saharan African countries (38 of 47) registered a fiscal deficit, and 13 countries had a fiscal deficit that exceeded 5 percent. The average fiscal expansion—as measured by the gap between the 2019 fiscal balance and the threshold of -5 percent of GDP—for countries in the region is about 2.6 percent. Countries with the smallest margin to expand fiscally (the bottom tercile) can spend, on average, 0.1 percent of GDP. In contrast, the countries with the largest margin of fiscal expansion (the top tercile) can deploy an average of 5.6 percent of GDP.[2] Some of the African countries in the bottom or top tercile are in risk of debt distress or already in debt distress. In this context, conducting countercyclical policies will come at the cost of rendering public debt unsustainable.

Fighting COVID-19 in Sub-Saharan Africa will require bold policy actions. It is likely that most of the countries in the region may be unable to finance these actions without jeopardizing macroeconomic stability and debt sustainability. In this context, designing effective policies to fend off COVID-19 while preserving macroeconomic stability may require an intervention from development partners that provide not only fast cash, but also relief to the debt obligations of African economies.

The amount of financing required to support health systems, (formal and informal) workers and businesses is likely to exceed the available resources of African countries. COVID-19 related multilateral assistance (from the IMF, the WBG, and regional development banks) and the suspension of debt service payments would immediately inject fresh liquidity and enlarge the fiscal space of African governments. In 2018, Sub-Saharan Africa paid US$ 35.8 billion in total external debt service (2.1 percent of the regional GDP), of which US$ 9.4 billion was paid to official bilateral creditors (0.6 percent of the regional GDP). A debt moratorium granted by official creditors to Angola represents US$ 4.1 billion (4 percent of GDP), and that amount would increase to US$ 7.4 billion (7 percent of GDP) if it included all creditors. For Kenya, the resources released total US$ 675 million (0.8 percent of GDP) and US$ 2.3 billion (2.7 percent of GDP) if the suspension of debt payments come from official bilateral creditors and from all creditors, respectively.[3] In a region that may need emergency economic stimulus of US$ 100 billion (including an estimated US$ 44 billion waiver for interest payments in 2020), the debt moratorium would help governments conduct countercyclical responses to COVID-19 without putting to risk the viability if their macroeconomic policy frameworks.[4]

The call by the International Monetary Fund (IMF) and the World Bank Group for all official bilateral creditors to suspend payments from International Development Association countries that request forbearance must therefore be acted upon. The IMF and World Bank Group are presenting a bilateral debt relief approach for endorsement at the Development Committee virtual meeting of Governors on April 17. The multilateral institutions argue that preserving the sustainability of public debt among poorer countries—including those in Sub-Saharan Africa—may require a moratorium on official bilateral debt payments, and participation by commercial

2 Note that these calculations do not take into account the lower revenues that African governments will have at their disposal as the prices of commodities and the growth rate of the economy that were referenced in the preparation of their budgets will be significantly lower.

3 These figures are based on the total external debt service paid by these countries in 2018.

4 There is wide variability in the amount and the composition of external debt service across countries in the region. Fiscal space in countries like Angola, Ethiopia, Kenya and Zambia may expand significantly in the event of a debt moratorium from official bilateral creditors (See Annex Table 2.1).

creditors.[5] Finally, the IMF and World Bank Group have approved Somalia's eligibility for debt relief under the Enhanced Heavily Indebted Poor Countries (HIPC) Initiative. This implies the reduction of debt from US$5.2 billion at the end of 2018 to US$557 million in net present value terms once the country reaches its HIPC completion point in 2023.

The remainder of this section provides facts about African debt and discusses its recent evolution to contribute to a dispassionate debate.

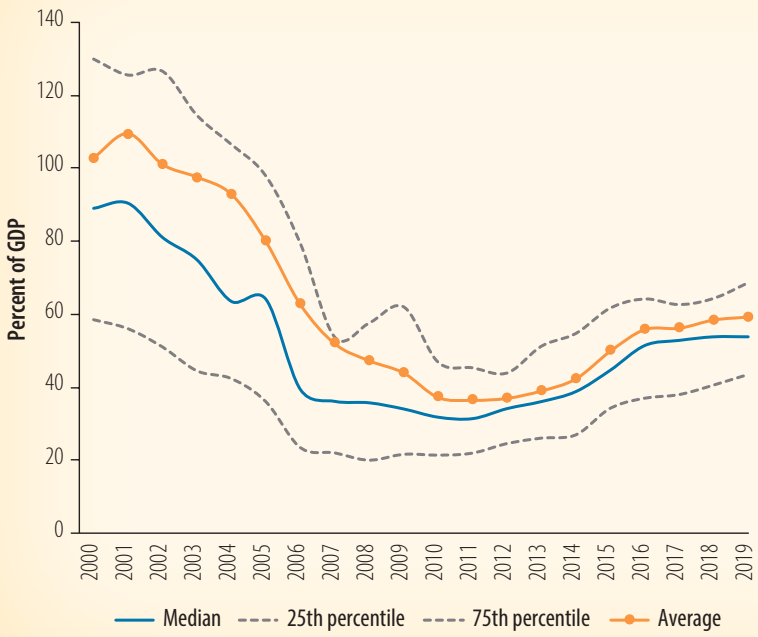
Evolving Debt Profile of Sub-Saharan African Countries

Over the past decade, countries have substantially accumulated liabilities in Sub-Saharan Africa—although at varying speeds across countries. The 2008–09 global financial crisis, the 2011–12 European sovereign debt crisis, persistent lower policy rates in advanced countries, volatile commodity prices (for instance, declining and fluctuating crude oil prices), and rapid economic growth in non–Paris Club countries have exacerbated their debt positions. These major international events have contributed to changes in the debt profile of Sub-Saharan African countries. Their capacity to repay has, therefore, deteriorated as their fiscal revenues have decreased, and economic activity has decelerated in the region. After exhibiting a downward trend due partly to debt forgiveness, the ratio of general government gross debt to gross domestic product (GDP) in Sub-Saharan Africa has gradually increased since 2012 (figure 2.1). On average, general government gross debt has risen from 37 percent of GDP in 2012 to 59 percent in 2019—an increase of 22 percentage points of GDP.

Figures 2.2 and 2.3 also demonstrate why detailed economic analysis is crucial for effective economic management: they indicate that Sub-Saharan African countries have resorted to more expensive sources of deficit financing (sovereign bonds as opposed to concessional loans) due to liquidity problems stemming from the global financial crisis and European debt crisis. For example, figure 2.2 shows the ratio of outstanding public and publicly guaranteed (PPG) external debt to GDP in Sub-Saharan Africa. A large portion of public external debt was owed to official creditors (PPG

FIGURE 2.1: General Government Gross Debt in Sub-Saharan Africa, 2000–19 (% of GDP)

Public debt accumulation has accelerated in Sub-Saharan Africa since 2012.



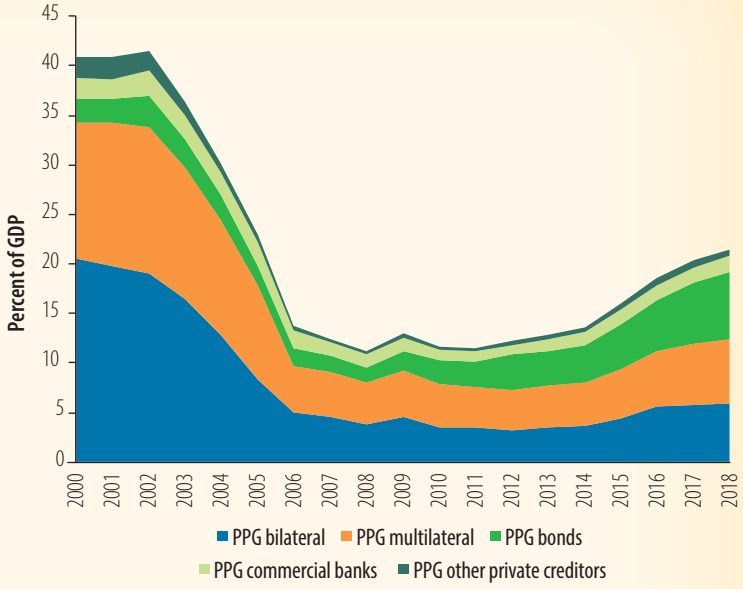
Source: World Economic Outlook, International Monetary Fund.

5 See the joint statement from the IMF and World Bank Group at: https://www.worldbank.org/en/news/statement/2020/03/25/joint-statement-from-the-world-bank-group-and-the-international-monetary-fund-regarding-a-call-to-action-on-the-debt-of-ida-countries.

bilateral and PPG multilateral represented nearly 80 percent of the outstanding debt stock before 2006) while the share of public debt owed to private creditors, especially PPG bonds, has started to increase since 2010. On average, PPG bond stocks for the region as a whole increased from 2.5 percent of GDP in 2010 to 6.9 percent of GDP in 2018—an amount that is greater than the PPG bilateral and multilateral debt stocks (5.9 and 6.5 percent of GDP respectively in 2018). In the case of PPG external debt service to exports (figure 2.3), the debt service from PPG multilateral debt increased from 0.6 percent 2011 to 2.2 percent in 2018 while debt service from PPG bonds jumped from 0.4 percent in 2011 to 3.2 percent in 2018.

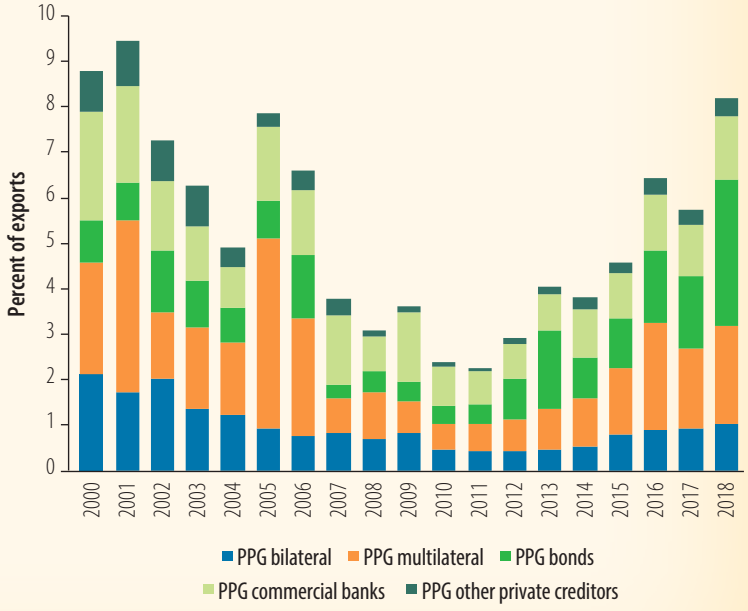
Bond financing has increased, while the composition of debt has changed in Sub-Saharan Africa.

FIGURE 2.2: Outstanding Public and Publicly-Guaranteed External Debt in Sub-Saharan Africa, 2000–18 (% of GDP)



Debt service has increased sharply in Sub-Saharan Africa, especially service to private creditors.

FIGURE 2.3: Public and Publicly-Guaranteed External Debt Service in Sub-Saharan Africa, 2000–18 (% of exports)



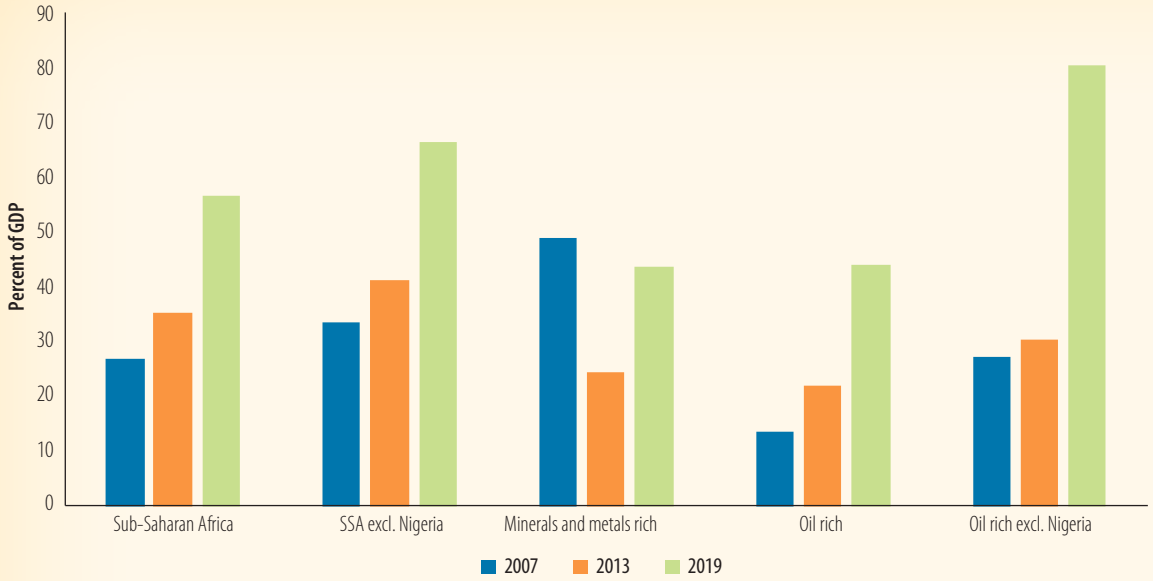
Source: World Bank, World Development Indicators.

Notes. Regional figures are GDP-weighted averages. GDP = gross domestic product; PPG = public and publicly guaranteed.

The pace of debt accumulation has varied widely across Sub-Saharan African countries because their risk management practices and responses to shocks differ and are specific to the different structures of economic activity across countries. For example, government debt to GDP has increased monotonically from 2007 to 2019 for most country groups in Sub-Saharan Africa with the exception of countries in the region that are abundant in minerals and metals (figure 2.4). The reduction of public debt in 2013 for this group of countries is due to debt forgiveness granted to the Democratic Republic of Congo in July 2010. From 2012 to 2019, public debt changed at different pace across countries in the region. Figure 2.5 shows the government debt to GDP ratio in 2012 and the changes in that ratio across countries

FIGURE 2.4: General Government Gross Debt, Select Years, by Natural Resource Abundance

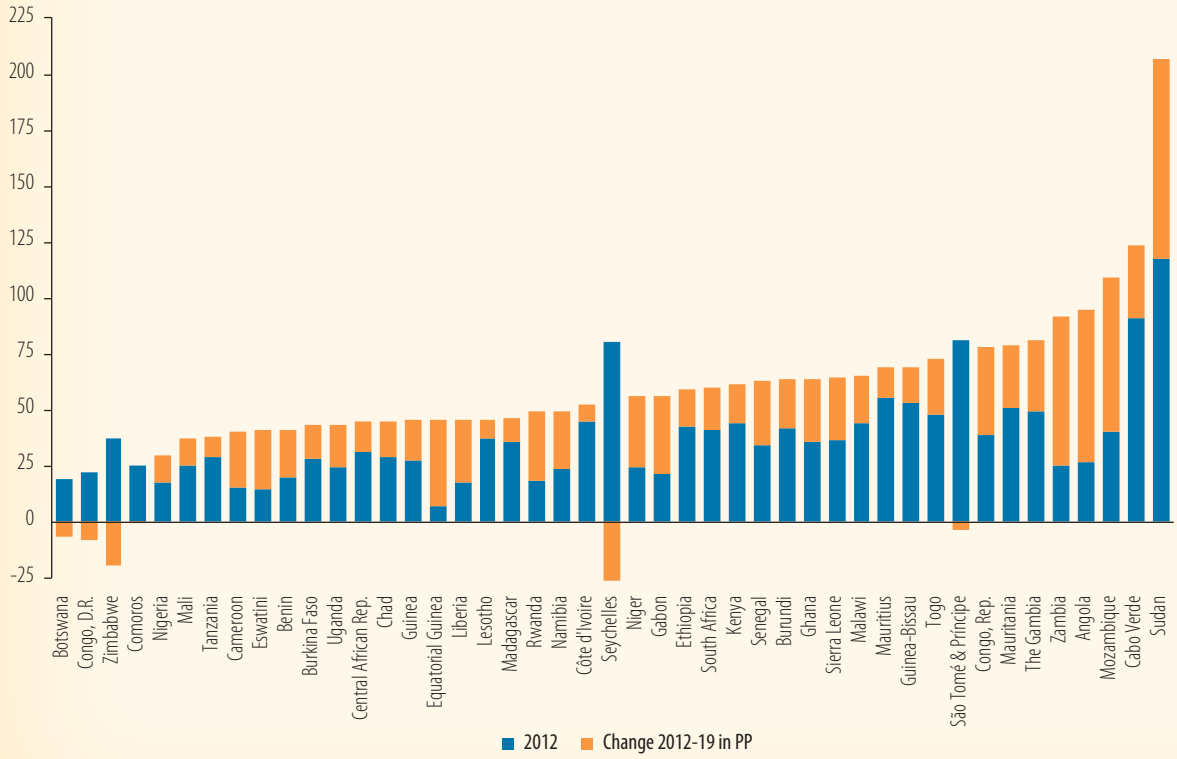
Debt burdens accumulated extensively in 2019 in most of the country groups in the region.



Source: World Economic Outlook, International Monetary Fund.
Note: GDP = gross domestic product; SSA = Sub-Saharan Africa.

FIGURE 2.5: General Government Gross Debt across Sub-Saharan African countries (% of GDP)

The accumulation of debt burden varies across countries in the region.



Source: World Economic Outlook, International Monetary Fund.
Note: GDP = gross domestic product; PP = percentage points.

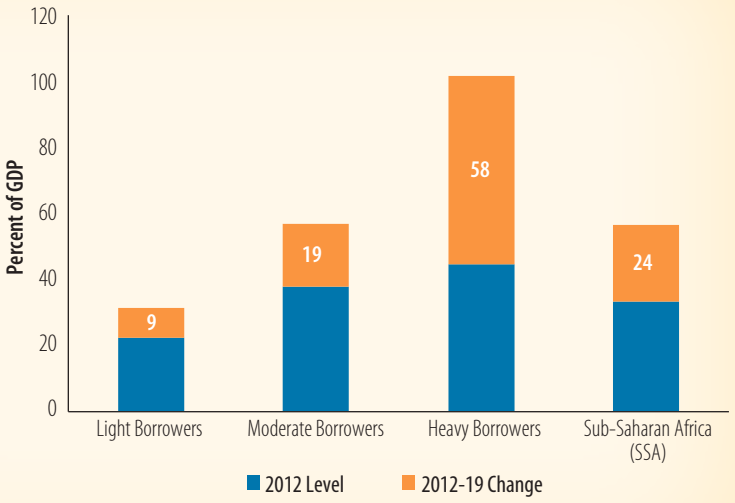
in the region during the period 2012–19. Botswana, the Democratic Republic of Congo, and Zimbabwe experienced a decline in their debt to GDP ratios—with a reductions of 7, 8, and 20 percentage points of GDP, respectively in 2012–19.[6] Burkina Faso, the Central African Republic (CAR), and Guinea display not only similar debt-to-GDP ratios (that fluctuate between 43 and 45 percent of GDP in 2019) but also analogous increases in debt (between 13 and 18 percentage points of GDP).[7] Equatorial Guinea's public debt jumped about 38 percentage points of GDP in 2012–19—as the government increased its borrowing amid plunging oil prices. Sudan has the largest level of government debt (207 percent of GDP in 2019) and experienced the largest increase among countries in the region (89 percentage points of GDP in 2012–19).

How Fast Are Countries in the Region Borrowing?

Strengthening debt management would alleviate the large public debt burden which has been rising rapidly in the region—although there is heterogeneity in the pace of debt accumulation across countries. Looking at recent trends in debt accumulation, countries in the region can be classified into three categories according to their intensity of debt build-up. Based on the accumulation of their general government gross debt to GDP, they can be classified into groups of light borrowers, moderate borrowers and heavy borrowers.[8] The 33rd and 67th percentile of the Sub-Saharan African distribution of cumulative variation of general government gross debts between 2012 and 2019 (15 and 28 percentage points of GDP, respectively) is used to distinguish between the light, moderate, and heavy borrowers (Calderon and Zeufack 2020).[9] Figure 2.6 shows the (level and variation of) public debt in Sub-Saharan Africa for the light, moderate, and heavy borrowers from 2012 to 2019. The levels and the changes in public debt are larger for heavy borrowers while they are relatively smaller for light borrowers. The behavior of moderate borrowers is close to the regional average. The (weighted) average cumulative variation of public debt among light borrowers from 2012 to 2019 is 9.2 percent of GDP

Debt burdens have intensified across different groups of debtor countries in Sub-Saharan Africa.

FIGURE 2.6: Public Debt in Sub-Saharan Africa, by Intensity of Debt Accumulation, 2012–2019 (% of GDP, weighted average)



Sources: World Economic Outlook, International Monetary Fund; World Bank staff calculations.
Note: Group figures are GDP-weighted averages. GDP = gross domestic product.

6 The Democratic Republic of Congo was granted debt forgiveness during this period. This was not the case for Botswana or Zimbabwe.

7 The Central African Republic and Guinea received debt forgiveness and Burkina Faso did not.

8 The group of light borrowers includes Botswana, Burkina Faso, the Central African Republic, the Comoros, the Democratic Republic of Congo, Côte d'Ivoire, Lesotho, Madagascar, Mali, Mauritius, Nigeria, São Tomé and Príncipe, the Seychelles, Tanzania, and Zimbabwe. The group of moderate borrowers consists of Benin, Burundi, Cameroon, Chad, Eswatini, Guinea, Guinea-Bissau, Kenya, Malawi, Namibia, Sierra Leone, South Africa, Togo, and Uganda. The group of heavy borrowers includes Angola, Cabo Verde, the Republic of Congo, Equatorial Guinea, Gabon, The Gambia, Ghana, Liberia, Mauritania, Mozambique, Niger, Rwanda, Senegal, Sudan, and Zambia.

9 If a country's cumulative variation of the public debt between 2012 and 2019 is below the 33rd percentile, then the country is categorized as light borrower. If a country's debt accumulation falls between the 33rd and 67th percentile, then the country is considered a moderate borrower. Finally, if the debt accumulation of a country is equal to or greater than the 67th percentile, it is called a heavy borrower. Consequently, the country groupings could vary depending on the time period.

and the weighted average level of public debt is 31.7 percent of GDP in 2019 (figure 2.7). In the case of moderate borrowers, the average cumulative variation of public debt is 19.3 percent of GDP (between 2012 and 2019) and the weighted average level of public debt is 57.4 percent of GDP in 2019. Heavy borrowers' average accumulation of public debt is 57.7 percent of GDP and the weighted average level of public debt is 102.8 percent of GDP in 2019.

FIGURE 2.7: Public Debt of Heavy Borrowers in Sub-Saharan Africa (% of GDP)

There is great variability in debt positions among heavy borrowers.

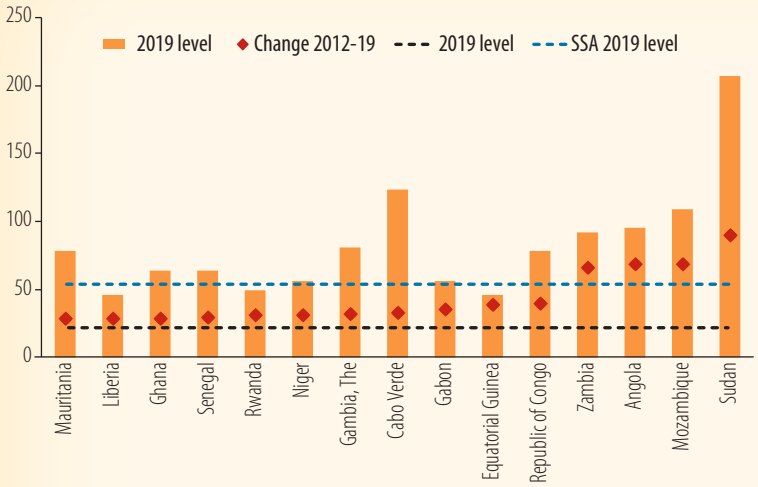
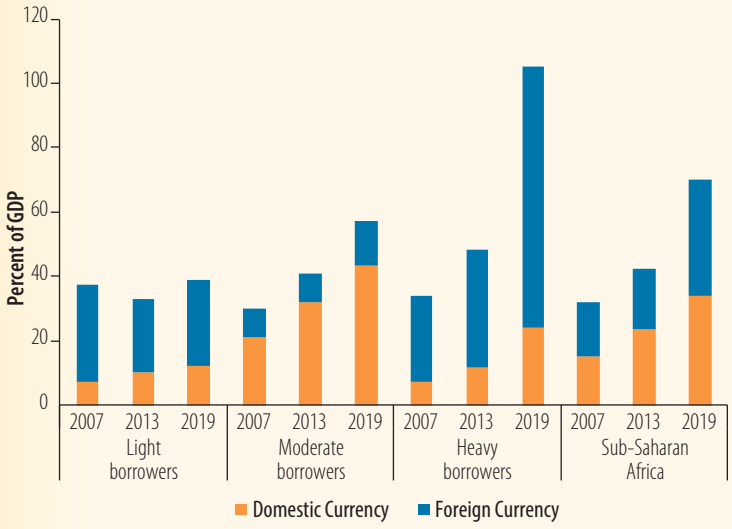


FIGURE 2.8: Public Debt, by Currency and Type of Borrowers, 2007–2019

Moderate borrowing governments have mostly borrowed in domestic currency.



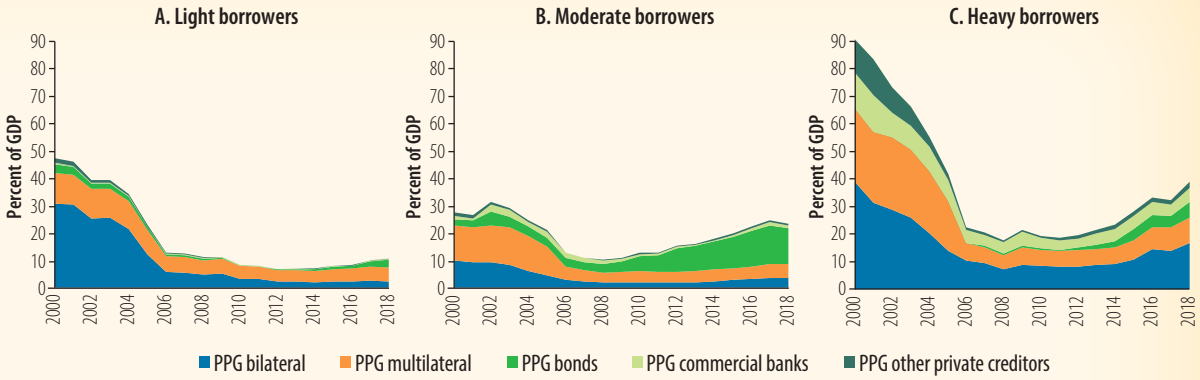
Source: World Economic Outlook, International Monetary Fund.

Notes: Regional figures are GDP-weighted averages. The blue and black dotted horizontal lines represent the 2019 level of the general government gross debt and the cumulative change in general government gross debt in 2012–2019 for the region, respectively. The grey bars and the red diamonds denote the level and cumulative change of general government gross debt for each country, respectively. GDP = gross domestic product; SSA = Sub-Saharan Africa.

Figure 2.7 zooms in further on the level and change of public debt among heavy borrowers in Sub-Saharan Africa. Four of the 15 heavy-borrowing countries have a 2019 level that is greater than the 2019 regional average level of debt (54 percent of GDP). The variation in the public debt from 2012 to 2019 for all 15 heavy borrowers exceeds the average change for the region (21 percent of GDP). Therefore, their amount of indebtedness has grown over the past seven years at a faster pace than that of the Sub-Saharan Africa region as a whole. Figure 2.8 plots the currency composition of public debt for the region as well as for light, moderate, and heavy borrowers. The general government gross debt stocks of light and heavy borrowers are mainly denominated in foreign currency while that of moderate borrowers is mostly in domestic currency terms. In 2019, about 77 percent of the debts owed by heavy-borrowing governments was expressed in foreign currency whereas the share of domestic currency public debt of moderate borrowers was 76 percent. Consequently, moderate borrowers manage their debt profiles better than heavy and light borrowers by mainly borrowing in domestic currency and minimizing their currency risks.

Public external profiles differ across the three groups of borrowing countries in the region.

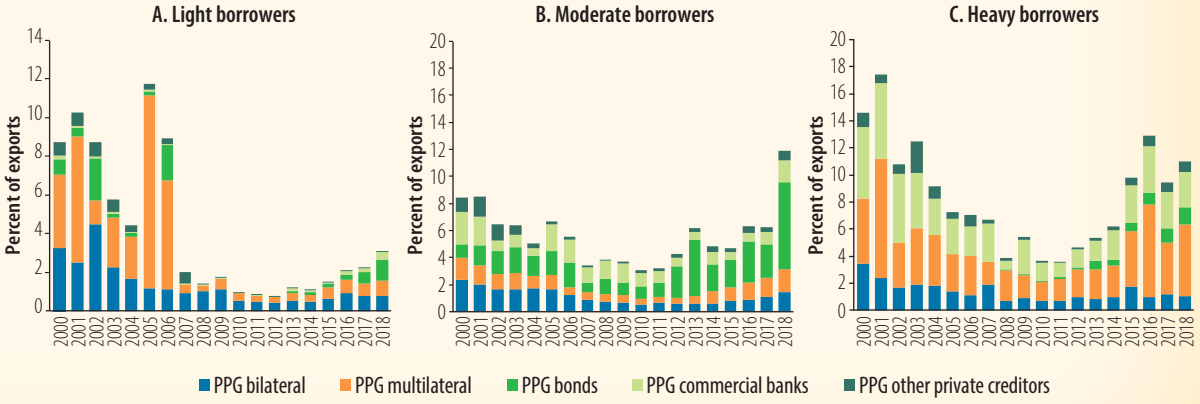
FIGURE 2.9: Public and Publicly Guaranteed External Debt in Sub-Saharan Africa, by Type of Borrower (% of GDP)



Source: World Development Indicators, World Bank.
Note: Group figures are GDP-weighted averages. GDP = gross domestic product; PPG = public and publicly guaranteed.

Debt service has increased across all debtor country groups.

FIGURE 2.10: Public and Publicly Guaranteed External Debt Service in Sub-Saharan Africa, by Type of Borrower (% of exports)

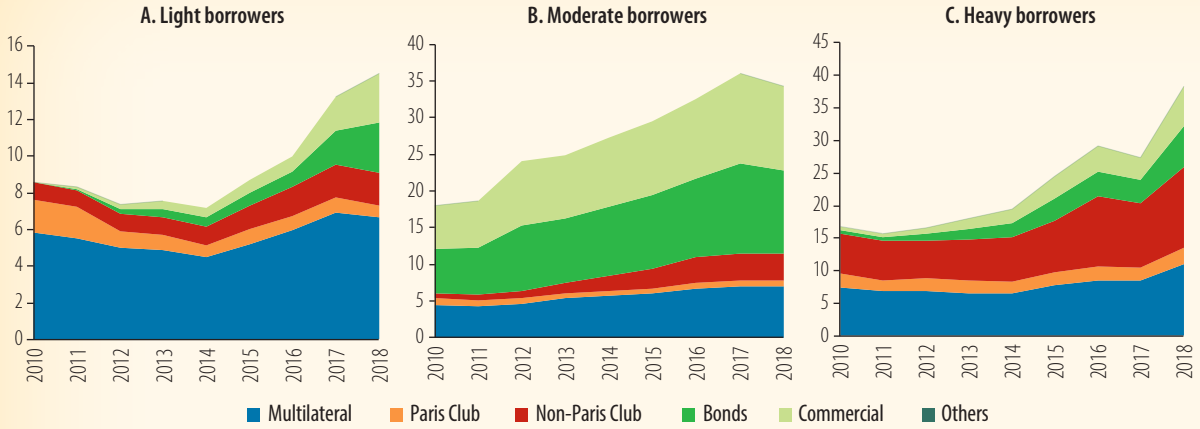


Source: World Development Indicators, World Bank.
Note: Group figures are GDP-weighted averages. GDP = gross domestic product; PPG = public and publicly guaranteed.

Debt accumulation has accelerated across the different types of debtor country groups in the region. As figure 2.2 illustrates, there has been a shift in the composition of Sub-Saharan Africa's public debt. Moderate and heavy borrowers have switched their composition of outstanding PPG external debt after the global financial crisis while light borrowers have reduced the amount of debts from PPG bilateral creditors (figure 2.9). For instance, moderate borrowers have increased the share of bond issuances in their outstanding PPG external debt after the global crisis, and they have reduced the share of PPG bilateral and multilateral debt in the outstanding PPG external debt stock. The amount of debt owed to bond issuances grew from 4.1 percent of GDP in 2009 to 13.1 percent of GDP in 2018 for moderate borrowers. Heavy borrowers have increased their amount of debt owed to private creditors (PPG commercial banks and PPG bonds) along with debt from PPG bilateral and multilateral creditors. Notably, the PPG bilateral debt stocks of heavy borrowers increased from 8.9 percent of GDP in 2009 to 16.7 percent of GDP in 2018, while PPG bonds surged from 0.7 percent of GDP in 2009 to 5.8 percent of GDP in 2018. In the case of light borrowers, the composition of public external debt has switched

from PPG bilateral to PPG bonds. The amount owed by light borrowers to foreign governments has declined from 4.9 percent of GDP in 2009 to 2.1 percent of GDP in 2018, while the amount borrowed from bondholders has increased from 0.4 percent of GDP in 2009 to 2.9 percent of GDP in 2018. This shift also translates into greater debt service from bonds—which rose from 0.1 percent of exports in 2011 to 1.1 percent of exports in 2017 (figure 2.10).

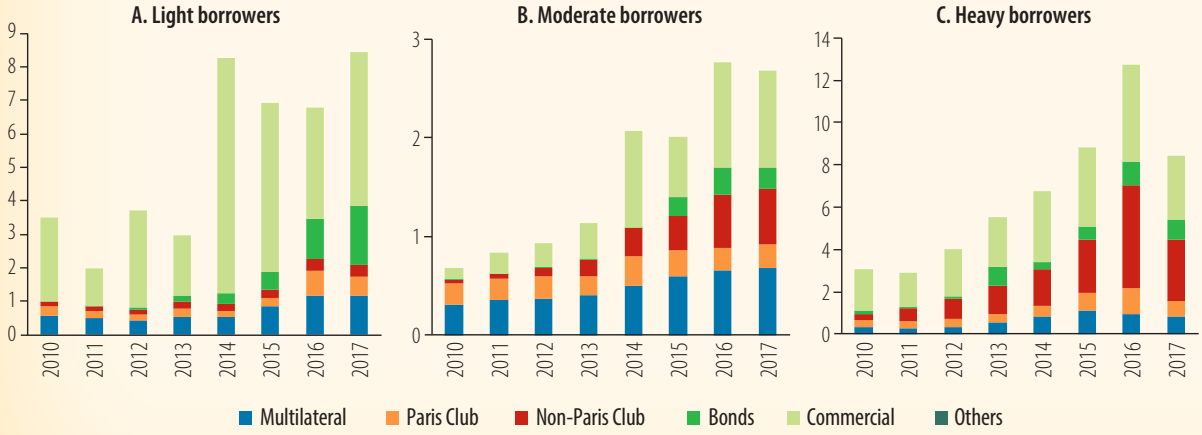
FIGURE 2.11: Public and Publicly Guaranteed External Debt Stocks, by Type of Borrower, 2010–2018 (% of GDP)



Lending from non–Paris Club governments has increased sharply among heavy borrowers, while debt from private creditors is large among moderate borrowers.

Source: World Bank.
Note: Group figures are GDP-weighted averages. GDP = gross domestic product.

FIGURE 2.12: PPG External Debt Service by Intensity of Borrowing, 2010-2018 (% GDP)



Debt service has increased significantly, especially from private creditors among light borrowers and non–Paris Club governments among heavy borrowers.

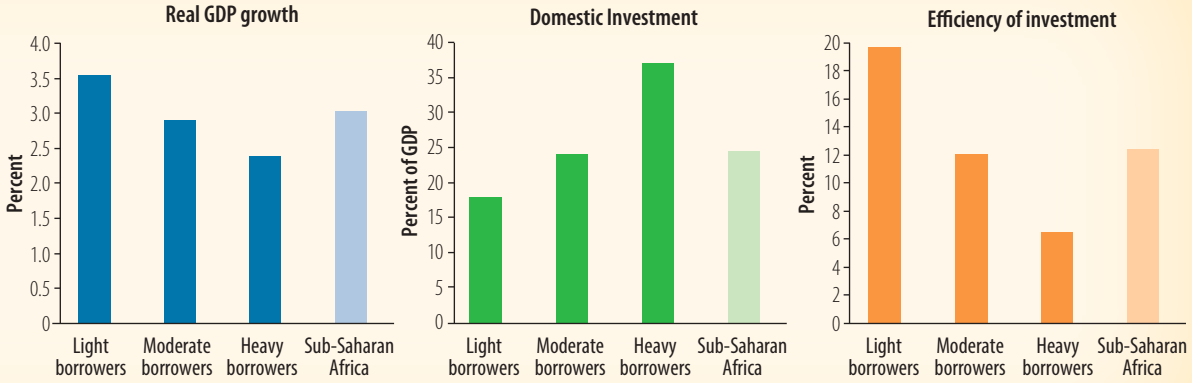
Source: World Bank.
Note: Group figures are GDP-weighted averages. GDP = gross domestic product.

A further look at the composition of public debt shows a rapid increase in the credit from emerging players to African nations in international credit markets—specifically, distinguishing between Paris and non–Paris Club governments. The PPG external debt stock owed to non–Paris Club governments has increased since 2012 for all three categories of African debtors—although at different speeds (figure 2.11). For instance, PPG external debt from non-Paris Club governments increased from 0.9 percent of GDP in 2012 to 1.8 percent of GDP in 2018 for

light borrowers while it grew from 5.8 percent of GDP in 2012 to 12.3 percent of GDP in 2018 for heavy borrowers. This highlights the findings from Figure 2.9 that PPG bilateral debt has increased along with PPG debt owed to private creditors (bonds and commercial banks) since 2012 for light, moderate and heavy borrowers (figure 2.11). As expected, heavy borrowers have increased their external debt service to non–Paris Club governments since 2011 (figure 2.12). By contrast, moderate borrowers have increased debt service to non–Paris Club governments, commercial banks, and multilateral creditors since 2012. Their debt service to bondholders has increased more significantly since 2015. In the case of light borrowers, the debt service of commercial banks and bonds has increased since 2012.

Light borrowers invest efficiently and achieve greater returns to economic activity.

FIGURE 2.13: Growth, Investment and Efficiency of Investment, by Type of Borrower (average 2013-19)



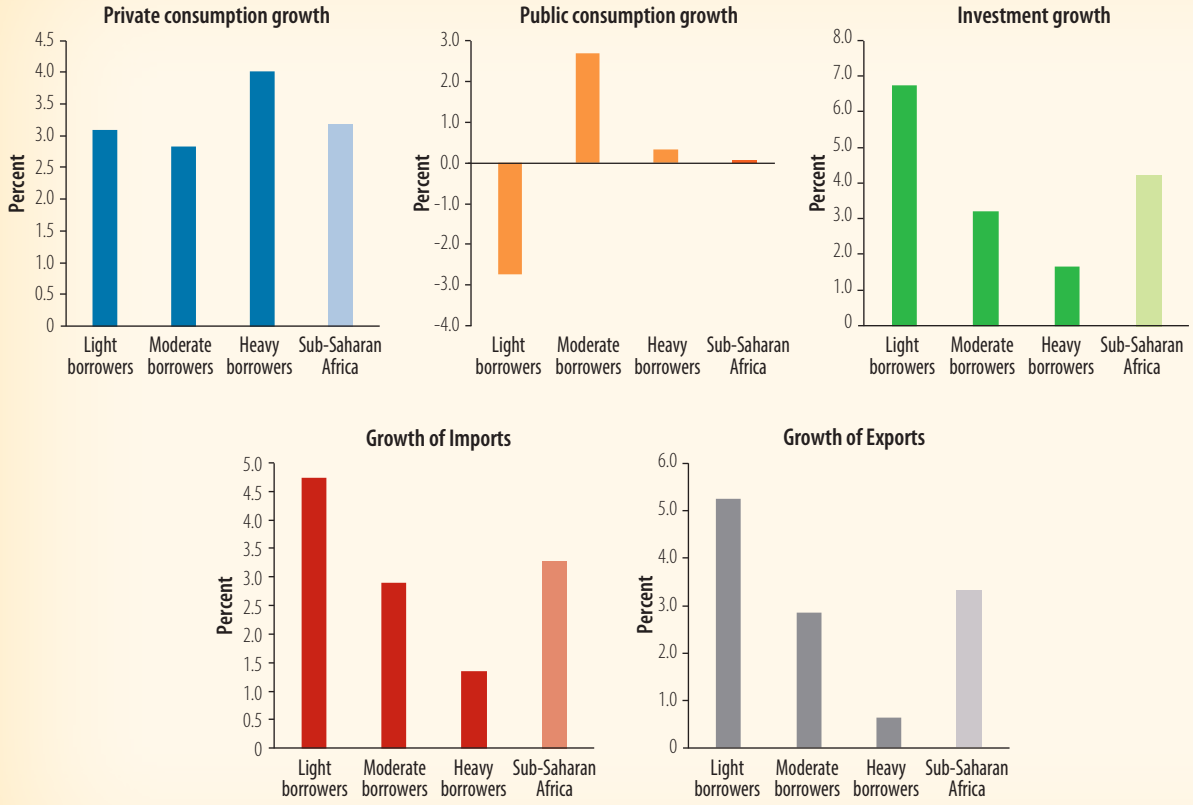
Source: World Development Indicators, World Bank.
Note: Group figures are GDP-weighted averages. GDP = gross domestic product.

Policies to Improve the Efficiency of Debt Financing

Implementing structural policies to improve productivity is critical for helping the region's economies move toward a sustainable path and strengthen their capacity to pay off their debts. Figure 2.13 shows the average real GDP growth, domestic investment (as a percentage of GDP) and the efficiency of investment of light, moderate, and heavy borrowers in Sub-Saharan Africa during the period 2013–19. Light borrowers grew at a faster pace than moderate and heavy borrowers. Although they did not invest as much as the other groups of countries (an average 18 percent of GDP in 2013–19), their efficiency of investment was significantly higher. Heavy borrowers have the largest investment coefficient (37 percent of GDP in 2013–19) along with the lowest GDP growth and efficiency of investment among those groups. Heavy borrowers' efficiency of investment is roughly one-third of that of light borrowers while their real GDP growth (annual average of 2.4 percent in 2013–19) is lower than the average for Sub-Saharan Africa.

The annual average growth rates of investment, imports, and exports are, for instance, highest for light borrowers—at 6.7 percent, 4.7 percent, and 5.2 percent, respectively, as seen in figure 2.14. Meanwhile, light borrowers register the lowest growth rate of public consumption (i.e. a contraction in public consumption which is negative), and moderate borrowers appear to borrow to finance higher growth in public consumption. Investment, import, and export growth are the lowest among heavy borrowers while their private consumption growth is higher than that of the other borrower groups. The evolution of investment growth has decelerated in light, moderate and heavy borrowers before 2017, and investment growth of heavy borrowers contracted due to the drastic drop in oil prices in 2014 (figure 2.15).

FIGURE 2.14: Growth of the Aggregate Demand, by Type of Borrower (annual average rate, 2013–19)



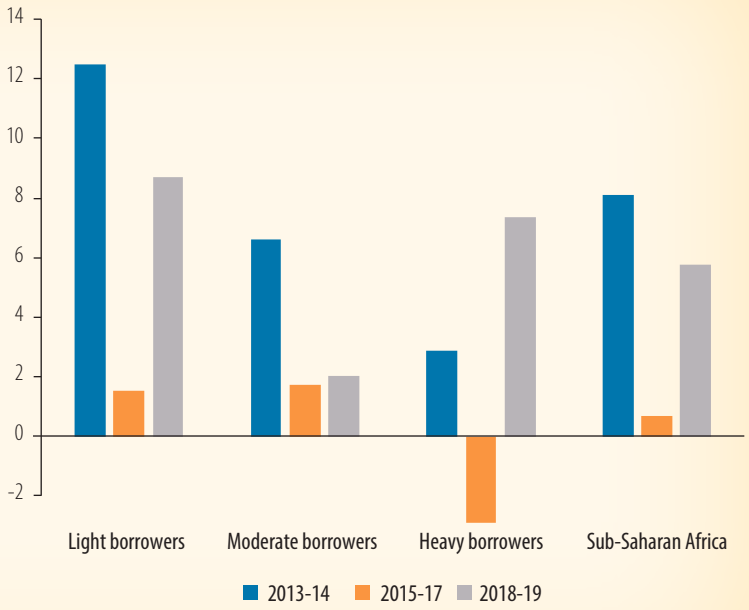
Investment growth is the highest among light borrowers and the lowest among heavy borrowers. The latter country group registers the highest growth rate in private consumption.

Source: World Development Indicators, World Bank.
Note: Group figures are GDP-weighted averages. GDP = gross domestic product.

Macroeconomic management is more effective in environments with higher institutional quality—thus, elevating the importance of advancing macroeconomic policy and institutional reform in parallel. Figure 2.16 shows the average quality of policies and institutions of the light, moderate, and heavy borrowers in Sub-Saharan Africa (the World Bank 2020). On average, moderate borrowers exhibit the highest quality of policies and institutions (as measured by

Investment growth has decelerated in light, moderate, and heavy borrowers amid the plunge in commodity prices.

FIGURE 2.15: Investment Growth over 2013–19, by Type of Borrower (%)



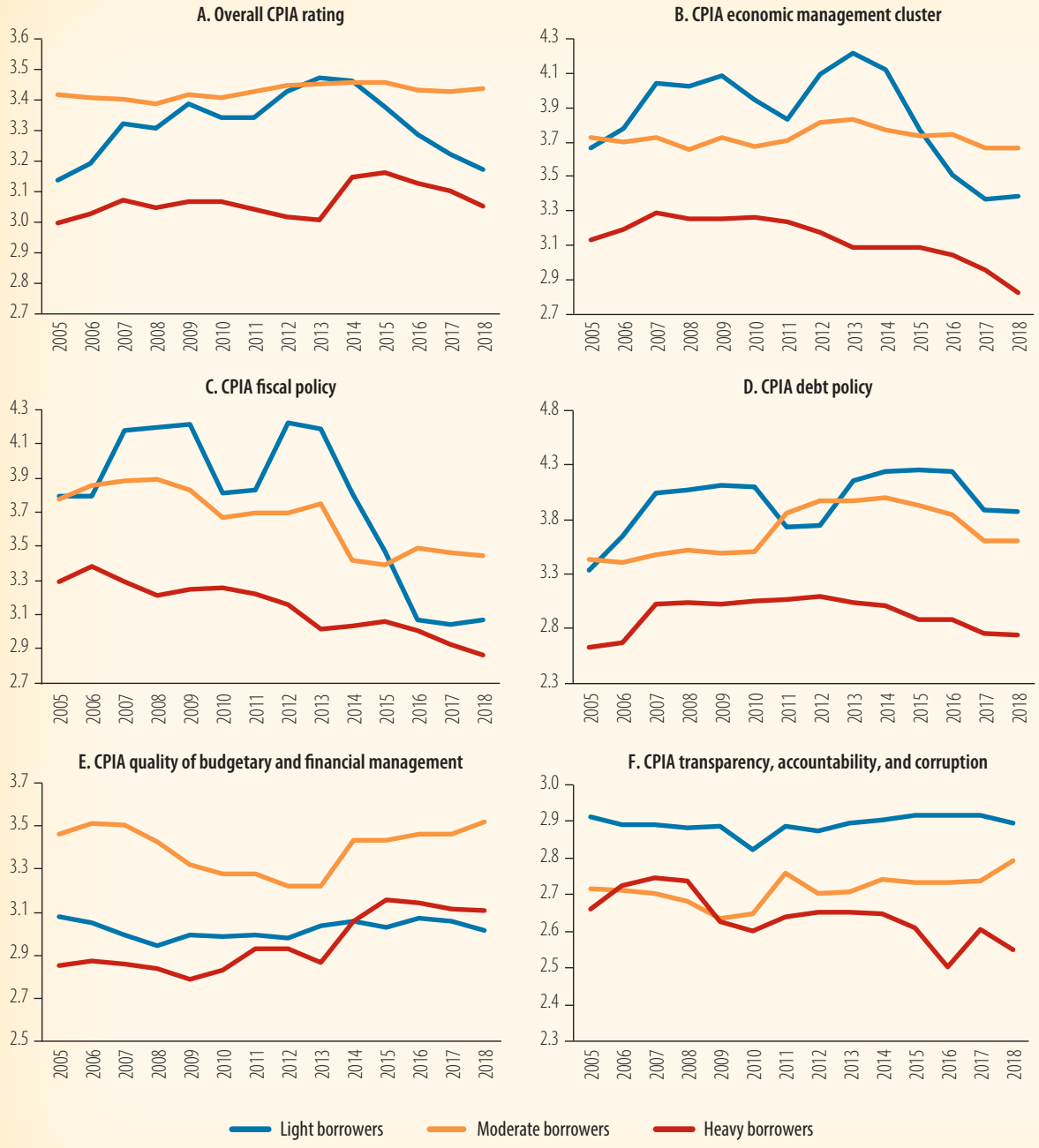
Source: World Development Indicators, World Bank.
Note: Group figures are GDP-weighted averages. GDP = gross domestic product.

the overall Country Policy and Institutional Assessment (CPIA) ratings) from 2016 to 2018 while the CPIA ratings have been gradually declining for light and heavy borrowers after the sharp commodity price slump in 2014–15. For the quality of macroeconomic policies (CPIA economic management cluster), moderate borrowers still have the highest ratings during the period 2016-18 while both light and heavy borrowers have witnessed a downward trend since 2013. This declining trend is mostly attributed to the evolution of the CPIA rating on the quality of fiscal policy. However, light borrowers have the highest rating of the CPIA Debt Policy category while heavy borrowers have the lowest rating. Effective fiscal policies require strong budgetary and public financial management institutions. The quality of fiscal institutions is, therefore, higher in moderate borrowers compared with light and heavy borrowers. For the ratings on transparency, accountability, and corruption of the public sector, light borrowers tend to have better scores than other groups in the region—with the heavy borrowers experiencing a deterioration in their scores since 2012. Hence, moderate borrowers have better quality of policies and institutions—especially in the area of macroeconomic management and transparency, accountability, and corruption in the public sector.

Given the changing risk profile of African debt, accurate and timely debt and macroeconomic analysis can support countries in their economic management and reduce their mounting debt burden. Greater debt transparency—in the amount of funds borrowed and the terms and conditions—is needed, as issues have become increasingly complex with the emergence of new creditors and the growing share of sovereign bonds in Sub-Saharan African countries. Debt management practices should be updated to address the opportunities and risks associated with these new risks. An additional reason for transparency is that the lack of disclosure in debt data may lead to mispricing sovereign bonds and associated default risks (Horn, Reinhart, and Trebesch 2019).

FIGURE 2.16: Quality of Policies and Institutions in Sub-Saharan Africa, by Type of Borrower

Moderate borrowers show better risk management practices.



Source: World Bank 2019a .
Note: CPIA = Country Policy and Institutional Assessment.

TABLE A.2.1: PPG External Debt Service by Type of Creditor, 2018 (US$ millions)

		Official Creditors		Private Creditors			Total
Code	Country	Bilateral	Multilateral	Bonds	Comm. Banks	Other	Service
ZAF	South Africa	0	638	10,518	720	60	11,937
AGO	Angola	4,145	93	169	2,147	812	7,366
GHA	Ghana	496	115	1,087	609	136	2,444
KEN	Kenya	675	598	259	796	1	2,330
ETH	Ethiopia	619	180	66	489	576	1,930
NGA	Nigeria	156	275	911	0	0	1,341
CIV	Côte d'Ivoire	630	75	393	4	9	1,111
TZA	Tanzania	219	169	0	501	0	889
ZMB	Zambia	225	48	237	202	28	740
GAB	Gabon	174	71	157	250	0	652
CMR	Cameroon	393	93	34	82	9	611
MOZ	Mozambique	301	79	0	140	4	525
SEN	Senegal	141	144	162	53	8	508
MRT	Mauritania	124	238	0	0	0	362
UGA	Uganda	90	232	0	0	0	322
COG	Congo, Rep.	129	108	48	0	0	285
COD	Congo, Dem. Rep.	121	162	0	0	1	284
MLI	Mali	90	143	0	0	0	233
SDN	Sudan	183	26	0	0	0	209
BEN	Benin	19	169	0	5	0	193
TCD	Chad	19	35	0	0	120	174
MUS	Mauritius	103	65	0	6	0	174
BWA	Botswana	13	151	0	0	9	173
NER	Niger	47	68	0	0	0	114
BFA	Burkina Faso	27	81	0	0	0	108
MDG	Madagascar	36	59	0	6	0	101
ZWE	Zimbabwe	36	51	0	0	0	87
GIN	Guinea	50	35	1	0	0	86
TGO	Togo	31	49	0	5	0	84
RWA	Rwanda	17	37	27	0	0	80
CPV	Cabo Verde	13	34	0	9	0	56
LSO	Lesotho	12	37	0	0	0	48
SWZ	Eswatini	23	21	0	2	0	46
MWI	Malawi	27	16	0	0	0	43
GMB	Gambia, The	11	24	0	2	0	37
SLE	Sierra Leone	9	25	0	0	0	33
ERI	Eritrea	20	6	0	0	0	26
LBR	Liberia	2	20	0	0	0	22
BDI	Burundi	0	11	0	0	0	12
GNB	Guinea-Bissau	1	5	0	0	0	6
CAF	Central Afr. Rep.	2	3	0	0	0	5
STP	São Tomé & Príncipe	1	3	0	0	0	4
COM	Comoros	2	1	0	0	0	3
SOM	Somalia	0	0	0	0	0	0
SSA	**Sub-Saharan Africa**	**9,425**	**4,493**	**14,071**	**6,031**	**1,773**	**35,794**

Source: World Development Indicators, The World Bank. PPG = Public and Publicly-Guaranteed.

Annex A.1

TABLE A.1: Proposed Country/Region Groups and Main Transmission Channels

Countries	Oil exposure	Mining exposure	Agro-commodity Exposure	Tourism exposure	Supply chain disruption	Currently affected by the COVID-19 (# cases as of March 15 2020)
Nigeria	Exposed					
Angola	Exposed					
South Africa		Exposed		Exposed		
Ethiopia				Exposed	Exposed	
Kenya				Exposed		
Congo, Dem. Rep.		Exposed				
Ghana	Exposed					
Cameroon	Exposed		Exposed			
Côte d'Ivoire			Exposed			
Rest of Central Africa	Exposed					
Rest of Western Africa		Exposed				
Rest of Southern Africa		Exposed	Exposed			
Rest of Eastern Africa		Exposed	Exposed			
Other African countries (incl Madagascar and Mauritius)			Exposed	Exposed	Exposed	
EU 27						50,000
China						80,995
United States						3,000
Other OECD						
ROW						

TABLE A2: Mapping between Proposed Sectors and GTAP Sectors

Proposed sectors	GTAP sectors
Agriculture	Paddy rice
	Wheat
	Cereal grains nec
	Vegetables, fruit, nuts
	Oil seeds
	Sugar cane, sugar beet
	Plant-based fibers
	Crops nec
	Forestry
	Fishing
Livestock	Bovine cattle, sheep and goats, horses
	Animal products nec
	Raw milk
	Wool, silk-worm cocoons

Proposed sectors	GTAP sectors
Natural Resources	Coal
	Minerals nec
Oil, Gas, and Refined Oil	Oil
	Gas
	Petroleum, coal products
Low-skilled Manufacturing	Bovine meat products
	Meat products nec
	Vegetable oils and fats
	Dairy products
	Processed rice
	Sugar
	Food products nec
	Beverages and tobacco products
	Textiles
	Wearing apparel
	Leather products
	Wood products
	Mineral products nec
	Ferrous metals
	Metals nec
	Metal products
	Manufactures nec
High-skilled Manufacturing	Paper products, publishing
	Chemical, rubber, plastic products
	Motor vehicles and parts
	Transport equipment nec
	Electronic equipment
	Machinery and equipment nec
Travel	Air transport
Hotel and restaurant (tourism)	Trade Accommodation Recreational and other services
Low-skilled Services	Electricity
	Gas manufacture, distribution
	Water
	Construction
	Transport nec
	Water transport
	Dwellings
High-skilled Services	Communication
	Financial services nec
	Insurance
	Business services nec
Public services	Public Administration, defense, education, health

Annex B: Main Indicators in the No-COVID Baseline

TABLE A2.1: GDP and Main Macro Indicators (first row is GDP growth for each country, %)

	2015	2020	2025	2030
Côte d'Ivoire	5.8	8.6	8.8	7.9
Investment	6.8	9.6	9.8	8.8
Export	5.8	8.4	8.4	7.5
Import	5.7	7.3	7.1	6.3
Cameroon	5.2	5.6	5.9	5.7
Investment	1.9	1.7	1.0	-0.6
Export	4.9	5.7	6.0	5.7
Import	4.4	5.1	5.0	4.5
Congo, Dem. Rep.	7.5	9.6	10.5	9.3
Investment	6.4	8.4	9.2	7.9
Export	8.0	9.7	10.7	9.4
Import	6.3	7.6	8.5	7.6
Ethiopia	6.5	6.7	6.3	6.1
Investment	3.8	3.5	2.6	1.7
Export	9.5	9.5	8.4	8.0
Import	4.4	4.8	4.7	4.6
Gabon	3.1	3.0	3.3	3.1
Investment	3.6	3.4	3.8	3.5
Export	2.0	1.9	2.3	2.1
Import	3.6	3.9	3.8	3.3
Ghana	8.5	6.8	6.4	5.9
Investment	6.9	5.1	4.6	3.9
Export	10.6	8.0	7.3	6.4
Import	7.1	5.8	5.4	4.9
Guinea	11.3	12.6	9.4	8.0
Investment	13.3	14.5	11.1	9.5
Export	15.8	15.1	9.7	7.8
Import	6.8	9.4	7.6	6.6
Kenya	5.5	5.8	5.9	5.7
Investment	4.6	5.0	5.0	4.7
Export	9.5	9.1	8.1	7.1
Import	4.2	4.6	4.6	4.4
Madagascar	3.3	5.9	6.5	6.7
Investment	5.4	7.9	8.4	8.3
Export	2.8	5.5	6.2	6.4
Import	2.9	5.2	5.7	5.8
Mauritius	4.1	4.4	3.6	3.0
Investment	3.8	4.1	3.3	2.7
Export	4.8	5.0	4.0	3.4
Import	3.3	3.6	3.1	2.7
Nigeria	6.6	6.6	6.4	6.1
Investment	8.2	8.1	7.8	7.5
Export	4.5	6.9	6.8	6.5
Import	3.4	7.2	7.6	7.4
Rwanda	7.1	6.9	6.9	6.5
Investment	6.3	6.1	6.0	5.5
Export	8.3	7.9	7.5	6.7
Import	5.9	6.2	6.1	5.6
Senegal	4.7	5.8	5.8	5.6
Investment	2.8	3.7	3.5	3.0
Export	7.4	8.2	7.8	7.1
Import	3.0	3.8	4.0	4.0
Chad	4.2	4.2	6.0	6.2
Investment	3.0	2.9	4.6	4.7
Export	4.7	4.8	6.6	6.4
Import	3.8	4.3	5.4	5.2

	2015	2020	2025	2030
Tanzania	6.4	7.2	7.3	6.8
Investment	3.9	4.3	4.0	2.9
Export	9.6	9.0	8.5	7.5
Import	4.6	4.9	5.1	4.8
Rest of Africa	4.3	5.3	4.8	4.3
Investment	3.1	4.0	3.4	2.9
Export	4.6	5.5	4.9	4.3
Import	3.4	4.2	4.0	3.6
South Africa	4.1	4.4	3.8	3.3
Investment	4.1	4.3	3.7	3.3
Export	4.1	4.3	3.8	3.3
Import	4.1	4.2	3.7	3.2

TABLE A2.2: Share of Oil, Mining and Tourism Exports in Total Exports (%)

	2011	2020	2030
Cote d'Ivoire	11	8	7
Oil	10	7	6
Mining	1	1	1
Tourism	0	0	0
Cameroon	28	22	23
Oil	17	9	13
Mining	11	12	9
Tourism	0	0	0
Democratic republic of Congo	39	30	27
Oil	12	8	9
Mining	23	18	14
Tourism	3	4	4
Ethiopia	3	4	3
Oil	0	0	0
Mining	0	0	0
Tourism	3	3	3
Gabon	96	94	94
Oil	95	93	93
Mining	1	1	1
Tourism	0	0	0
Ghana	21	16	15
Oil	18	13	12
Mining	2	2	2
Tourism	1	1	1
Guinea	43	15	17
Oil	12	6	7
Mining	32	9	11
Tourism	0	0	0
Kenya	4	3	2
Oil	2	1	1
Mining	2	2	1
Tourism	0	0	0
Madagascar	28	14	17
Oil	24	10	13
Mining	3	4	4
Tourism	0	0	0
Mauritius	3	3	3
Oil	0	0	0
Mining	0	0	0
Tourism	3	3	3

	2011	2020	2030
Nigeria	94	58	57
Oil	94	56	57
Mining	0	0	0
Tourism	0	1	1
Rwanda	61	49	49
Oil	43	31	33
Mining	16	15	13
Tourism	2	2	3
Senegal	8	7	6
Oil	3	2	2
Mining	3	3	3
Tourism	2	2	2
Chad	85	81	76
Oil	81	76	71
Mining	0	0	0
Tourism	4	5	5
Tanzania	14	15	10
Oil	0	0	0
Mining	9	9	4
Tourism	6	5	6
Rest of Africa	48	41	40
Oil	40	33	33
Mining	6	7	6
Tourism	2	2	2
South Africa	25	26	26
Oil	3	3	3
Mining	19	20	20
Tourism	3	3	3
Rest of the World	15	16	16
Oil	10	11	10
Mining	2	2	2
Tourism	3	3	3

TABLE A2.2: Share of Oil, Mining and Tourism Exports to China, the European Union, and the United States in Total Exports (%)

	2011	2020	2030
Cote d'Ivoire	37	32	29
Oil	33	26	24
Mining	76	76	75
Tourism	52	52	52
Cameroon	72	73	74
Oil	72	72	74
Mining	72	73	73
Tourism	58	58	57
Democratic republic of Congo	56	61	64
Oil	70	73	76
Mining	49	57	58
Tourism	57	57	57
Ethiopia	63	63	64
Oil	60	60	59
Mining	78	78	76
Tourism	61	62	63
Gabon	71	72	72
Oil	71	72	72
Mining	70	72	72
Tourism	59	60	60

	2011	2020	2030
Ghana	62	61	61
Oil	60	58	59
Mining	76	79	78
Tourism	58	57	55
Guinea	54	46	42
Oil	0	0	0
Mining	74	74	67
Tourism	39	36	33
Kenya	30	32	30
Oil	19	17	13
Mining	38	43	40
Tourism	40	38	36
Madagascar	53	51	49
Oil	52	46	46
Mining	57	62	61
Tourism	61	63	64
Mauritius	63	63	64
Oil	43	35	30
Mining	42	41	37
Tourism	63	64	64
Nigeria	50	44	42
Oil	50	44	42
Mining	64	69	69
Tourism	35	33	32
Rwanda	51	50	50
Oil	52	50	50
Mining	46	49	48
Tourism	62	63	64
Senegal	41	41	39
Oil	11	9	8
Mining	56	51	46
Tourism	60	59	57
Chad	71	71	72
Oil	71	72	73
Mining	30	30	31
Tourism	59	59	59
Tanzania	68	67	64
Oil	4	4	3
Mining	73	73	73
Tourism	60	58	56
Rest of Africa	73	70	69
Oil	75	73	71
Mining	60	61	60
Tourism	59	58	57
South Africa	52	56	56
Oil	16	12	12
Mining	56	61	60
Tourism	62	63	65
Rest of the World	75	76	76
Oil	79	80	78
Mining	77	80	80
Tourism	58	61	64

TABLE A2.3. INDEX OF PREPAREDNESS INDEX (%)

Country/ Region	EPI Index	Country/ Region	EPI Index
Cameroon	31.3	Western Africa	33.7
Chad	27.9	Central Africa	28.1
Gabon	27.9	Eastern Africa	37.2
Rest of central Africa	25.3	Southern Africa	46.1
Cote d'Ivoire	34.2	Northern Africa	26.2
Nigeria	38.9	Oil exporters	31.7
Senegal	35.9	Oil impoters	35.7
Ghana	34.9	Mining exporters	37.5
Rest Of Western Africa	24.8	All Sub-Saharan Africa	34.2
DRC	18.7	All Africa	33.7
Rwanda	33.9		
Tanzania	37.7		
Ethiopia	38.5		
Kenya	50.8		
Mauritius	35.3		
Rest of Eastern Africa	26.9		
South Africa	62.2		
Rest of southern Africa	29.9		
Rest of Africa	26.2		
United States of America	87.2		
EU and EFTA	57.9		
China	47.5		
Rest of the world	32.9		

Annex C: Stock Taking of Fiscal, Monetary, and Macro-Financial Measures Taken in Sub-Saharan African Countries

COUNTRY	FISCAL	MONETARY AND MACRO-FINANCIAL	EXCHANGE RATE AND BOP
Angola	The government is working on a package to fight the COVID-19 outbreak and its economic fallout.	No measures (monetary policy instruments unchanged since 2019Q4).	Central bank allows a market-clearing exchange rate during FX auctions.
Benin	The authorities have used $17 million (0.1% of GDP) for mitigation and prevention measures.	Measures announced at the level of the BCEAO (Central Bank of West African States): (i) Providing FCFA 340 billion additional liquidity to bring the total liquidity made available to banks to 4,750 billion FCFA (ii) Extending the collateral framework to access the BCEAO's refinancing to include CFAF 1,050 billion in bank loans to 1,700 prequalified private companies (iii) Setting up a framework with the banking system to support firms with repayment difficulties (iv) Allocating FCFA 25 billion to the West African Development Bank (BOAD) trust fund for urgent investment and equipment expenses (v) Communicating on the special program for refinancing bank credits granted to small and medium-size enterprises (vi) Initiating negotiations with firms issuing electronic money to encourage its usage (vii) Ensuring adequate provision of banknotes for satisfactory ATM operation.	No measures.
Botswana	The authorities are working to approve a budget of P500 million (25% of GDP).	No measures.	No measures. The central bank maintains a crawling peg vis-à-vis a basket of currencies.
Burkina Faso	The government is currently weighing potential countercyclical fiscal measures to address the socioeconomic impacts. An emergency response plan for the health sector includes strengthening human and technical capacities of public hospitals, increasing available hospital beds, expanding testing capacities, and purchasing medical supplies to facilitate the implementation of hygiene measures.	Measures announced at the level of the BCEAO (Central Bank of West African States): (i) Provision of additional liquidity to banks (ii) Extending the collateral framework (iii) Setting up a framework with the banking system to support firms with repayment difficulties (iv) Increasing the amount of concessional loans to finance urgent investment and equipment expenses (v) Communicating on the special program for refinancing bank credits granted to small and medium-size enterprises (vi) Initiating negotiations with firms issuing electronic money to encourage its usage (vii) Ensuring adequate provision of banknotes for satisfactory ATM operation.	No measures.
Burundi	No measures.	No measures.	No measures. Burundi has been engaged in multiple currency practices, with a parallel market exchange rate that is substantially more depreciated than the official exchange rate.

COUNTRY	FISCAL	MONETARY AND MACRO-FINANCIAL	EXCHANGE RATE AND BOP
Cabo Verde	Measures include (i) Loan guarantees of up to 50% for large companies (CVE 1 billion, about €9 million) (ii) Up to 80% for companies in the tourism and transport sectors (CVE 1 billion) (iii) Up to 100% for small and medium-size enterprises (CVE 300 million, €2.7 million) and for micro-enterprises (CVE 700 million CVE, about €6.7 million) (iv) Faster settlement of invoices and VAT refunds (v) Extension of the tax payment period (vi) Payment in installments for VAT and other withheld taxes (vii) Exemption for contributions to the Social Security Fund (viii) Funding of an emergency plan with CVE 76 million through the reallocation of budgetary appropriations for personnel and medical equipment.	No measures.	No measures.
Cameroon	The authorities' preparedness and response plan for COVID-19-related health spending accounts for CFAF 6.5 billion (US$11 million, 0.1% of GDP).	BEAC measures include (i) Increase in liquidity injections from $400 million to $800 million (CFAF 240 billion to CFAF 500 billion) (ii) Banks with financing needs will be able to satisfy their requests at the marginal lending facility under the usual conditions (iii) New deadlines granted to the CEMAC countries for repaying their loan securities held by credit institutions. The Government of Cameroon adopted a US$11 million national COVID-19 preparedness and response plan mostly dedicated to the purchase of medical equipment, basic rehabilitation of health facilities, technical assistance, and trainings. The government will work during the month of April to finalize its response plan framed around three pillars: (i) Health/medical interventions (ii) Support to the private sector (iii) Social measures.	No measures.

COUNTRY	FISCAL	MONETARY AND MACRO-FINANCIAL	EXCHANGE RATE AND BOP
Central African Republic	SIDP2, $50 million (IDA19) is scheduled for the Board in early July 2020. Policy actions under the program, which have all been met, have strengthened the government's position to respond to the crisis (e.g., targeted free health care, social protection, and improved budget management and customs administration). The government has informally requested to frontload IDA19 resources to finance and disburse CSIDP2 quickly. The government will implement a response plan for the health sector with an estimated cost of FCFA 27 billion, or 1.9% of GDP (with WHO). This plan aims at: (i) Providing medical care for confirmed cases (ii) Improving the monitoring of the country's points of entry (iii) Strengthening the capacities of the medical staff, laboratories, and hospitals. A fiscal gap resulting from COVID-19 is estimated at $70 million, based on an assumption of a four-month duration of the crisis. The gap will be financed as follows: (i) $25 million as supplemental financing to CSIDP1, which is a 25% top-up of the original amount (ii) $30m from an IMF Rapid Credit Facility (iii) The remainder is to be covered by the ADB, EU, and/or a CEMAC stimulus package.	BEAC measures include (i) Increase in liquidity injections from $400 million to $800 million (CFAF 240 billion to CFAF 500 billion) (ii) Banks with financing needs will be able to satisfy their requests at the marginal lending facility under the usual conditions (iii) New deadlines granted to the CEMAC countries for repaying their loan securities held by credit institutions.	No measures.
Chad	An estimated CFAF 15 billion (0.3% of non-oil GDP) in fiscal measures has been approved and is being implemented. Key measures include (i) Training of medical and technical staff (ii) Purchase of necessary medical equipment (iii) Construction of seven health centers in remote areas (iv) Construction of three mobile hospitals (v) Securely managing entry points. The authorities are considering fiscal measures to help the private sector.	BEAC measures include (i) Increase in liquidity injections from $400 million to $800 million (CFAF 240 billion to CFAF 500 billion) (ii) Banks with financing needs will be able to satisfy their requests at the marginal lending facility under the usual conditions (iii) New deadlines granted to the CEMAC countries for repaying their loan securities held by credit institutions.	No measures.
Comoros	The authorities intend to implement their pandemic preparedness plan with health care as the top priority, followed by vulnerable households.	The authorities intend to monitor the impact of the COVID-19 shock on banks' asset quality.	The authorities intend to monitor inflation developments and continue preserving the peg against the euro.

COUNTRY	FISCAL	MONETARY AND MACRO-FINANCIAL	EXCHANGE RATE AND BOP
Congo, Democratic Republic of	The IMF estimates an additional 2020 fiscal gap of $400 million related to COVID-19. Due to the heavy dependency on trade (exports making up about 30% of GDP and about 40% of exports going to China), a narrow fiscal space will suffer from the consequences of the pandemic and increase the country's external vulnerability. Slower growth will also negatively impact poverty, and an increase in public spending in response to the pandemic may compromise the government's already weak capacity to finance social spending programs. A preparedness and response national plan ($130 million, 0.3% of GDP) is being finalized and it focuses on actions to (i) Strengthen early detection and foster technical and operational coordination within the government (ii) Improve the quality of medical care for infected patients (iii) Develop effective preventive communication strategies and enhance medical logistic platforms.	The central bank (BCC) postponed the adoption of new minimum capital requirements, encouraged the restructuring of nonperforming loans, and announced measures to reduce contamination risks and promote the use of e-payments. To ease liquidity, the BCC announced (i) A reduction of the policy rate by 150 bps to 7.5% (ii) Eliminating mandatory reserve requirements on demand deposits in local currency (iii) Extending the maturity of emergency liquidity loans to up to 24 months.	No measures.
Congo, Republic of	The overall cost of the response plan to the COVID-19 epidemic has been estimated at US$35 million. The government made US$1.4 million available to the Ministry of Health.	BEAC measures include (i) Increase in liquidity injections from $400 million to $800 million (CFAF 240 billion to CFAF 500 billion) (ii) Banks with financing needs will be able to satisfy their requests at the marginal lending facility under the usual conditions (iii) New deadlines granted to the CEMAC countries for repaying their loan securities held by credit institutions.	No measures.
Côte d'Ivoire	The government is working on an emergency response plan of CFAF 96 billion (0.3 % of GDP), which will (i) Provide free care for those with the infection and equip intensive care units (ii) Strengthen epidemiological and biological surveillance (virus testing, creation of a free call center, and rehabilitating and equipping laboratories) (iii) Reinforce capacities of pharmaceutical industries and finance research on the virus.	Measures announced at the level of the BCEAO (Central Bank of West African States): (i) Provision of additional liquidity to banks (ii) Extending the collateral framework (iii) Setting up a framework with the banking system to support firms with repayment difficulties (iv) Increasing the amount of concessional loans to finance urgent investment and equipment expenses (v) Communicating on the special program for refinancing bank credits granted to small and medium-size enterprises (vi) Initiating negotiations with firms issuing electronic money to encourage its usage (vii) Ensuring adequate provision of banknotes for satisfactory ATM operation.	No measures.

COUNTRY	FISCAL	MONETARY AND MACRO-FINANCIAL	EXCHANGE RATE AND BOP
Equatorial Guinea	The government has deployed an initial health spending plan (0.07% of GDP) focused mainly on prevention. This plan operationalized a first response system, quarantine facilities for incoming travelers, and laboratory facilities/testing. In light of the recent oil price declines, the government is contemplating slowing down execution of nonpriority expenditures as well as continuing implementation of plans to strengthen the tax administration. The government established a National Emergency COVID-19 Fund which has already received XAF 5 billion ($ 8.6 million) from the central government budget. Private firms, individuals, nonprofit organizations, and other entities are urged to contribute to this fund.	BEAC measures include (i) Increase in liquidity injections from $400 million to $800 million (CFAF 240 billion to CFAF 500 billion) (ii) Banks with financing needs will be able to satisfy their requests at the marginal lending facility under the usual conditions (iii) New deadlines granted to the CEMAC countries for repaying their loan securities held by credit institutions.	No measures.
Eritrea	No measures.	No measures.	No measures.
Eswatini	The government issued a supplementary budget for public health care in the amount of E100 million, or 0.14% of GDP, that is still pending parliamentary approval. Low-priority recurrent spending will be redirected and reallocated toward health infrastructure. Revenue measures to mitigate the impact of the virus include (i) Taxpayers projecting losses will file loss provisional returns and no payment will be required (ii) Extension of returns filing deadlines by three months before penalties kick-in (iii) Payment arrangements for taxpayers facing cash flow problems (iv) Waiver of penalties and interest for older tax debts if principal is cleared by the end of September.	The Central Bank of Eswatini has (i) Reduced the discount rate by 100 basis points to 5.5% (ii) Reduced the reserve requirement by 1pp to 5% (iii) Reduced the liquidity requirement to 20% (from 25%) for commercial banks and to 18% (from 22%) for the development bank.	The exchange rate has depreciated by 17% this year, but no measures have been taken.
Ethiopia	Ethiopia announced a Br 5 billion (US$154 million, 0.15% of GDP) package to bolster health care. In addition, the government announced tax exemptions and preferential access to currency for prevention and containment of imported products. The NBE will avail Br 15 billion liquidity in support of private banks, to allow them to provide debt relief and refinancing to customers in need. In addition, mobile banking limits at the Commercial Bank of Ethiopia will be increased. Finally, the Ministry of Trade and Industry will continue strengthening the measures aimed at ensuring the supply of key goods and mitigating price spikes.	No measures.	No measures.

COUNTRY	FISCAL	MONETARY AND MACRO-FINANCIAL	EXCHANGE RATE AND BOP
Gabon	The government has acted on various fronts: (i) Creation of a fund of FCFA 4 billion, or around USD$2 million, to combat COVID-19 propagation. The authorities' current projection envisages the control of nonpriority expenditure and redirection of savings (FCFA 17 billion, 0.2% of GDP) to COVID-19-related spending. (ii) Preparation of an emergency plan to support the health sector and an action plan to limit the negative impact of the crisis on the economy. (iii) An early response (with WHO) called the COVID-19 Emergency Preparedness and Response Plan amounting to $723,000 for immediate health-related needs. (iv) In coordination with the IMF, the government prepared a finance law to take into account the new macro-fiscal context and induced additional public expenditure. The financing gap is estimated at about $470 million. The IMF rapid response, with a Board date scheduled on April 8, would cover US$150 million, leaving US$320 million to be covered.	BEAC measures include (i) Increase in liquidity injections from $400 million to $800 million (CFAF 240 billion to CFAF 500 billion) (ii) Banks with financing needs will be able to satisfy their requests at the marginal lending facility under the usual conditions (iii) New deadlines granted to the CEMAC countries for repaying their loan securities held by credit institutions.	No measures.
Ghana	The government committed US$100 million to support preparedness and response. Additional funds have been earmarked to address the availability of test kits, pharmaceuticals, equipment, and bed capacity.	The Monetary Policy Committee cut the policy rate by 150 basis points to 14.5% and announced several measures to mitigate the impact of the pandemic shock, including (i) Lowering the primary reserve requirement from 10% to 8% (ii) Lowering the capital conservation buffer from 3% to 1.5% (iii) Revising provisioning and classification rules for specific loan categories (iv) Steps to facilitate and lower the cost of mobile payments.	No measures.
Guinea	A National Emergency Preparedness and Response Plan for the COVID-19 outbreak was prepared, with the support of international development partners. Key measures focus on: (i) Strengthening surveillance at ports of entry (ii) Reinforcing capacity for COVID-19 detection (iii) Increasing the number of quarantine centers (iv) Expanding treatment facilities and acquiring needed medical equipment (v) Conducting a communication campaign.	No measures.	No measures.
Guinea- Bissau	No measures.	Measures announced at the level of the BCEAO (Central Bank of West African States): (i) Provision of additional liquidity to banks (ii) Extending the collateral framework (iii) Setting up a framework with the banking system to support firms with repayment difficulties (iv) Increasing the amount of concessional loans to finance urgent investment and equipment expenses (v) Communicating on the special program for refinancing bank credits granted to small and medium-size enterprises (vi) Initiating negotiations with firms issuing electronic money to encourage its usage (vii) Ensuring adequate provision of banknotes for satisfactory ATM operation.	No measures.

COUNTRY	FISCAL	MONETARY AND MACRO-FINANCIAL	EXCHANGE RATE AND BOP
Kenya	The government has earmarked funds for additional health expenditure, including enhanced surveillance, laboratory services, isolation units, equipment, supplies, and communication. The government has also earmarked funds for expediting payments of existing obligations to maintain cash flow for businesses during the crisis. Given lower revenues due to decreased economic activity and the need to accommodate emergency spending, the government is currently reassessing the budget deficit target for FY 2019/20.	The central bank: (i) Lowered its policy rate by 100 bps to 7.25% (ii) Lowered banks' cash reserve ratio by 100 bps to 4.25% (iii) Increased the maximum tenor of repurchase agreements from 28 to 91 days (iv) Announced flexibility to banks regarding loan classification and provisioning for loans (v) Encouraged banks to extend flexibility to borrowers' loan terms based in pandemic-related circumstances (vi) Encouraged the waiving or reducing of charges on mobile money transactions to disincentivize the use of cash.	No measures.
Lesotho	The government internally decided to allocate M700 million (about US$40 million) from the FY2020/21 budget. It is also identifying financing sources to maintain fiscal sustainability and finance expenditures related to COVID-19.	Following an extraordinary meeting of the Monetary Policy Committee, the Central Bank of Lesotho (CBL) announced (i) An increase of the net international reserves target floor from US$630 million to US$660 million (ii) A reduction of the CBL policy rate by 100 basis points, from 6.25% to 5.25%.	No measures.
Liberia	The authorities prepared a COVID-19 preparedness plan in conjunction with the donor community. The draft is still evolving. The World Bank has to date approved US$1.5 million in financing (which is yet to be utilized). Areas of concentration under the plan include support to health care workers, purchase and rehabilitation of health care equipment, procurement of drugs and other medical supplies, deployment of surge staff to contact tracing activities, border areas, rapid response teams, training of responders, planning, communications and information sharing, staffing and equipping of laboratories, and logistical and supply support.	No measures.	No measures.
Madagascar	In coordination with other development partners, the country will have a negative budget impact estimated at $300 million. It is complementary to the IMF RCF ($170 million), AFD ($15 million), AfDB (TBC), and EU (TBC). Measures are being taken to increase health spending, help the most vulnerable, support the private sector, and preserve the stability of the financial sector. Key measures include (i) Increased spending on epidemic prevention and control (ii) Cash transfers and in-kind necessities to the poorest and those unemployed (iii) Tax relief, suspension of government fees, and waived social contributions.	The central bank provided monetary policy support and acted to safeguard financial stability, by providing MGA180 billion (about 0.3% of GDP) in additional liquidity to the banking system, to allow banks to defer delayed payments on existing loans and increase lending to businesses.	The authorities are maintaining the flexible exchange rate regime. The exchange rate depreciated by less than 1% since last month.

COUNTRY	FISCAL	MONETARY AND MACRO-FINANCIAL	EXCHANGE RATE AND BOP
Malawi	The government prepared a US$20.8 million response plan focused on health sector–related expenditures: i) Preparedness activities across all pillars of response ii) Mobilizing and pre-positioning medical, screening, and prevention materials iii) Building capacity, training health workers, and establishing treatment centers iv) Raising public awareness and community engagement among workers at points of entry v) Screening for coronavirus.	No measures.	No measures.
Mali	The government prepared a contingency plan to prevent the spread of COVID-19 and strengthen its medical care capacity (with WHO), costed at CFAF 6.3 billion (0.06% of GDP). At the regional level, the Council of Finance Ministers of the WAEMU has committed to undertake necessary steps to mitigate the adverse economic effects of the virus, although no specific measures have been announced yet.	Measures announced at the level of the BCEAO (Central Bank of West African States): (i) Provision of additional liquidity to banks (ii) Extending the collateral framework (iii) Setting up a framework with the banking system to support firms with repayment difficulties (iv) Increasing the amount of concessional loans to finance urgent investment and equipment expenses (v) Communicating on the special program for refinancing bank credits granted to small and medium-size enterprises (vi) Initiating negotiations with firms issuing electronic money to encourage its usage (vii) Ensuring adequate provision of banknotes for satisfactory ATM operation.	No measures.
Mauritania	The Ministry of Health prepared a $10 million (0.13% of GDP) short-term response plan to contain the spread of COVID-19. The plan includes the procurement of medical supplies and equipment as well as the recruitment of additional medical staff. The government is expected to announce soon a large set of measures to address the pandemic and support the population and the economy, including financial assistance to negatively impacted people and businesses.	The central bank has taken a set of measures to support the financing of the economy, including: a reduction of the policy rate from 6.5% to 5%, a reduction of the marginal lending rate from 9% to 6.5%, and a decrease of the reserve requirement ratio from 7% to 5%.	No measures.

COUNTRY	FISCAL	MONETARY AND MACRO-FINANCIAL	EXCHANGE RATE AND BOP
Mauritius	The country's fiscal response will rely heavily on external financing from development partners (WB, IMF, AFD, AfDB). Expenditure is also being re-prioritized. The authorities have announced plans to increase general public health spending by Rs 208 million (0.04% of GDP), with half already disbursed. A range of other fiscal support measures include an additional Rs 4 billion (0.8% of GDP) in spending/financing. The State Investment Corporation will raise Rs 2.7 billion (0.5% of GDP) to make equity investments in troubled firms. There will be financing available for small and medium-size enterprises. The Development Bank of Mauritius will give Rs 200 million (0.04% of GDP) in credit to firms short on cash. Affected firms will receive extra tax deductions. All labor contracts set to expire this year are extended through December 3, 2020. The government will also introduce a Wage Support Scheme to limit the socioeconomic impact of COVID-19 by providing financial support to employees who would become unemployed on a temporary basis.	The Bank of Mauritius (BOM) reduced the key repo rate from 3.35% to 2.85%. The BOM also adopted a set of measures focused on economic operators that are being directly impacted by COVID-19, including i) Reduction of the cash reserve ratio from 9% to 8% ii) Special relief amount of Rs 5 billion (1% of GDP) for affected firms to be administered via the commercial banks to meet operators' cash flow and working capital requirements iii) For commercial banks, a moratorium of six months on capital repayment for existing loans iv) Easing supervisory guidelines on handling credit impairments v) Rs 5 billion (1% of GDP) of 2.5% two-year BOM bonds, which will be made available to retail investors vi) Support to households by a six-month moratorium on household loans at commercial banks, while BOM will bear interest payments for households with the lowest income vii) Special Foreign Currency (US$) Line of Credit ($300 million) for targeting operators that have foreign currency earnings, including small and medium-size enterprises viii) Swap arrangement to support import-oriented businesses (initial amount $100 million) ix) Waiving ATM fees during the national confinement period.	The central bank has maintained the flexible exchange rate regime and intervened modestly in the foreign exchange market to reduce volatility and provide FX liquidity to the economy.
Mozambique	The government has increased the budget allocation for health, from about MT 2 billion (about 0.2% of GDP) to about MT 3.3 billion (0.3% of GDP). In addition, the Minister of Finance asked for US$700 million from partners to face the impact of the pandemic.	To ease liquidity conditions, the central bank reduced reserve requirements by 150 basis points for foreign currency and domestic currency deposits, 11.5% and 34.5%, respectively. It announced measures to support financial markets and encourage prudent loan restructuring by: (i) Introducing a foreign currency credit line for institutions participating in the Interbank Foreign Exchange Market, in the amount of US$500 million, for a period of nine months (ii) Waiving the constitution of additional provisions by credit institutions and financial companies in cases of renegotiations of the terms and conditions of the loans, before their maturity, for clients affected by the pandemic, until December 31.	In line with the flexible exchange rate regime, the metical has been allowed to adjust and has depreciated since early March 2020.
Namibia	To support households coping with reduced income, increased health-related spending, and other hardships due to the virus outbreak, measures include a one-off (N$750) Emergency Income Grant paid to employees who have lost their jobs due to the pandemic and its fallout. To complement this measure, the government will provide a tax-backed loan scheme for tax registered and tax-paying (PAYE) employees and self-employed individuals who have lost income or part thereof. Finally, the government will subsidize water during lockdowns to ensure that all water points remain open.	The central bank reduced the policy rate by 100 bps to 5.25%.	No measures.

COUNTRY	FISCAL	MONETARY AND MACRO-FINANCIAL	EXCHANGE RATE AND BOP
Niger	A COVID-19 response plan has been formulated, focusing on containment and prevention, at an initial cost of US$2.4 million (0.02% of GDP).	Measures announced at the level of the BCEAO (Central Bank of West African States): (i) Provision of additional liquidity to banks (ii) Extending the collateral framework (iii) Setting up a framework with the banking system to support firms with repayment difficulties (iv) Increasing the amount of concessional loans to finance urgent investment and equipment expenses (v) Communicating on the special program for refinancing bank credits granted to small and medium-size enterprises (vi) Initiating negotiations with firms issuing electronic money to encourage its usage (vii) Ensuring adequate provision of banknotes for satisfactory ATM operation.	No measures.
Nigeria	Contingency funds of N984 million ($2.7 million) have been released to Nigeria's Center for Disease Control, and an additional N6.5 billion ($18 million) is planned. A fiscal stimulus package to provide relief for taxpayers and incentivize employers to retain and recruit staff during the downturn is being designed. Import duty waivers for pharmaceutical firms will be introduced. Regulated fuel prices have been reduced, and an automatic fuel price formula introduced to ensure that fuel subsidies are eliminated. The World Bank is preparing additional financing of around US$500 million to US$700 million for the State Fiscal Transparency Accountability and Sustainability, to provide quick-disbursing financing to the states to support their budgets. The states rely heavily on transfers from the Federation Account to finance their budgets, and with the fall in oil prices and corresponding fall in inflows into the Federation Account, the transfers to states are projected to fall precipitously.	The Central Bank of Nigeria (CBN) maintained its current monetary policy rate in March but introduced additional measures, including (i) Reducing interest rates on all applicable CBN interventions from 9% to 5% and introducing a one-year moratorium on CBN intervention facilities (ii) Creating an N50 billion ($139 million) targeted credit facility (iii) Liquidity injection of N3.6 trillion (2.4% of GDP) into the banking system, including N100 billion to support the health sector, N2 trillion to the manufacturing sector, and N1.5 trillion to the real sector to impacted industries. Regulatory forbearance was also introduced to restructure loans in impacted sectors.	The official exchange rate has been adjusted by 15%, with an ongoing unification of the various exchange rates under the investors and exporters (I&E) window, Bureau de Change, and retail and wholesale windows. The authorities committed to let the I&E rate move in line with market forces. A few pharmaceutical companies have been identified to ensure they can receive FX and naira funding.
Rwanda	Containment of COVID-19, including immediate investments in health systems and mitigating the social impact of the public health crisis, will require substantial financing. Under the latest estimates, the government's additional financing needs will rise to 3.6% of GDP amid an expected decline in tax revenues. Public debt will reach 65% of GDP.	To mitigate the possibility of price gouging during the shutdown period, the government implemented fixed prices on food goods across the nation. The measure also helps stabilize food prices, which increased over 20% across the nation this past year. Alongside the fixed prices, the government also capped the amount of each product an individual can buy each day. According to sources on the ground, Rwandans are afraid that they will not be paid their normal salaries during the country lockdown—especially impacting those who live paycheck to paycheck and may not have the means to feed their families during this shutdown.	N/A
São Tomé and Príncipe	The drop in tourist activity in São Tomé and Príncipe, as a result of border closures and flight cancelations, is expected to lead to one of the biggest reductions in economic activity in Africa, according to estimates from the United Nations Economic Commission for Africa (UNECA). A UNECA report shows that one possible solution for the government of the archipelago is to secure a boost to the financial program that is currently in place from the IMF and debt renegotiation, given the serious imbalances in the country's economy.	Estimates show that financing needs will amount to US$28 million in 2020. For now, a package of US$2.5 million was approved for prevention, detection, and response posed by COVID-19 and to strengthen national systems for public health preparedness.	No measures.

COUNTRY	FISCAL	MONETARY AND MACRO-FINANCIAL	EXCHANGE RATE AND BOP
Senegal	The government plans to set up an emergency fund of up to FCFA 1,000 billion (7% of GDP), financed by a mix of donor contributions, voluntary donations from the private sector, and the budget. The fund will be used to support vulnerable households and firms. FCFA 50 billion will be allocated for urgent food aid. The government intends to adopt tax measures, providing some general tax relief and targeted support to the most affected sectors (hotels, restaurants, transport, and culture). A strategic plan to fight against COVID-19 is being implemented to i) Enhance testing and treatment capacity ii) Strengthen preventive measures iii) Intensify communication. Its implementation is expected to cost about FCFA 70 billion (0.5% of GDP).	Measures announced at the level of the BCEAO (Central Bank of West African States): (i) Provision of additional liquidity to banks (ii) Extending the collateral framework (iii) Setting up a framework with the banking system to support firms with repayment difficulties (iv) Increasing the amount of concessional loans to finance urgent investment and equipment expenses (v) Communicating on the special program for refinancing bank credits granted to small and medium-size enterprises (vi) Initiating negotiations with firms issuing electronic money to encourage its usage (vii) Ensuring adequate provision of banknotes for satisfactory ATM operation.	No measures.
Seychelles	Under a benign baseline scenario, GDP is expected to contract 11%. To mitigate the effects, the government has announced a measure to subsidize wages for companies facing distress. As expenditure is being re-prioritized, the government is working out the financing of this stimulus measure, which will rely heavily on external financing from development partners (WB, IMF, and potentially bilateral donors).	The Central Bank of Seychelles (CBS) reduced the policy rate by 100 bps to 4%. In addition, it announced that a credit facility of approximately $36 million will be set up to assist commercial banks with emergency relief measures to assist businesses and individuals. The CBS also announced that commercial banks, the Development Bank of Seychelles (DBS), and the Seychelles Credit Union have agreed to consider a moratorium of six months on the repayment of principal and interest on loans, to assist businesses in impacted sectors. The six-month moratorium may also apply to individuals. Through its communication, the CBS reassured that it will continue to monitor potential market stress and any emerging risks to the financial sector and the economy, and that it stands ready to take appropriate actions to ensure that the local banking system remains financially and operationally resilient to support the economy. The macroeconomic framework is adequate, as debt (56% of GDP) has been on a consistent downward trajectory since 2008/09, thanks to fiscal discipline supported by a (non-disbursing) IMF program.	No measures.
Sierra Leone	The government is developing a package of measures for business support: (i) Provide tax deferments to importers and manufacturers of locally consumed goods, estimated at 3% of total projected revenue loss (ii) Provide a special loan facility (local and foreign currency) to businesses at concessional interest rates (iii) De-risk lending through guarantees to small and medium-size enterprises (iv) Negotiate with commercial banks to suspend interest to small and medium-size enterprises in the tourism sectors (v) Commence the National Micro-Credit Scheme	The central bank decided to: (i) Reduce the monetary policy rate (mostly signaling) by 150 bps, from 16.5% to 15% (ii) Create a special credit facility (Le 500 billion) to support production, procurement, and distribution of essential goods (iii) Extend the reserve requirement maintenance period from 14 to 28 days to ease tight liquidity. Business support measures include (i) Support the private sector for the importation of essential commodities (ii) Establish and maintain a stock and price monitoring system for essential commodities.	The central bank announced its intention to provide FX resources to ensure the importation of essential goods (list of qualifying goods yet to be published). The exchange rate has been allowed to adjust.
Somalia	No measures.	No measures.	No measures.

COUNTRY	FISCAL	MONETARY AND MACRO-FINANCIAL	EXCHANGE RATE AND BOP
South Africa	The government will assist companies facing distress, through the Unemployment Insurance Fund and special programs from the Industrial Development Corporation. Within the realm of the budget, workers with an income below a certain threshold will receive a small monthly payment during the next four months. Funds will be available to assist small and medium-size enterprises under stress, mainly in the tourism and hospitality sectors. Allocations will also be made to a solidarity fund to help combat the spread of the virus, and it will be created with the assistance of private contributions. On the tax front, the revenue administration will accelerate reimbursements and tax credits and allow small and medium-size enterprises to defer certain tax liabilities. The authorities have released partial cost estimates for the measures, so far amounting to ZAR 12 billion (0.2% of GDP). The government is working on additional support measures to be presented to parliament.	The central bank reduced the policy rate by 100 bps, to 5.25%. Additionally, it announced measures to ease liquidity conditions by: (i) Increasing the number of repo auctions to two to provide intraday liquidity support to clearing banks at the policy rate (ii) Reducing the upper and lower limits of the standing facility to lend at the repo rate and borrow at the repo rate less 200 bps (iii) Raising the size of the main weekly refinancing operations as needed (iv) The government announced the launch of a unified approach to enable banks to provide debt relief to borrowers.	The central bank announced that it will continue its longstanding practice of not intervening in the foreign exchange market.
South Sudan, Republic of	No measures.	No measures.	No measures.
Sudan	The government has prepared a Multi-hazard Emergency Health Preparedness Plan guided by the WHO, which identifies priority areas and estimates the needed budget to carry out these activities. According to the plan, the financial need to cope with COVID-19 is about $82 million. So far, the domestic private sector has pledged to contribute $2 million to help the government.	No measures.	No measures.
Tanzania	The Government of Tanzania enhanced preparedness and its containment capacity, including measures to strengthen detection and surveillance capacity at points of entry, such as airports and border-crossing sites, and training of medical staff on case management, risk communication, and community engagement. The plan focuses on critical priorities and amounts to US$77 million. The government has provided initial resources for its financing and is working with development partners to secure more financing.	No measures.	No measures.
The Gambia	The authorities have prepared a US$9 million COVID-19 action plan for which they are seeking grant financing, given the country's debt situation. The government has also reallocated 500 million dalasi (0.6% of GDP) from the current budget to the Ministry of Health and other relevant public entities to complement the support already received from partners to prevent and control the spread of the COVID-19 outbreak.	Domestic financial conditions have tightened, with the average yield on the most used 364-day T-bills increasing to 11.4% (400 bps higher than at end-2019). To ease liquidity conditions, the central bank reduced its monetary policy rate by 50 basis points at end-February 2020, to 12%, and increased its standing deposit facility rate by the same margin to 3%. It is also actively monitoring the situation and is in close communication with banks and ready to respond to the situation as inflationary pressures warrant. Further measures are under consideration to provide emergency liquidity support together with increased intensity and frequency of supervision to address any financial stability concerns.	No measures.

COUNTRY	FISCAL	MONETARY AND MACRO-FINANCIAL	EXCHANGE RATE AND BOP
Togo	The authorities announced an action plan heavily reliant on development partners' financing. The overall financing need is estimated at about CFAF 70 billion (about $130 million, or 2% of GDP). The immediate and direct costs of this plan are estimated at CFAF 20 billion (about $35 million, or 0.6% of GDP), with a CFAF 2 billion self-funding. The authorities also intend to spend CFAF 50 billion (about $95 million or 1.4% of GDP) to improve key health infrastructure to strengthen resilience against pandemics and chronic diseases.	Measures announced at the level of the BCEAO (Central Bank of West African States): (i) Provision of additional liquidity to banks (ii) Extending the collateral framework (iii) Setting up a framework with the banking system to support firms with repayment difficulties (iv) Increasing the amount of concessional loans to finance urgent investment and equipment expenses (v) Communicating on the special program for refinancing bank credits granted to small and medium-size enterprises (vi) Initiating negotiations with firms issuing electronic money to encourage its usage (vii) Ensuring adequate provision of banknotes for satisfactory ATM operation.	No measures.
Uganda	The authorities have used part of their Contingency Fund in the FY2019/20 budget to finance approximately one-fifth of the Ministry of Health Preparedness and Response Plan from January to June 2020 (about US$1.3 million from a total of US$7 million). They are working closely with the private sector and other stakeholders and will suggest support measures, which are likely to include recapitalizing the Uganda Development Bank so it can provide financing for manufacturing and import substitution. The Uganda Revenue Authority has granted an extension on tax-paying deadlines. The government will also increase health expenditure and is mobilizing external support.	The Bank of Uganda (BoU) issued a statement listing the following measures: (i) BoU's commitment to provide exceptional liquidity assistance for a period of up to one year to financial institutions that might need it (ii) Ensuring that the contingency plans of the supervised financial institutions guarantee the safety of customers and staff (iii) Putting in place a mechanism to minimize the likelihood of sound businesses going into insolvency due to lack of credit (iv) Waiving limitations on restructuring of credit facilities at financial institutions that may be at risk of going into distress (v) Working with mobile money providers and commercial banks to ensure they reduce charges on mobile money transactions and other digital payment charges.	Bank of Uganda has announced that it stands ready to intervene in the foreign exchange market to smooth out excess volatility of the exchange rate.
Zambia	The government's response has largely focused on health intervention measures. The government set up an Epidemic Preparedness Fund under the Ministry of Health, amounting to K57 million, or around $3.3 million (0.02% of GDP) and a COVID-19 contingency and response plan (costed at K659 million, or around $38 million). Given the constrained fiscal space, the authorities introduced several fiscal measures to mitigate the economic and social impact of the crisis, including payment of domestic arrears; allowance of VAT claims on imported spare parts, lubricants, and stationery; suspension of import duties on copper concentrates in the mining sector; and suspension of export duties on precious metals and crocodile skin.	Financial sector measures have so far focused on promoting mobile money and minimizing cash transactions, including waiving fees for transactions below a threshold; relaxing limits on single/daily transactions for individuals, small-scale farmers, and enterprises, and removal of transaction limits for corporate wallets; and reducing interbank payment processing fees. The authorities also plan to issue a regulatory directive aimed at encouraging financial service providers to provide relief to the private sector and facilitate long-term lending.	No measures.
Zimbabwe	The authorities' initial requirements to fight COVID-19 stood at US$26.4 million, targeting prevention and control of the disease, including awareness campaigns.	The country returned to the multicurrency system. It reduced the bank policy rate from 35% to 25%, reduced the statutory reserve ratio from 5% to 4.5%, And increased the private sector lending facility from ZW$1 billion to ZW$2.5 billion.	Moved from a managed floating exchange rate system to a fixed exchange rate management system.

Appendix

TABLE A.1: Country Classification by Resource Abundance in Sub-Saharan Africa

Resource-rich countries		Non-resource-rich countries		
Oil	Metals & minerals			
Angola	Botswana	Benin	Gambia, The	São Tomé and Príncipe
Chad	Congo, Dem. Rep.	Burkina Faso	Ghana	Senegal
Congo, Rep.	Guinea	Burundi	Guinea-Bissau	Seychelles
Equatorial Guinea	Liberia	Cabo Verde	Kenya	Somalia
Gabon	Mauritania	Cameroon	Lesotho	Sudan
Nigeria	Namibia	Central African Republic	Madagascar	Tanzania
South Sudan	Niger	Comoros	Malawi	Togo
	South Africa	Côte d'Ivoire	Mali	Uganda
	Sierra Leone	Eritrea	Mauritius	Zimbabwe
	Zambia	Eswatini	Mozambique	
		Ethiopia	Rwanda	

Note: Resource-rich countries are those with rents from natural resources (excluding forests) that exceed 10 percent of gross domestic product.

TABLE A.2: Country Classification by Income in Sub-Saharan Africa

Low-income countries		Lower-middle-income countries	Upper-middle-income countries	Higher-income countries
Benin	Malawi	Angola	Botswana	Seychelles
Burkina Faso	Mali	Cabo Verde	Equatorial Guinea	
Burundi	Mozambique	Cameroon	Gabon	
Central African Republic	Niger	Congo, Rep.	Mauritius	
Chad	Rwanda	Côte d'Ivoire	Namibia	
Comoros	Senegal	Eswatini	South Africa	
Congo, Dem. Rep.	Sierra Leone	Ghana		
Eritrea	Somalia	Kenya		
Ethiopia	South Sudan	Lesotho		
Gambia, The	Tanzania	Mauritania		
Guinea	Togo	Nigeria		
Guinea-Bissau	Uganda	São Tomé and Príncipe		
Liberia	Zimbabwe	Sudan		
Madagascar		Zambia		

Note: The list is from the World Bank list of economies, June 2019.

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