Africa's Pulse

APRIL 2022 | VOLUME 25

AN ANALYSIS OF ISSUES SHAPING AFRICA'S ECONOMIC FUTURE

BOOSTING RESILIENCE: THE FUTURE OF SOCIAL PROTECTION IN AFRICA

WORLD BANK GROUP

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

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Executive Summary

- The growth recovery of the global economy is losing steam as it faces a series of new, multiple, and covariate shocks. As economies started lifting coronavirus constraints, pent-up demand and constrained supply responses led to a broad-based increase in commodity prices. Rising food and energy prices fueled headline inflation, thus signaling the increasing likelihood of advanced economies withdrawing the massive policy stimulus deployed at the onset of the COVID-19 pandemic. The Russian invasion of Ukraine adds to the existing headwinds facing the global recovery by further disrupting supply chains and increasing international prices of commodities—particularly food staples, fertilizers, oil, and gas. These forces are weighing on economic activity and leading to additional inflationary pressures, thus posing challenges to the conduct of monetary policy among central banks worldwide.

Sub-Saharan Africa's Recovery from the Pandemic Has Decelerated Amid High Volatility and Uncertainty

- Economic growth in the region is estimated at 4 percent in 2021, 0.7 percentage point higher than the forecast of the October 2021 *Africa's Pulse*, and up from a contraction in economic activity of 2 percent in 2020. The upward revision of growth in 2021 reflects growth upgrades of 1.2 and 0.3 percentage points for Nigeria and South Africa, respectively. The recovery in 2021 was supported by the recovery in global trade, high commodity prices, and the lifting of coronavirus restrictions that had been imposed to contain the spread of the different waves of the pandemic. Private consumption and, to a lesser extent, gross fixed investment contributed to the recovery from the expenditure side, while net exports held back the recovery. The upturn was also buoyed by the service sector, while weather conditions favored agriculture from the production side.

- Scarring effects induced by the COVID-19 pandemic combined with climate-related issues present long-term risks to the outlook of Sub-Saharan African economies, constraining the region from reaching the twin goals of ending poverty and boosting shared prosperity. While potential output in advanced economies is expected to revert to its pre-pandemic trend in 2022, it will be down by 4.2 percent in Sub-Saharan Africa. The effects of the pandemic on human capital associated with losses of years of schooling in many countries will take years to recover. Elevated debt levels, limited fiscal and monetary space, and various shocks from the global economy constitute obstacles for the Sub-Saharan African countries to achieve the twin goals.

- In Sub-Saharan Africa, the economy is struggling to pick up momentum amid a slowdown in global economic activity, continued supply constraints, outbreaks of new coronavirus variants, high inflation, and rising financial risks due to high and increasingly vulnerable debt levels. Economic growth in the region is expected to decelerate in 2022 amid a global environment with multiple (and new) shocks, high volatility, and uncertainty. The economy is set to expand by 3.6 percent in 2022, down from 4 percent in 2021 but still 0.1 percentage point higher than the forecast of the October 2021 *Africa's Pulse*.

- Sub-Saharan Africa was already facing multiple challenges from the second half of 2021, including the emergence of new variants of the pandemic (namely, Delta and Omicron), global inflation, supply disruptions, and climate shocks. The invasion of Ukraine compounds the factors holding back the recovery in the region. Global commodity prices have continued increasing across the board, although at a faster pace since the onset of the hostilities between the Russian Federation and Ukraine. As most commodities are produced (as well as imported) in the region, a broad-based increase in commodity prices would entail countervailing forces that might render mute the impact on the terms of trade of some African economies. Finally, lockdowns imposed in Shanghai as well as in key manufacturing hubs and agricultural provinces in China could aggravate supply chain disruptions, cause food shortages, raise the price of agricultural products, and restrict global manufacturing trade.

- The war in Ukraine is likely to impact Sub-Saharan African economies through a series of direct and indirect channels, including direct trade linkages; commodity prices; higher food, fuel, and headline inflation; tightening of global financial conditions; and reduced foreign financing flows into the region. Given the sources of growth in the region and the nature of economic linkages with Russia and Ukraine, the war in Ukraine might have a marginal impact on economic growth and overall poverty—as it is affecting mostly the urban poor and vulnerable people living just above the poverty line. Its largest impact is on the increasing likelihood of civil strife as a result of food- and energy-fueled inflation amid an environment of heightened political instability. Overall trade linkages in the region with Russia and Ukraine are, on average, small—with some exceptions (the Republic of Congo, The Gambia, Togo, and Sudan). However, global trade disruptions are affecting not only oil and gas prices, but also the prices of food staples (especially cereals and edible oils) and fertilizers. Soaring wheat prices are affecting importers in the region, and especially so those dependent on imports from Russia and Ukraine (for example, the Democratic Republic of Congo, the Republic of Congo, Uganda, Ethiopia, and Mauritania). High fuel and food prices will translate into higher inflation across African countries, thus hurting the poor—notably, the urban poor. The conflict is exacerbating preexisting inflationary pressures, which may lead to central banks of advanced countries hiking policy rates earlier and at a stronger than anticipated pace at the cost of withdrawing support to a still sluggish economic recovery.

- After two years of the pandemic crisis, Sub-Saharan Africa appears to have avoided the catastrophic health scenario once predicted by experts. As of March 2022, the region has registered nearly 8 million cases of COVID-19 and more than 169,000 thousand deaths—a small fraction of the infections and fatalities registered worldwide despite the region's poor vaccination rollout. As the more transmissible but less lethal Omicron variant spread throughout the region since December 2021, authorities largely steered clear of tightening restrictions. This led to greater community mobility and a continued expansion in manufacturing and services, as captured by the Purchasing Managers' Index, during

the Omicron wave. Still, the threat of new variants should drive the push for increasing vaccination rates among African countries. As access to vaccines improves, enhancing the logistics associated with getting doses into arms and overcoming vaccine hesitancy among the population are critical.

- Economic activity in Sub-Saharan Africa is projected to grow at 3.9 percent and 4.2 percent in 2023 and 2024, respectively. A recovery in global demand is expected in 2023 as most of the shocks dragging down the global economy are expected to dissipate. Higher global growth, still favorable commodity prices, easing of austerity measures, and a more accommodative monetary policy amid falling inflation are among the factors contributing to higher growth along the forecast horizon. Furthermore, the lifting of most coronavirus restrictions across many countries, particularly China, might help alleviate global supply chain disruptions. As a result, growth will be supported by an uptick in consumption and investment, as well as faster growth in the industrial and service sectors.

- Sub-Saharan Africa's recovery is multi-speed, with wide variation across countries. The recovery of the three largest economies in the region—Nigeria, South Africa, and Angola—will continue to be sluggish. High oil prices will support growth in Nigeria and Angola. The recovery in South Africa, while benefiting from persistently high commodity prices, will continue to be held back by structural problems—including electricity shortages, transport and logistic inefficiencies, as well as labor and product market rigidities. Excluding Angola, Nigeria, and South Africa, growth is projected at 4.1 percent in 2022—higher than the growth of the region as a whole. Non-resource-rich countries are projected to be adversely affected by rising commodity prices, dragging down growth in the region. The opposite occurs with resource-rich countries whose growth would be propelled by favorable terms of trade. The war in Ukraine would further improve the economic performance of resource-rich countries (especially their extractive sector) and decelerate the economic activity of non-resource-rich countries as their import bills soar.

- As a result of supply shocks predating the war in Ukraine, emerging signs of stagflation are posing challenges to monetary policy making. Central banks in Sub-Saharan Africa are facing the dilemma of supporting a sluggish economy (at the cost of higher inflation) or combating inflation (at the cost of withdrawing support to economic activity). Monetary authorities in the region have opted for the second option. In response to the monetary policy normalization in advanced countries, especially the United States, the number of central banks hiking policy rates is on the rise. However, monetary tightening in Africa might not be effective in curbing inflation as it is primarily driven by supply shocks (commodity prices and climatic shocks), and the weak monetary transmission in countries with underdeveloped financial markets and large informal sectors.

- Sub-Saharan African countries are planning and implementing measures to contain the impact of food and fuel prices on the poor and vulnerable segments of the population—including price regulations, temporary reduction (or waiver) of value-added taxes, levies or import duties on food staples and regular household goods, and subsidy schemes, among others. Trade policy can play a key role by ensuring the free flow of food across borders in the region. Avoiding the mistakes of the past, such as export bans and other types of restrictions, is critical to prevent shortages and even higher prices. Financing these measures amid restricted fiscal space might require assistance from the international community through further concessional lending. Finally, targeted social assistance and insurance can be provided to the urban poor and the urban population at risk of falling below the poverty line to cope with these shocks.

- Tightening global financial conditions, due to policy rate increases in advanced economies, coupled with the war in Ukraine are pushing up sovereign spreads in several countries, reflecting fears about debt sustainability—with Ghana leading the way. The risk could further increase if global inflationary pressures continue growing amid the multiple shocks facing the world economy, and if the Federal Reserve Bank hikes policy rates more aggressively than anticipated. Sovereign spreads could then rise even higher, especially in countries that are in or at risk of debt distress, as well as countries with high exposure to exchange rate or interest rate risks. In 2021, countries in the region are at moderate or high risk of debt distress, and the share of countries in high risk of debt distress grew from 52.6 percent in 2020 to 60.5 percent in 2021. To address the rising risks of debt sustainability, some countries in the region implemented austerity measures; however, these actions have been insufficient to reduce debt levels.

- The existing debt relief and resolution mechanisms have been inadequate to bring down debt levels or reduce the vulnerabilities of countries that are eligible for such initiatives. Improvements are much needed to avoid a large wave of debt crisis among developing countries, particularly Sub-Saharan African countries. Some changes have been proposed by international financial institutions, such as the establishment of clear guidelines and a timeline for the treatment process, the suspension of debt service payments to official creditors for all applicants during negotiations, an assessment of the parameters and processes of comparable treatment as well as clear rules for implementation, and expansion of the eligibility criteria of the Common Framework to include lower-middle-income countries seeking debt treatment.

Accelerating the Structural Transformation Process in Sub-Saharan Africa Will Reduce the Risk of Stagflation

- The looming threat of stagflation worldwide amid a landscape of multiple new and covariate shocks emphasizes the need for African policy makers to implement policies that accelerate structural transformation through productivity-enhancing growth and creating more and better jobs. Delivering this kind of inclusive economic transformation requires implementing policies that build competitive advantages across all sectors of

the economy, strengthening the learning capacity of private and public firms, fostering market competition and contestability, and addressing economywide inefficiencies. A combination of actionable measures is needed to improve the resilience of the economy by shoring up productivity and job creation, enhancing the strength of social protection systems to combat extreme poverty and build resilience to shocks, as well as helping people invest in productive assets.

- Building resilience in agriculture will boost the productivity of African farmers, especially staple crop productivity, and reduce the risks of food insecurity. African policies should try to do no harm by avoiding past mistakes such as bans or other restrictions on food staples, and ensure the steady flow of foodstuffs across borders. Keeping food supply chains operational without breakdowns in transportation and logistics is essential. Digital solutions can be implemented to connect farmers with existing and new markets, and expand e-commerce platforms. Building resilience in food markets also includes implementing cost-effective procedures to prepare for future shocks, providing financial support for agribusiness to rebuild supply chains, and strengthening intellectual property rights to allow modern technological transfers and innovation to boost productivity growth, among others. Policies that promote competitive food markets and participation in agricultural value chains will contribute to building resilience.
- A more productive agriculture sector releases labor seeking non-agricultural employment, and industrialization represents an opportunity for job creation. It is critical to design policies that foster within-firm productivity growth, address market distortions, strengthen the participation of firms in regional and global value chains, attract foreign direct investment, and narrow infrastructure gaps. Policies that foster competitiveness across African manufacturing firms—and, thus, reduce excessive unit labor costs—are essential to attract and keep value chain–related jobs. In this context, creating jobs—especially in the formal sector—remains atop the policy priorities, and it is the best form of social protection for the population, particularly vulnerable segments.

Social Protection Reforms Need to Strengthen Economic Resilience and Shock Responsiveness

- Social safety nets in Africa play an increasingly crucial role in ensuring the economic resilience of poor and vulnerable households in the face of shocks. An increasing number of African governments are implementing social safety nets that provide cash transfers coupled with productive inclusion measures such as micro-entrepreneurship trainings, lump sum capital provision, and savings facilitation. The evidence on the effectiveness of these programs is growing rapidly, demonstrating the improved ability of households to withstand shocks by protecting consumption, diversifying livelihoods to off-farm labor, and strengthening coping mechanisms.

- Beyond safety nets, social insurance and labor market programs also contribute to economic resilience by protecting informal workers. As part of the diversification of policy objectives, governments have started to broaden their focus beyond the rural poor by designing interventions for urban informal workers. These include innovative social insurance and savings programs that allow for flexible contributions and fiscal incentives to match contributions, among others. Many countries have introduced labor market programs, including temporary wage subsidies paid to employers, that improve the resilience of firms and their capacity to cope during the economic downturn triggered by crisis.

- By being "adaptive," in other words, by scaling up services to affected households in response to shocks, social safety nets are also emerging as a rapid and effective response modality. At the onset of the COVID-19 pandemic, most African countries used their safety net programs to provide emergency support to households and workers, to soften the economic and social blow of the pandemic. In many countries, such shock-responsive interventions can also be used to mitigate the impacts of other types of shocks, including climate-related ones such as droughts and floods, or due to forced displacements (within countries or across countries) linked to conflict, crisis, or natural disasters. Such an approach can offer the potential for countries to respond faster and more cost-effectively than other traditional modalities.

- However, further investments are needed. For social protection platforms to be truly effective in building resilience and improving shock response, they require policy changes and major innovation via dynamic delivery systems and shock-sensitive financing behind them. In many African countries, safety net structures are still emerging. Bringing them to their full potential will require embracing broader policy objectives to move from the traditional chronic poverty focus of social protection programs, to tackling shock vulnerability and productive inclusion. To become adaptive, safety nets must upgrade their delivery and financial systems. Rapid scalability during times of shock requires dynamic delivery systems, including foundational ID systems, social registries, and digital payment systems. Scalability also requires financing that cost-effectively provides the right amount of funding at the right time—this can be achieved via a suitable mix of disaster risk financing instruments, such as dedicated funds or insurance.

- Data will be essential. The importance of African countries gradually collecting accurate and comprehensive data covering the entire population cannot be overstated. This should include information on the welfare conditions and risks/vulnerabilities of households, and the channels through which shocks propagate. This information will need to be kept up to date to allow for appropriate responses. Data from different sources will need to be integrated, including increasing the use of nontraditional forms of data, such as remote sensing, cell phones, and social media.

- The current moment is an opportunity for African governments to embark on a bolder agenda for social protection systems that strengthen economic resilience and response to shocks. Across the continent, COVID-19 has demonstrated the critical need for shock preparedness. It has also shown the vast potential of social protection systems to use technology to provide fast emergency relief to affected households and workers at a large scale. With the exposure to shocks rising, African governments should consider further advancing on this path and fully embracing the potential of adaptive social protection.
- Social protection programs should continue building the resilience of poor and vulnerable households by supporting them in investing in productive assets and human capital. Choosing the right mix of social protection instruments (from cash transfers to public works to productive economic inclusion measures) will be paramount. Such tools can protect and enhance households' education, nutrition, and health, while allowing communities to make better use of their natural resources and promoting investments in productive assets for income-generating activities.
- Finally, making the most of the good times will enable more effective responses during rainy days. Unfortunately, financing for the sector remains scarce and heavily donor-dependent on much of the African continent. Only through predictable and adequate budgets for the sectors, made available by countercyclical fiscal policies or by contingency funds accumulated during expansionary periods, countries will build protection programs that can rapidly respond to shocks and help their citizens weather crises. Alternatively, or in addition, reallocating inefficient public spending on poorly targeted and often regressive measures such as fuel and agricultural subsidies, and widening the tax base, could contribute to creating more fiscal space for social protection policies.

Section 1: Recent Trends and Developments

1.1 GLOBAL TRENDS

Prior to the outbreak of the Russian Federation–Ukraine conflict, global growth was recovering as the wave of COVID-19 infections driven by the Omicron variant worldwide waned. In February, unemployment in the United States fell to its lowest level since March 2020, while the services Purchasing Managers' Index (PMI) jumped from 51.2 to 56.5, underpinned by a decline in new cases of COVID-19 and easing restrictions. The euro area experienced a similar increase in the services PMI, while headline inflation registered a record high of 5.8 percent year-over-year in February on the back of a 32 percent increase in energy prices. Activity in China continued to slow, reflecting continuing stress in the real estate sector alongside COVID-19 flare-ups and related lockdowns. Policy makers stepped in to address the slowdown with policy rate cuts, relaxed regulations on bank loans, and infrastructure investments.

The conflict in Ukraine has led to a marked deterioration in global sentiment, and is likely to weigh on global activity through multiple channels, including commodity and financial markets, trade and migration links, and confidence. Neighboring countries with greater direct economic linkages are likely to suffer considerably, while the impact on more distant countries will primarily be felt through higher commodity prices (especially global fuel and food prices).[1] The sanctions imposed on Russia by other countries are unprecedented in scale, and may have spillovers to the global financial system.

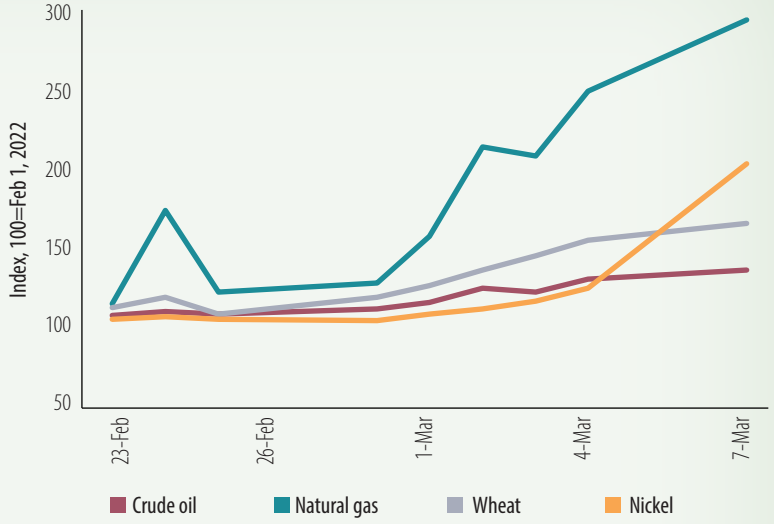
Commodity prices surged after the start of the conflict, exacerbating the already high volatility exhibited during the COVID-19 pandemic. The increase in prices was especially pronounced for commodities where Russia and Ukraine are particularly large exporters, including natural gas, coal, crude oil, wheat, aluminum, and palladium (figures 1.1 and 1.2). The increase in commodity prices comes on top of a sharp rise since the start of the year. Brent crude oil prices reached a 10-year high of $130/barrel (bbl) at the beginning of March as the United States and the United Kingdom banned Russian oil imports. Natural gas prices in Europe have increased by 260 percent since the start of the conflict amid supply uncertainty, as Europe remains heavily reliant on Russian imports of natural gas. In addition to geopolitical risk premia, the overall rise in prices has been driven by a rebounding demand for commodities as the global economy recovers. International trade disruptions and shortages of commodities may also have contributed to elevate prices. Production among OPEC+ countries has also been weaker than expected (figure 1.3). Higher energy costs have pushed up prices of other energy-intensive commodities, such as fertilizers and aluminum. Inventories of industrial commodities have fallen sharply, particularly for crude oil, natural gas, and tin. Wheat prices have increased by more than 50 percent, reaching record highs.

Russia and Ukraine account for a substantial share of imports of wheat, maize, and seed oil in numerous countries (figure 1.4). These imports may be almost entirely halted if the conflict persists. Russia is also the world's largest exporter of fertilizers and has recommended that fertilizer manufacturers halt exports, which will hinder food production elsewhere. For lower-

1 Economic activity in neighboring and distant countries may also be impacted, although to different degrees, by supply chain disruptions and financial effects as a result of the sanctions imposed on Russia.

Elevated commodity prices before the Russia-Ukraine conflict

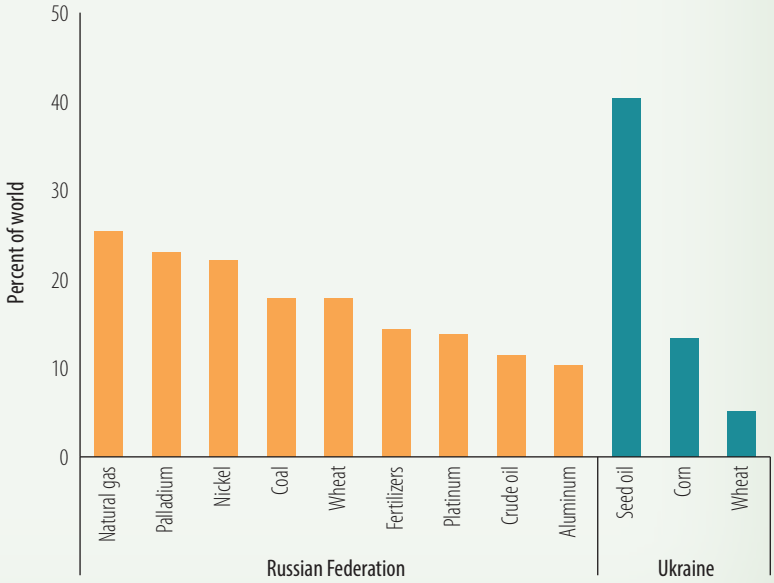
FIGURE 1.1: Commodity Prices Since the Outbreak of the Russian Federation–Ukraine Conflict



Sources: Bloomberg; World Bank.
Note: The last observation is March 7, 2022.

Importance of Russia and Ukraine as key commodity exporters

FIGURE 1.2: Russian Federation and Ukraine Commodity Exports



Sources: UN Comtrade; World Bank.
Note: Data are for 2020. Export shares for energy commodities are in volume terms; those for non-energy commodities are in value terms.

income countries, disruption to supplies as well as higher prices could cause rising food insecurity.

Inflationary pressures have been growing in many countries and are likely to worsen given the effects of Russia's invasion of Ukraine on commodity prices and supply chains (box 1.1). Logistic disruptions and airspace bans are likely to exacerbate persistent supply bottlenecks as elevated commodity prices ripple through global value chains (GVCs) and trade is rerouted across longer and more expensive routes. Trade through the Black Sea has already been disrupted, and the number of ships visiting Russian ports has fallen sharply since the end of February. Shipping costs of dry bulk materials have increased as disruptions in trade and logistics translate into higher transportation costs.

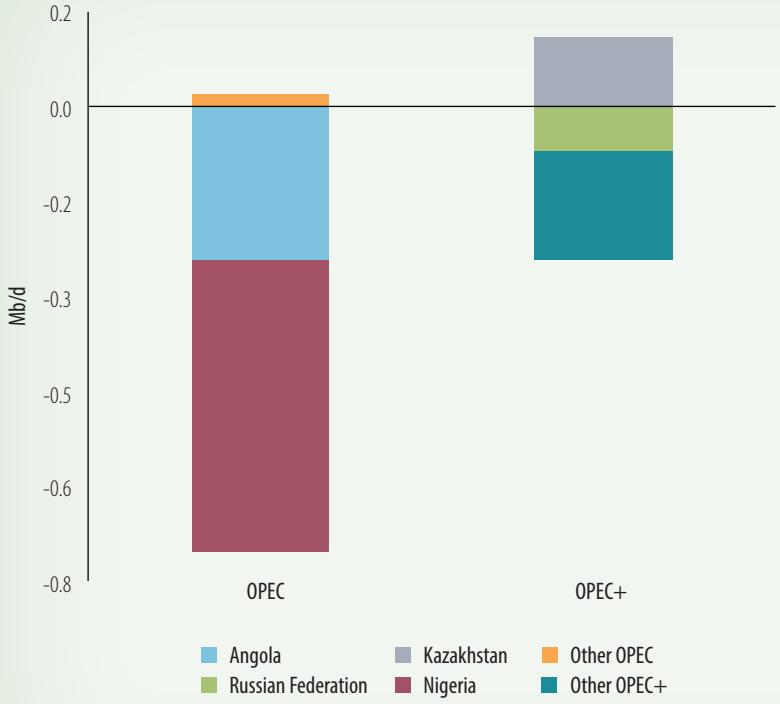
Global financial conditions tightened in March as the conflict in Ukraine soured risk appetite. Russian financial asset prices collapsed following the imposition of sanctions and capital controls, while credit default swap spreads increased sharply from mid-February in countries bordering Ukraine. The United States, the European Union, and Western allies have barred seven Russian banks from the Society for Worldwide Interbank Financial Telecommunication (SWIFT) global banking system. This ban adversely impacts the Russian economy and other countries through unfinished settlements in foreign transactions. Global equities fell sharply between mid-February and mid-March, while the dollar strengthened against a basket of major currencies amid elevated geopolitical risk. U.S.

long-term yields fell over the same period as investors sought safe havens. The healthy capitalization of European banks reduces the probability of losses on Russian assets being amplified. Nonetheless, given the degree of financial stress unfolding in the Russian economy, risks remain. For example, it is possible that underappreciated linkages to the Russian system exist via leveraged nonbank financial institutions.

Widespread lockdowns have been imposed in the key manufacturing hubs of Shenzhen, Dongguan, and Changchun, as well as the Chinese financial center of

FIGURE 1.3: OPEC and OPEC+ Production Relative to Targets

Disappointing oil production in Angola and Nigeria, below OPEC quotas.

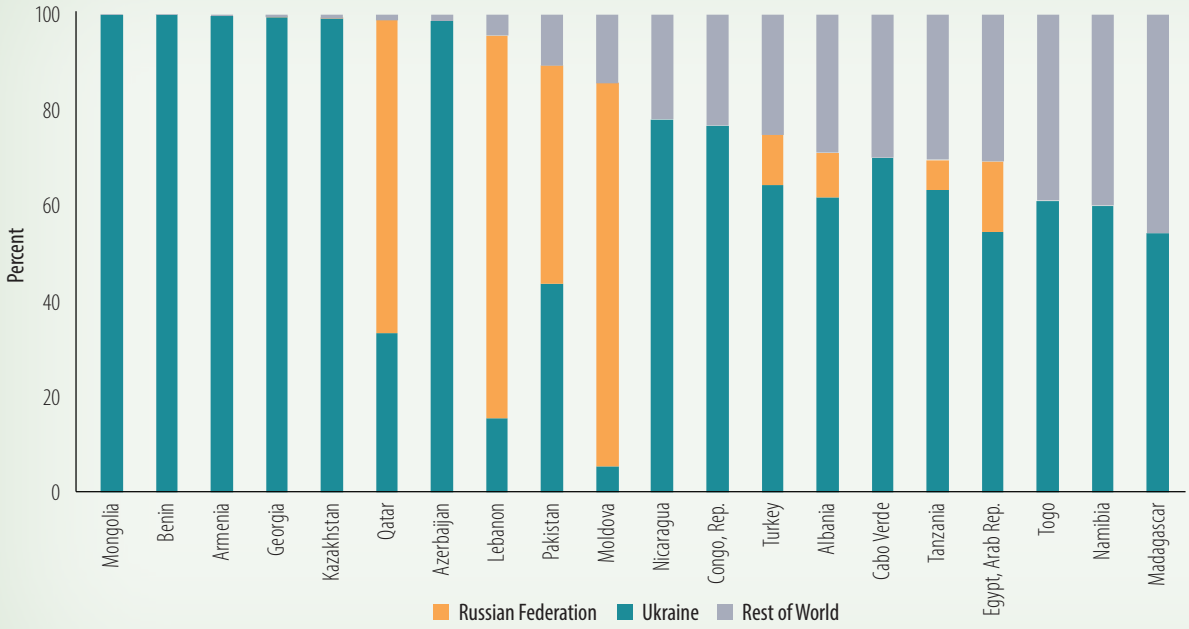


Sources: Haver Analytics; International Energy Agency; World Bank.

Note: Change in crude oil production compared to targets set by OPEC countries for December 2021. Others include Bahrain, Brunei, Malaysia, Sudan, and South Sudan. Mb/d = Million barrels per day.

FIGURE 1.4: Geographical Composition of Wheat Imports

Several developing countries are highly exposed to wheat imports from Russia and Ukraine.



Sources: United Nations Comtrade; United Nations High Commissioner for Refugees; World Bank.

Note: Data are for 2020.

Shanghai (home to the world's busiest container port) as a result of the worst COVID-19 outbreak in China since Wuhan. These lockdowns can exacerbate supply chain disruptions that could fuel (headline and core) inflation in several countries. Shenzhen, a city of 17.5 million residents in southern China, is a modern metropolis connecting Hong Kong SAR, China, and mainland China. This sub-provincial city is a key global technological hub and one of the first special economic zones in the country. Shenzhen, also known as China's Silicon Valley, is a hub for many manufacturing and high-tech industries, including Huawei, Tencent, Da-Jiang Innovations, Apple, Toyota, and Volkswagen, among others. The new lockdown imposed in Shenzhen by the government creates further shortages of high-tech and electric vehicle products; therefore, these additional supply chain disruptions can weigh on economic activity and exacerbate inflation.

BOX 1.1: The Resurgence of Inflation in Advanced Economies

The rate of Consumer Price Index (CPI) inflation has recently risen from 2.6 percent year-on-year in March 2021 to 7.5 percent year-on-year in 2022 due to volatile and higher energy prices, increasing food prices, and supply chain disruptions. Supply and demand shocks associated with the COVID-19 pandemic crisis have exacerbated the volatility in oil prices, and hence increased global inflation. The COVID-19 virus, initially discovered in December 2019, has disrupted labor availability and (global and regional) supply chains. The lockdowns imposed by governments led to the temporary suspension or slowdown of businesses (see figure 1.7 in subsection 1.3). The Purchasing Managers' Index (PMI) dropped dramatically in April 2020. This suspension and slowdown in business (especially shipping and airlines cargos) caused an excess supply of energy commodities (i.e. oils and LNG) at the beginning of the pandemic. This excess supply prompted a decline in energy prices as shown in figure B1.1.1. Oil prices started to decline in December 2019, and those prices continued to fall after January 2020 until reaching a trough in April 2020 when the world faced the strictest lockdown measures.

By then, OPEC+ producers restricted the supply of oil and LNG. Consequently, oil prices started to increase again in April 2020 and rose significantly towards June 2020 (figure B1.1.1), worsening supply chain problems. Similarly, food prices followed oil prices by decreasing from January 2020 and hitting a trough in May 2020 (figure B1.1.2). Then global food prices increased from May 2020 to the end of 2021 by about 47 percent. An increase in oil and energy prices due to strict measures associated with the pandemic also pushed up the container freight rates from China starting in June 2020 as shown in figure B1.1.3. Increasing freight rates from China, combined with a scarcity of energy (i.e. oils and LNG) and labor, have slowed distribution processes in many products, thereby raising food prices and other product prices further (figure B1.1.2).

The conflict between Ukraine and the Russian Federation is exacerbating the upward pressures in international energy and food prices and, in turn, fueling domestic inflation. For instance, Germany terminated the Nord Stream 2 gas pipeline project with Russia while additional economic sanctions are further restricting the Russian economy. As a result, imports from Russia of oil, gas, and agricultural products (including staples) will decline. If the conflict persists, disruptions in financial and commodity markets will continue worsening economic activity in energy and for importers as well as Russia. The International Energy Agency (IEA) agreed to release 60 million barrels of oil from their emergency reserves to avoid a shortfall in global oil markets and ease an increasing hike in oil prices due to the Russian invasion of Ukraine. Imports of natural gas from Russia account for almost 64 percent of total imports to the European Union.[a] The IEA predicts that the European Union will face shortfalls from Russia's anticipated supply of 140 million tons, which is more than 30 percent of the European Union's projected consumption. The European Union's current

inventory of natural gas is less than 30 percent of its storage capacity (about 21 million tons) due in large part to adverse weather conditions in 2021.[b] The European Union will need to search for alternative sources of natural gas (i.e., in North America, Africa, and Australia). Without global coordination and a shift in energy policy, competition among alternative countries for LNG could lead to higher global prices.

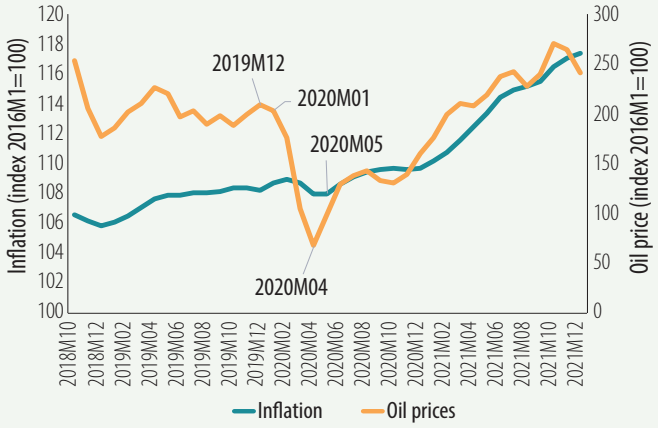
In the face of accelerating inflation, central banks in advanced countries are withdrawing policy stimulus. Some central banks have started or signaled plans to increase their policy rates to control a higher pace of increasing inflation. The Bank of England has already increased its policy rate three times since December 2021 with the aim of meeting the two percent inflation target.[c] The European Central Bank has kept its policy rate at a record low level while arguing that it will increase its policy rate sometime this year. Meanwhile, the bond buying under its 1.85 trillion euros Pandemic Emergency Purchase Program will be cut in 2022Q1 as the scheme winds down. On the other hand, bond purchases under the Asset Purchase Program will be ramped up at a monthly pace of 20 billion euros. The Federal Reserve raised its policy rate by a quarter point in the Federal Open Market Committee meetings on of March 15-16, 2022. In March, Federal Reserve officials agreed to cut up to $95 billion a month from the central bank's asset holdings as another tool to fight inflation. The Fed has committed to more frequent and/or aggressive increases in the policy rate if inflation continues to be persistent.

a. World Bank (2022a).

b. Data from U.S. Energy Information Agency (EIA).

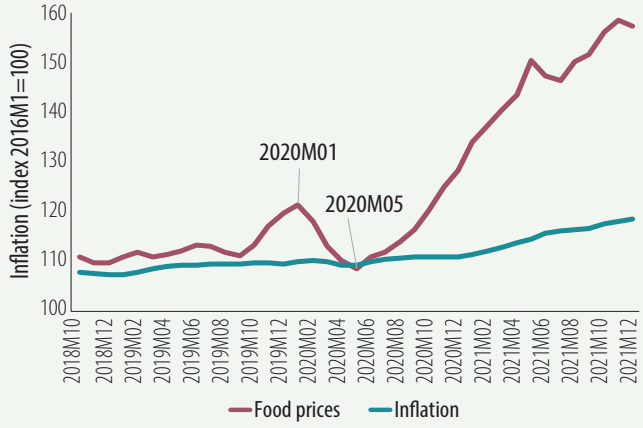
c. Its policy rate has increased by 0.15 percentage point, to 0.25 percent on December 15, 2021. The Bank of England has also voted to increase it by 0.25 percentage point in both its February 2, 2022 and March 17, 2022 meetings. The current bank rate is 0.75 percent.

FIGURE B1.1.1: U.S. CPI Inflation and International Oil Prices



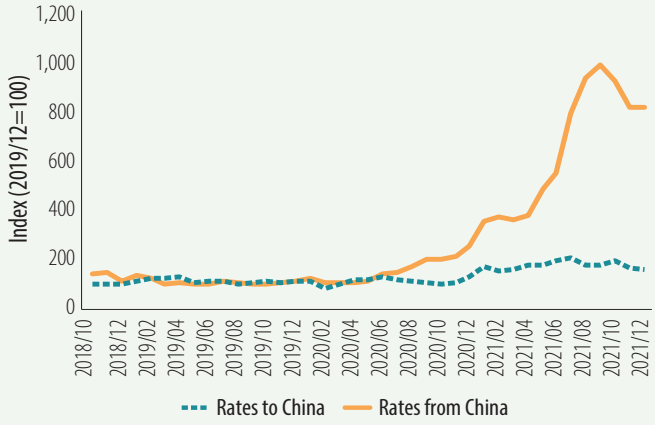
Oil prices started increasing in April 2020 and jumped in June 2020 due to OPEC+ producers' supply restrictions on oil and LNG.

FIGURE B1.1.2: U.S. CPI Inflation and FAO Food Prices



Food prices followed oil prices, declining from January 2020 and hitting a trough in May 2020.

FIGURE B1.1.3: Container Freight Rates



Increased oil and energy prices due to strict measures associated with the pandemic have pushed up container freight rates from China since June 2020.

Sources: U.S. Bureau of Labor Statistics; World Bank Commodity Outlook; Food and Agriculture Organization, and Bloomberg.

Note: Figures B1.1.1 and B1.1.2 depict the cumulative price increase of U.S. CPI, international oil prices, and the FAO Food Price Index since January 2016. Figure B1.1.3 shows the container freight rates measured by Freightos. "Rates to China" are the simple average of freight indexes from the U.S. East Coast, the U.S. West Coast, and Europe and "Rates from China" is the converse. CPI = Consumer Price Index; FAO = Food and Agriculture Organization.

Commodity Market Developments

Commodity prices surged in 2022Q1, supported by strong demand and, more recently due to the war in Ukraine; supply factors have played a role in some commodities. The price spike has been pronounced for commodities in which Russia and Ukraine play a key role in global markets, including energy commodities (natural gas, coal, and crude oil), wheat (and less so maize), fertilizers, as well as some metal commodities such as aluminum and palladium.

Energy prices experienced strong increases in 2022Q1 across the board. Crude oil prices averaged $95/bbl in 2022Q1, up from $59/bbl in the same quarter last year—prices reached $130/bbl in early March, an eight-year high. Apart from strong demand, oil prices have been affected by the war in Ukraine. Russia accounts for almost 7 million barrels a day of global exports of crude oil (or 15 percent). Its large share combined with import ban announcements by the United States and the United Kingdom contributed to the price spike. Oil prices have been supported by tight supplies, including concerns about OPEC+ production capacity. OPEC+ production was 1 million barrels per day lower than its production target during 2022Q1. Natural gas prices have also spiked, especially in Asia (which imports most of its natural gas in liquefied natural gas form) and Europe. European natural gas prices experienced a fourfold increase in 2022Q1 compared to a year ago, primarily as a result of supply constraints during the second half of 2021, which were further exacerbated by the war in Ukraine amid ongoing concerns about the reliability of natural gas supply to Europe—Russia accounts for more than one-third of European imports of natural gas. Energy prices are expected to be about 50 percent higher in 2022 (compared to 2021). In addition to the ongoing conflict in Ukraine, energy prices will be supported by the barrage of sanctions imposed on Russia, which are expected to have a lasting negative effect on Russia's oil production. Prices are expected to moderate in 2023 as production rises elsewhere, especially in the United States.

Metal prices also continued to rise in early 2022, adding to last year's gains. Iron ore, aluminum, and nickel prices saw particularly large gains (25, 20, and 15 percent higher than the previous quarter, respectively). Russia's importance in some of these markets contributed to the spike. Metal prices are expected to rise moderately in 2022 before stabilizing in 2023. The effects of the war in Ukraine are assumed to have less of a lasting impact on metals than on energy.

Agricultural prices rose 8 percent in 2022Q1. The war in Ukraine had a particularly large impact on wheat prices, which reached a high of US$560/ton in early March (up from US$350/ton in mid-February), as Russia and Ukraine collectively account for nearly one-quarter of global exports. Other food prices, including for maize and some edible oils, experienced increases as well, due to tight supplies and high input costs, especially for fertilizers (by contrast, rice prices have been remarkably stable). High energy prices, especially for natural gas and coal, exerted upward pressure due to fertilizer prices on top of the sharp rises in 2021. Agricultural prices are expected to average about 10 percent higher this year compared to 2021. They are expected to moderate in 2023 on increased supplies from the rest of the world.

1.2 COVID-19 RECENT DEVELOPMENTS

The most recent wave of the COVID-19 pandemic—led by the Omicron variant—is subsiding across countries in the world, including those in the region, although at different times and speeds. After almost two years of the pandemic crisis, Sub-Saharan Africa appears to have avoided the catastrophic health scenario that was predicted by experts.[2] Around 8 million cases of COVID-19 and more than 169,000 deaths were reported across Africa by March 20, 2022,[3] a small fraction of the infections and fatalities registered worldwide (1.7 and 2.8 percent, respectively).[4] The numbers of cases and deaths are also significantly smaller than initially predicted by public health experts and epidemiologists. For instance, early models predicted that up to 70 million Africans would be infected with COVID-19 by June 2020, with more than 3 million people dying.[5] Still, uncertainty about the spread and persistence of the virus remains, as new variants could emerge among the unvaccinated across the world—and, particularly, on the African continent. The Omicron wave may have resulted in lower death rates than the Delta wave; however, it is still important to continue surveillance of the pandemic as new variants may arise and the long-term effects from COVID-19 are being assessed.

A fourth wave of the coronavirus pandemic spread across countries in Sub-Saharan Africa in December 2021—initially in Southern Africa (South Africa, Botswana, and Namibia) and Eastern Africa. This fourth wave, led by the Omicron variant (B.1.1.529) of the coronavirus, was first discovered in Botswana and South Africa and spread more rapidly than other strains of the coronavirus. Despite the unknown long-term effects of the Omicron variant, it led to milder symptoms and lower death rates. The high transmissibility of this variant is attributed to the combination of about 50 mutations (more than any other variant so far), including more than 30 that affect its spike protein, the structure that helps the virus infiltrate cells.[6] This was reflected by the faster increase in cases during the Omicron wave compared to previous waves. For example, it took 36 days from trough to peak of infections during the fourth wave of the pandemic in Sub-Saharan Africa—as opposed to more than 50 days during the third wave led by the Delta variant. The number of cases also came down at a faster pace. About a month after reaching the peak of infections, the number of cases decreased by 66 percent during the fourth wave compared with a 21 percent decline during the third wave (figure 1.5).

The Omicron-led wave sharply increased the incidence of infections; however, it did not raise the likelihood of severe illness or death in the same fashion as the Delta-led wave did (figures 1.5 and 1.6). For example, new daily cases on a seven-day basis in Sub-Saharan Africa increased from a peak of 30,307 infections during the Delta wave to 39,935 infections during the Omicron wave. New daily deaths in the region, by contrast, were not as high during the Omicron wave (with a peak of 326 deaths on a seven-day basis) as they were during the Delta wave (with a peak of 721 deaths on a seven-day basis). This observed uncoupling of cases and deaths during the Omicron wave suggests a potential end to the emergency phase of the coronavirus pandemic.

2 These numbers need to be taken with caution as the limitations in testing capacity and surveillance in the region may have led to underestimation of the spread of COVID-19 (PERC 2021). Other assessments suggest that one in seven COVID-19 infections are being detected in Africa (WHO 2021). The country cases of Sierra Leone (Bailor Barrie et al. 2021) and Zambia (Mwananyanda et al. 2021) also show evidence of underestimation of cases and deaths.

3 The majority of cases and deaths from COVID-19 in the region were registered in East and Southern Africa, with nearly 6.9 million infections and more than 154,282 fatalities. They represent 86 and 91 percent of the cases and fatalities in the region.

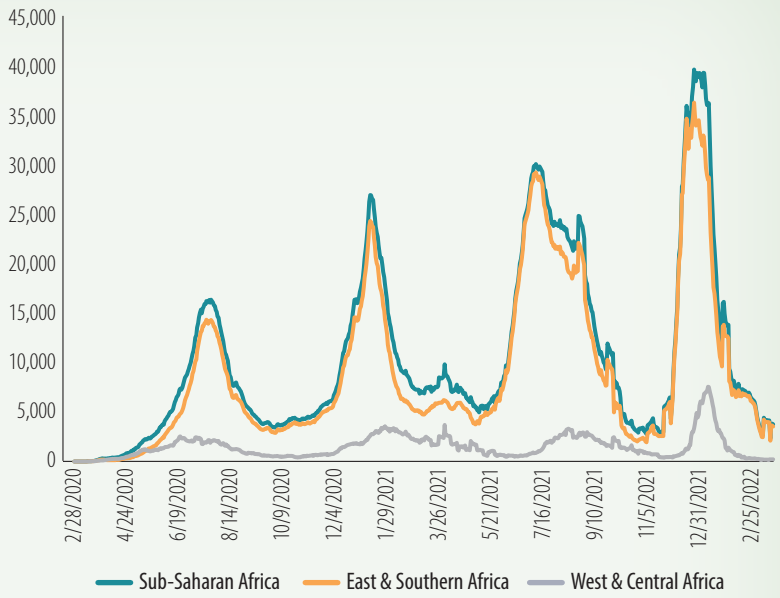
4 Excluding South Africa, the global shares of cases and deaths in the region are about 0.9 and 1.1 percent, respectively.

5 Walker et al. (2020).

6 The World Health Organization designated Omicron a "variant of concern" on November 26, 2021, thus signaling the very high global risks it posed.

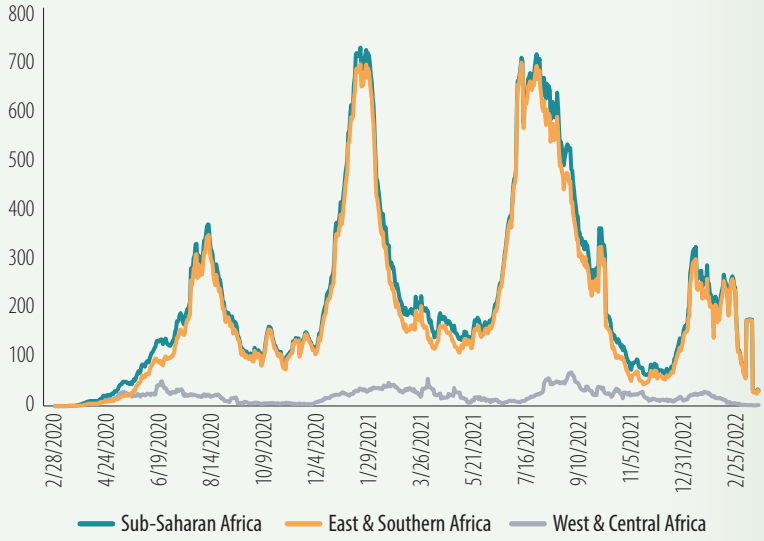
The recent Omicron wave of the coronavirus led to record infections at its peak.

FIGURE 1.5: Daily New COVID-19 Cases in Sub-Saharan Africa



Fatalities during the Omicron wave were lower than those during the other COVID-19 waves.

FIGURE 1.6: Daily New COVID-19 Deaths in Sub-Saharan Africa



Source: Our World in Data, Coronavirus Pandemic (COVID-19 Statistics).

Note: Data are as of March 20, 2022. The figures present seven-day averages of new daily cases and deaths in the region.

The same pattern of behavior is observed in East and Southern Africa (AFE) and West and Central Africa (AFW), although the levels are significantly lower in the latter subregion (figures 1.5 and 1.6). For example, the peak of daily cases (on a seven-day basis) in AFE increased from 29,444 during the Delta wave to 36,568 during the Omicron wave, while the peak of daily deaths declined from 704 to 301. In AFW, the peak of daily new cases jumped from 3,326 in the Delta wave to 7,603 in the Omicron wave, while daily new deaths dropped from 68 to 29.

The number of fatalities, hospitalizations, and intensive care unit admissions have remained low on the continent throughout the recent peak of the Omicron wave of the pandemic. This is illustrated by the case of South Africa—the country in the region with the largest number of COVID-19 cases and fatalities.[7] After its identification in late November 2021 by South African scientists, the Omicron variant spread rapidly and accounted for more than 98 percent of the cases, although the death rate from Omicron-variant infections in South Africa peaked only at 15 percent of the rate experienced when the Delta variant aggressively spread throughout the country. According to South Africa's National Institute of Communicable Diseases, 32 percent of the people who

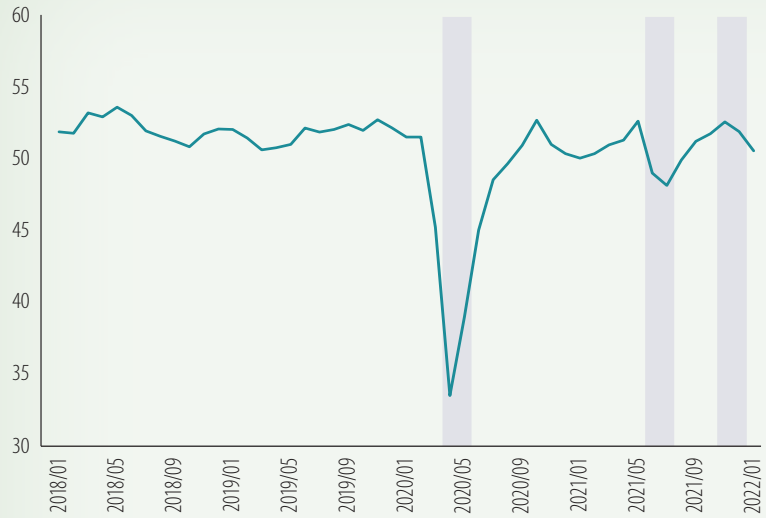
7 Experiences with cases, fatalities, and hospitalizations across Sub-Saharan African countries vary widely. In this case, we take the example of South Africa due to the availability of data on hospitalizations and cases of severe disease.

were hospitalized had severe disease during the Omicron-led wave, compared to 63 percent during the Delta-led wave. The peak number of hospitalizations during the fourth wave was nearly 60 percent of the peak during the third wave. The percentage of people in the hospital with COVID-19 who died during the Omicron wave was about 10 percent, compared to 26 percent during the Delta wave.[8]

African authorities have largely steered clear of tightening restrictions in response to the Omicron wave of the pandemic. This is clearly illustrated in recently released survey-based data that gauge business conditions in manufacturing and services. The composite PMI for selected African countries shows that market conditions pointed to expansions during the Omicron wave, as opposed to contractions during the Delta wave (mid-2021) and the initial lockdowns (April-May 2020).[9] Averaging across countries in the region with data available shows that the PMI was about 52 during the Omicron wave, compared to 48 during the Delta wave and 36 at the height of the lockdowns in 2020 (figure 1.7).[10] The contraction of economic activity during the Delta wave was mainly attributed to downturns in AFE countries—as opposed to AFW countries with available PMI data that registered an expansion. The PMI for all AFE and AFW countries registered an expansion during the Omicron wave.[11] These differences in the gauge of manufacturing and services partly reflect the greater community mobility in AFW.

FIGURE 1.7: Purchasing Managers' Composite Index in Sub-Saharan Africa

Manufacturing and services continued expanding during the Omicron wave.



Source: Haver Analytics.

Note: The graph reports the average Purchasing Managers' Index (PMI) index of the following countries: Ghana, Nigeria, Kenya, Mozambique, South Africa, Uganda, and Zambia. The monthly PMI data are seasonally adjusted, and values that exceed 50 represent an expansion in economic activity. The shaded areas represent the start of lockdowns to contain the spread of the pandemic (April-May 2020) and the periods around the peaks of the Delta (June-July 2021) and Omicron (November-December 2021) waves of the pandemic.

Community mobility in Sub-Saharan African countries also points to a smaller economic impact from the latest wave of COVID-19 infections compared to previous waves (say, Delta- and Beta-led ones). High-frequency data suggest that mobility remains strong in Sub-Saharan Africa—well above its pre-pandemic level despite the spread of the Omicron variant and (regular and/or extreme) climatic shocks (figure 1.8). For example, community mobility toward retail and recreation places (say, restaurants, cafes, shopping centers, theme parks, museums, libraries, and

8 NICD (2022).

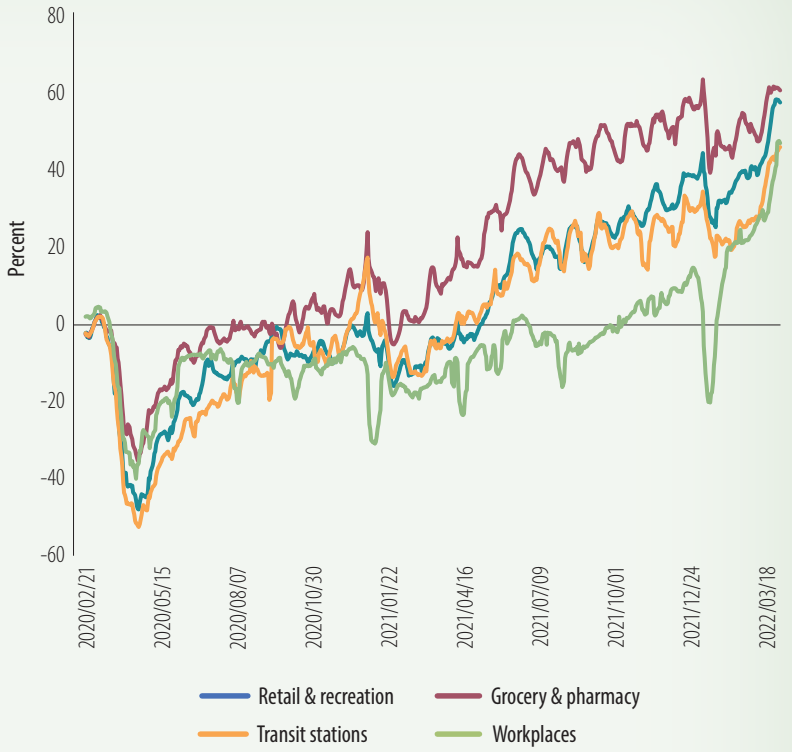
9 The group of Sub-Saharan African countries with monthly data on the composite PMI includes Ghana, Kenya, Mozambique, Nigeria, South Africa, Uganda, and Zambia.

10 PMI values above (below) 50 represent an expansion (contraction) in economic activity.

11 Moreover, the PMI values were highest for Nigeria and Kenya during the most recent wave (56.4 and 53.7, respectively, in December 2021), while they were lowest for Uganda and South Africa during the Delta-led wave (34.6 and 46.1, respectively, in July 2021).

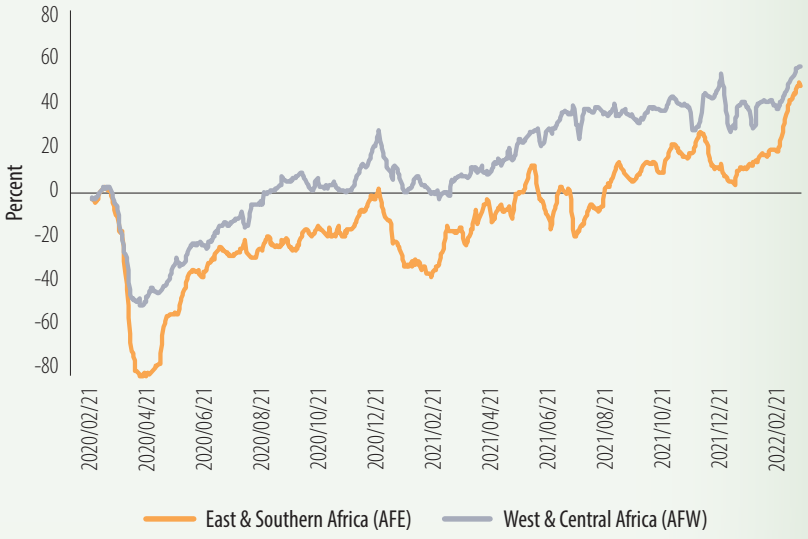
Community mobility in Sub-Saharan Africa during the Omicron wave was higher than during previous waves.

FIGURE 1.8: COVID-19 and Community Mobility in Sub-Saharan Africa (% change from baseline, seven-day average)



AFW showed greater community mobility than AFE, especially mobility to transit stations.

FIGURE 1.9: Mobility toward Transit Stations in Sub-Saharan Africa (% change from baseline, seven-day average)



Source: COVID-19 Community Mobility Reports.

Note: Mobility data are as of March 18, 2022. The figures plot the changes in community mobility for each day compared to the baseline value for that day of the week. The baseline is the median value for the corresponding day of the week during the five-week period from January 3 to February 6, 2020. Figure 1.9 plots the mobility trends for places like public transport hubs such as subway, bus, and train stations.

movie theaters) was about 36 percent higher than the pre-pandemic baseline during the Omicron wave, while it was only 18 percent higher during the Delta wave.[12] Mobility toward transit stations (public transportation hubs such as subway, bus, and train stations) was, on average, 56 percent higher than the baseline during the Omicron wave, and it was only 14 percent higher during the Delta wave. Finally, mobility toward places of work was below the baseline (-6 percent) during the Delta wave, but it was above the baseline (10 percent) during the Omicron wave. Community mobility trends were relatively similar when comparing AFE and AFW countries—although mobility seems to be greater in the latter subregion, especially toward transit stations (figure 1.9). The greater mobility might be attributed to the lower incidence of infections and fatalities in AFW countries as opposed to AFE countries.

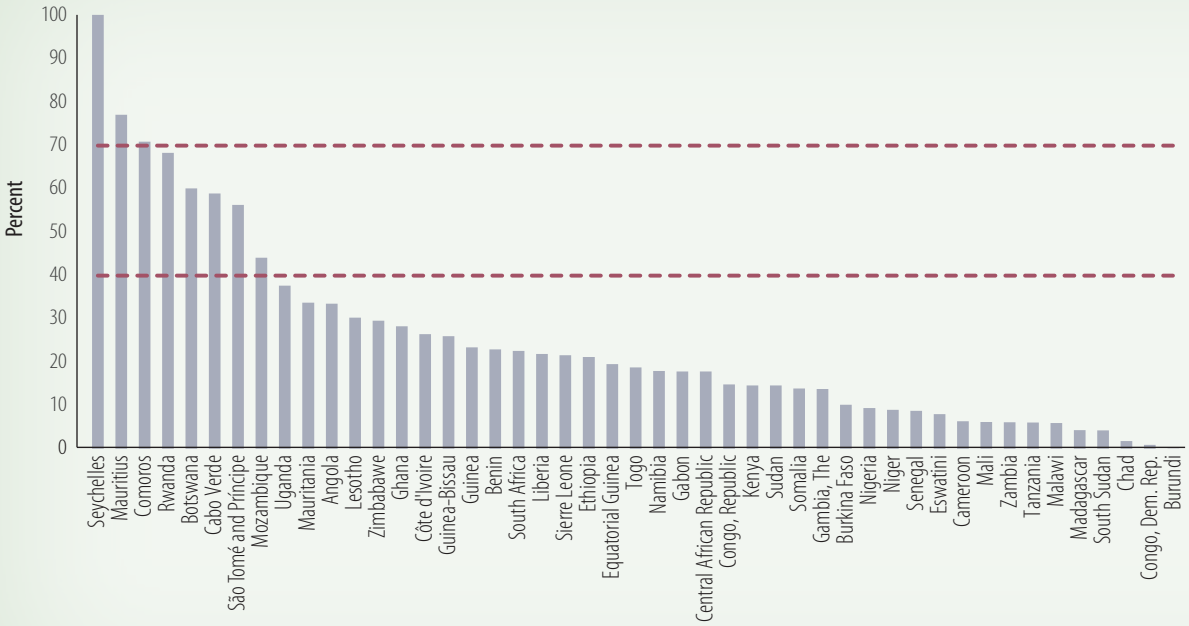
Sub-Saharan Africa has been disproportionately affected by the inadequate global rollout of

12 The pre-pandemic baseline is the median value for the corresponding day of the week during the five-week period from January 3 to February 6, 2020. Changes in community mobility for each day are compared to this baseline value for the day of the week.

coronavirus vaccines. As of mid-February 2022, the continent had received nearly 669 million doses (nearly 6 percent of all COVID-19 vaccines) and administered 405 million. Nearly 10 percent of the population of Sub-Saharan Africa is fully vaccinated according to the Africa Centers for Disease Control and Prevention as opposed to 64 percent in the United States and 85 percent in Great Britain. Only eight countries in Sub-Saharan Africa exceeded the World Health Organization target of 40 percent of the population with a first dose of the coronavirus vaccine by end-2021 (figure 1.10). The probability of most countries in the region reaching the 70 percent target by mid-2022 is very small. If access to COVID-19 vaccines by low-income countries (and, notably, African countries) does not improve at a faster pace, the world runs the risk of prolonging the pandemic. Low-vaccination countries/regions can potentially become the epicenter of the virus, as they might facilitate the emergence of new variants that might reduce vaccine effectiveness as well as heighten disease severity and global spread.[13]

FIGURE 1.10: Population with at Least One Dose of the COVID-19 Vaccine (%)

Many countries in the region still have low vaccination rates.



Source: Africa Centers for Disease Control and Prevention.

Note: Vaccination figures are as of March 17, 2022. The dotted lines represent the World Health Organization targets of full primary immunization against coronavirus of 40 percent by end-2021 and 70 percent by mid-2022.

Vaccine insecurity in Sub-Saharan Africa reveals the excessive dependence on foreign supply and a wide gap in manufacturing vaccines in the region. The continent imports nearly 99 percent of the vaccines that it administers, while it demands more than 25 percent of the vaccines produced globally.[14] Despite the challenges the region faces in vaccine manufacturing, capacity building is taking place at different stages through technological transfer partnerships at manufacturing facilities—as is the case with Aspen Pharmacare in South Africa. Scale-up efforts in already installed capacity by Biovac (South Africa) are being deployed, along with production

13 This is manifested by the different variants that were first detected in the countries/regions with low vaccination rates, like Beta (B.1.351) in South Africa (May 2020), Delta (B.1.617.2) in India (October 2020), and Omicron (B1.1.529) in Southern Africa (November 2021).

14 Sibidé (2022).

initiatives by Innovative Biotech (Nigeria) in collaboration with Merck.[15] In addition to these local efforts, the World Health Organization, along with a consortium of partners, has established a global messenger ribonucleic acid (mRNA) technology transfer hub in Africa.[16] Moderna and BioNTech have also announced plans to build mRNA vaccine factories in Africa, although production still has a long way to go. Finally, the Institut Pasteur de Dakar and the Coalition for Epidemic Preparedness Innovations are partnering to set up a regional manufacturing hub for COVID-19 and other vaccines in Senegal. Initially, the facility will produce up to 300 million doses of COVID-19 vaccine annually for use in Africa.[17]

The problem with low vaccination in Sub-Saharan Africa goes beyond access to vaccines.[18] Additional challenges for the continent are the inadequate logistics for getting doses into arms and vaccine hesitancy among the population. By mid-February, only 60 percent of the vaccines procured by African countries had been used. Several factors can explain the uneasy transition from vaccine supply to vaccination rollout, including the donation of vaccines with limited shelf life (which led to doses being destroyed in Nigeria and Malawi, among others), lack of components (for example, syringes), limited time to mobilize human and financial resources for the rollout, and inadequate capacity (public health infrastructure, trained personnel, and funding for vaccine program implementation, among others). Efforts to continue investing in health and reconfigure the public health system on the continent toward more self-reliance are critical.[19]

Vaccine hesitancy in Sub-Saharan Africa reflects lack of knowledge about the effectiveness of vaccines as public health interventions that sharply reduce the burden, morbidity, and mortality of communicable diseases.[20] A recent study shows that 63 percent of Africans would be willing to receive a COVID-19 vaccine as soon as possible.[21] More than 25 percent of the survey respondents did not think the vaccine was necessary, while 43 percent believed there were suitable alternatives to COVID-19 vaccination. Hesitancy among Africans is attributed to perceived risks of coronavirus infection and past experiences. For instance, most of the survey respondents were worried about side effects from the vaccine (79 percent), while others were concerned about vaccine-associated infection (39 percent).[22] Therefore, policy makers need to address misinformation about COVID-19 vaccines through community engagement strategies to raise awareness and diffuse knowledge about the effectiveness of these vaccines.[23]

15 In collaboration with University of the Witwatersrand, South Africa's Afrigen Biologics has manufactured its own version of the Moderna mRNA COVID-19 vaccine using the publicly available sequence of the shot. This version will be tested in humans by end-2022.

16 Nweneka and Disu (2022).

17 CEPI (2022).

18 According to the World Health Organization, deliveries to Africa under the COVID-19 Vaccines Global Access (COVAX) initiative increased more than 100 percent between November 2021 and January 2022. At the same time, the Africa Centers for Disease Control and Prevention is asking COVID-19 vaccine donors to align the distribution of shots to the country's take-up to optimize their usage.

19 *Lancet* (2022).

20 Mutombo et al. (2021).

21 The study by Anjorin et al. (2021) surveyed 5,416 individuals, of which 94 percent are residents of 34 African countries, while the rest of the Africans live in the diaspora.

22 More details on the drivers of hesitancy among Africans can be found in Anjorin et al. (2021).

23 Brits (2022).

1.3 IMPLICATIONS OF THE UKRAINE-RUSSIA CONFLICT FOR SUB-SAHARAN AFRICA

The conflict in Ukraine has led to trade embargoes and financial sanctions on Russia, thus resulting in a drastic reduction of imports from Russia and Ukraine, as well as soaring global commodity prices. The magnitude of the impact on economic activity is uncertain due to high volatility in commodity prices. This subsection describes how important the economies of Russia and Ukraine are to Sub-Saharan Africa, given their roles as key players in commodity markets. It also discusses how the conflict has affected Sub-Saharan Africa through direct and indirect channels of transmission.

Russia and Ukraine: Large Players in Key Commodity Markets

The economies of Russia and Ukraine are not large in terms of their gross domestic product (GDP) or their export sectors.[24] However, these two countries are top producers (as well as exporters) of key commodities worldwide. Russia is a key producer of energy commodities, particularly petroleum and gas. With production of 10.5 million barrels of crude oil per day in 2020, Russia is the third largest producer of crude oil in the world. Its global market share of crude oil is sizable at 11.2 percent, trailing only the United States and Saudi Arabia. Russia is also the second largest producer of natural gas worldwide, with a global market share of 17 percent.[25] In 2020, Russia produced an estimated 22.5 trillion cubic feet (Tcf) of dry natural gas, second only to the United States which produced an estimated 33.5 Tcf.

Beyond energy, Russia and Ukraine are top world exporters of food staples. Disruption in their production and exports is currently influencing the prices of wheat, maize, barley, and fertilizers. Rising prices of grain cereals, including maize, barley, and soybeans, are affecting the prices of animal feed and, hence, the international price of beef, poultry, and pork. Russia and Ukraine are among the top ten world producers of maize (6th and 10th largest producers, respectively). Russia and Ukraine are also the 4th and 7th largest producers of wheat in the world, respectively: Russia accounts for 11 percent of the world production of wheat, and Ukraine accounts for 3.3 percent. The Russian share of global barley production is about 13 percent while the Ukrainian share is approximately five percent. Production of rye in Russia and Ukraine accounts for 17 percent and 3.2 percent, respectively, of global production.

Russia and Ukraine are not only among the top ten producers of many food staples, but also among their largest exporters. Considered the world's *breadbasket,* Russia and Ukraine combined are the largest exporters in the world of certain agricultural products. For example, Russia and Ukraine account for 75.8 percent of worldwide sunflower seed oil exports—with 46.9 percent coming from Ukraine and 28.9 percent from Russia (table 1.1). Disruptions in the supply of sunflower seeds and seed oil due to the conflict are exerting upward pressure on the price of palm oil—widely consumed by Sub-Saharan African households. Russia represents a significant share of the world exports of wheat (19.3 percent), rye (19.4 percent), and barley (17.6 percent).

24 As measured by gross domestic product (in current US dollars), Russia's economy ranks 11th in the world, and it is roughly 7 and 10 percent the size of the United States and China, respectively—the two largest economies in the world. Ukraine is a smaller economy, with a level of economic activity similar to that of Hungary, and less than one percent the size of the United States. In terms of its exporting sector, Russia is relatively small given the size of its economy. Based on the dollar value of its exports, Russia ranks within the top 20 in the world for exports of goods and services. Its export size is about 14 and 18 percent that of China and the United States, respectively. It also trails smaller European countries such as the Netherlands, Ireland, Switzerland, Belgium and Spain, as well as East Asian trade hubs like Singapore and Hong Kong SAR, China.

25 The data reported were obtained from the US Energy Information Administration (EIA).

For Ukraine, its global export share of maize amounts to 13.1 percent while its shares of barley and wheat are 11.8 and 8.3 percent, respectively. Taken together, the world export shares of Russia and Ukraine account for almost 30 percent of barley, 27.6 percent of wheat, 23.3 percent of rye, and 15.3 percent of maize. A prolonged conflict between Russia and Ukraine will curb the production and export of cereal products from these countries and, thus, elevate their international prices. Disruptions in the supply of cereals—and, more broadly, food—also have the potential of causing domestic unrest in several countries that are already experiencing food shortages because of climatic shocks and supply chain problems.

TABLE 1.1: Global Shares of the Russian Federation and Ukraine in Food Staples, 2020/21 (%)

Staple	Russia	Ukraine	Total	Russia	Ukraine	Total
	Share of world production			Share of world exports		
Wheat	11	3.28	**14.28**	19.3	8.32	**27.62**
Barley	12.89	4.97	**17.86**	17.6	11.77	**29.37**
Rye	16.62	3.21	**19.83**	19.35	3.96	**23.31**
Maize	1.23	2.7	**3.93**	2.19	13.13	**15.32**
Cereals	5.89	8.99	**14.88**	11.76	10.68	**22.44**
Sunflower seeds	-	-	**-**	19.04	6.56	**25.6**
Sunflower seed oil	-	-	**-**	28.88	46.91	**75.79**

Sources: U.S. Department of Agriculture; Food and Agriculture Organization.

Russia is also a top producer of NPK fertilizer and urea fertilizer.[26] Russia is the fourth largest producer of both nitrogen fertilizer and phosphate fertilizer in the world. As an important input in the manufacturing of fertilizers, soaring natural gas prices are feeding into higher fertilizer prices—along with disruptions in their production. Yara International, the world's second largest fertilizer company based in Norway, recently announced that it will cut in half its production of ammonia and urea fertilizers in Europe due to the lack of availability of raw materials and, hence, high prices. World fertilizer exports are sharply compressing at a time when major crops are undergoing their planting seasons across the globe. A protracted disruption to the global supply of fertilizers could reduce crop production across several countries in the world if farmers curtail their use of fertilizer because of the high prices. These impacts on the supply and use of fertilizers could have adverse consequences on the 2021/22 and 2022/23 production years.[27]

Russia and Ukraine are important producers and exporters of metals and mineral ores—including basic metals, semiprecious and precious metals, noble gases, and rare earth metals. Transition metals and rare earth metals are critical inputs for manufacturing high-tech products such as semiconductors and lithium-ion batteries. In turn, these products are key parts of automobiles, electronic vehicles, airplanes, computers, household electronics, and defense products, among others. For instance, Russia accounted for significant global shares of exports of palladium (20.7 percent), platinum (12.3 percent), aluminum (8.9 percent), gold (4.4 percent), and to a lesser extent, iron ore (1.4 percent) and nickel (0.4 percent) in 2020.[28] Palladium is a key input for semiconductors while nickel is used in manufacturing electronic batteries. Russia also

26 NPK stands for the macro-nutrients used by plants, which are nitrogen, phosphorus, and potassium.
27 Oxford Economics (2022).
28 Russia accounted for 42.9 percent of the worldwide production of nickel in 2020.

produces tungsten (an input for the production of missiles and electrodes for small satellites). Meanwhile, Ukraine's exports of iron ore accounted for three percent of the global exports of the commodity in 2020. Ukraine also has reserves of manganese and zirconium although their production has not fully materialized. Ukraine largely dominates the world market for neon gas:[29] it accounts for roughly 70 percent of world exports of this rare gas—essential in the manufacturing of semiconductors.[30] Consequently, the Russia-Ukraine conflict is exacerbating the existing supply chain disruptions in the market of semiconductors, as well as the activity in high-tech and green industries (including manufacturing electric car batteries, electronic devices, integrated circuits, catalytic engines, and solar panels, among other products).

The Impact of Russia and Ukraine on Sub-Saharan Africa: Channels of Transmission

The conflict in Ukraine is likely to impact Sub-Saharan African economies through a series of direct and indirect channels associated with foreign trade and commodity prices (i.e. global prices of energy commodities, metals and mineral ores, and food staples); the pass-through of persistently high commodity prices to food, fuel, and headline inflation; tightening global financial conditions; and smaller flows of foreign financing into the region. These channels of transmission have been further activated at the onset of the Russia-Ukraine conflict.

Trade and Commodity Prices

The Russia-Ukraine conflict has affected Sub-Saharan African economies through higher commodity prices and disruptions in international trade—thus, aggravating existing supply chain problems. A sharp compression of imports from Russia and Ukraine, along with global trade deceleration and rising commodity prices, have affected countries in the region that are net commodity importers—either through direct linkages with the countries in conflict or through soaring global commodity prices. Supply chain disruptions can also affect semiconductor and high-tech industries due to sharp increases in the prices of metals and minerals that constitute inputs in their production processes.

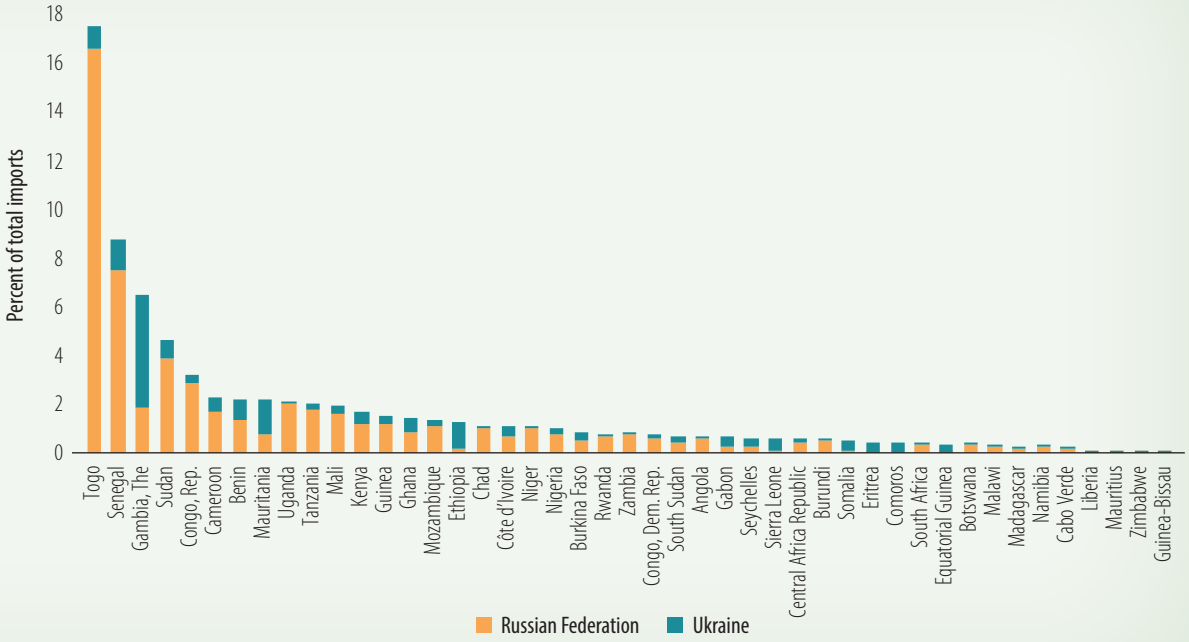
Sub-Saharan Africa's trade linkages with Russia and Ukraine are not as tight as those with countries in other regions of the world. For instance, Russia and Ukraine account for 1.3 percent of total imports in Sub-Saharan Africa (of which, 1.0 percent comes from Russia and 0.3 percent from Ukraine). However, there is some heterogeneity across countries in the region in terms of trade linkages (figure 1.11). Dependence on imports from Russia and Ukraine is higher than the regional average in some West African countries (the Republic of Congo, The Gambia, Senegal, and Togo) and some East African countries (Sudan and Uganda). Given the lower levels of trade between Russia and Ukraine and most countries in the region, the impact of the conflict on trade in Sub-Saharan Africa is mainly through the channel of higher global commodity prices.

29 Cryoin and Ingas are the major neon gas companies in Ukraine, with production accounting for 45 to 54 percent of the world production. The headquarters of Ingas and Cryoin are located in Mariupol and Odesa, respectively. Ninety percent of neon gas imports to the United States come from Ukraine. The Renesas Electronic Corporation, which is a Japanese semiconductor company, has a research and development base in Lviv (Ukraine) close to the border with Poland. Production of semiconductors is concentrated in the Asia region.

30 CNBC, March 11, 2022 (https://www.cnbc.com/2022/03/12/russias-attack-on-ukraine-halts-half-of-worlds-neon-output-for-chips.html); Bloomberg, March 6, 2022 (https://www.bloomberg.com/news/articles/2022-03-07/toshiba-concerned-chip-crisis-may-deepen-after-ukraine-invasion).

Given most African countries' small trade linkages with Russia and Ukraine, the impact of this trade channel in the region is mainly through higher global commodity prices.

FIGURE 1.11: Import Dependence on the Russian Federation and Ukraine across Countries in Sub-Saharan Africa, 2019-20 (% of total imports)



Source: International Trade Centre (ITC) data.
Note: Values are average shares for 2019–20.

Despite the low exposure to overall trade with Russia and Ukraine, some countries in the region are highly exposed to the price of cereals (and, more specifically, wheat), edible oils (especially, sunflower seed oil), and fertilizers. Russia and Ukraine accounted for 15.3 percent of cereal imports in Sub-Saharan Africa (11.4 percent from Russia and 3.9 percent from Ukraine) in 2020. The share of cereal imports coming from Russia and Ukraine exceeds 25 percent for five countries in the region—namely, the Democratic Republic of Congo, the Republic of Congo, Uganda, Ethiopia, and Nigeria (figure 1.12).[31] Within cereals, Sub-Saharan Africa appears to have larger linkages with Russia and Ukraine in the wheat trade. About one-third of the wheat imported by the region comes from the two Eastern European countries (25 percent from Russia and 8.6 percent from Ukraine).[32] The countries with the highest exposure to wheat trade from Russia and Ukraine (when considering jointly their share in total wheat imports, total cereal imports, and total imports) are the Democratic Republic of Congo, the Republic of Congo, Uganda, Ethiopia, and Mauritania (figure 1.13).[33] Large countries in the region also have moderate to high exposure to wheat imports from Russia and Ukraine, such as Kenya (29.4 percent from Russia and 10.1 percent from Ukraine), Ghana (33.9 percent from Russia), Mali (32 percent from Russia and 8 percent from Ukraine), and Nigeria (21.1 percent from Russia and 5.1 percent from Ukraine).

31 Using mirror export data, 50.4 percent of cereals imported by Sudan came from Russia and Ukraine in 2020.

32 This participation falls to 15 percent when considering the amount of wheat imports from Russia and Ukraine as a percentage of total cereal imports in Sub-Saharan Africa (11 percent coming from Russia and 4 percent from Ukraine). Additionally, the dependence on wheat from Russia and Ukraine is mitigated by the high substitutability with wheat flour. Benin imported ten times more wheat flour than raw wheat in 2020, mostly originating from Turkey.

33 Note that although 99 percent of total wheat imports from Benin comes from Russia and Ukraine, it represents a meager 1.4 percent of the West African country's total cereal imports.

FIGURE 1.12: Import Dependence on the Russian Federation and Ukraine in Cereals (% of total cereal imports)

The share of cereal and wheat imports from Russia and Ukraine is large for some Sub-Saharan African countries.

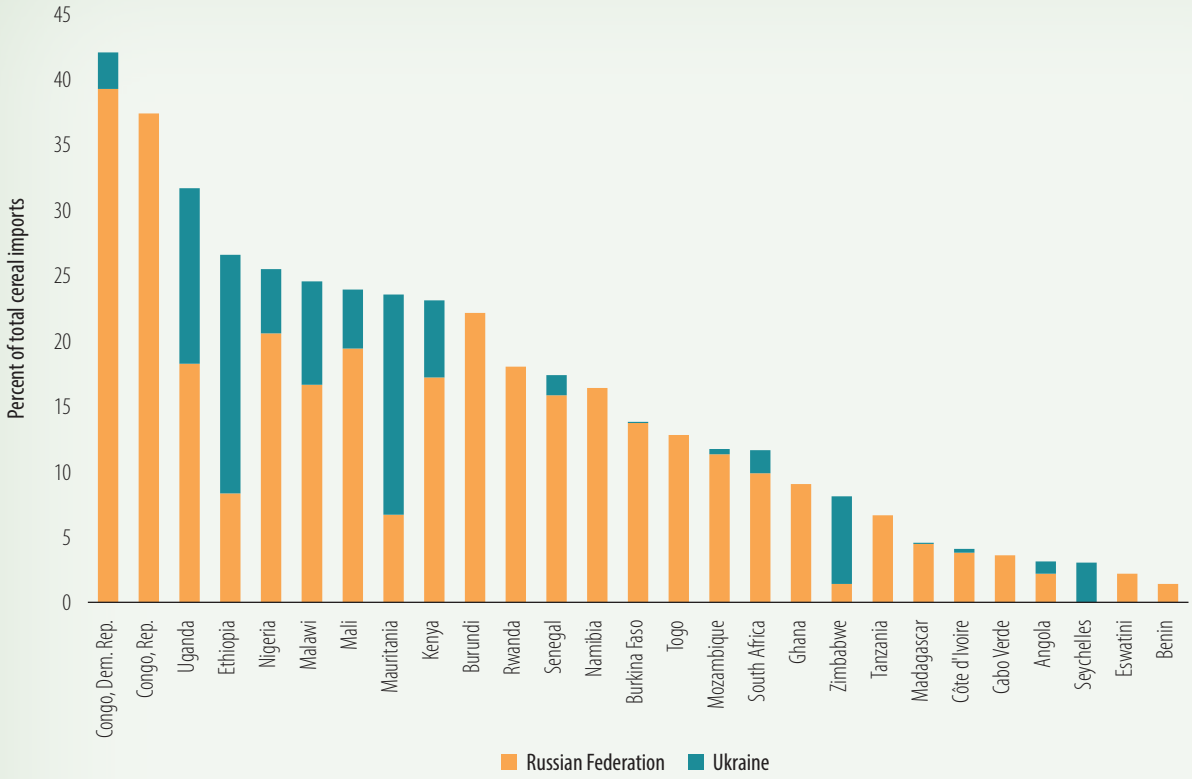
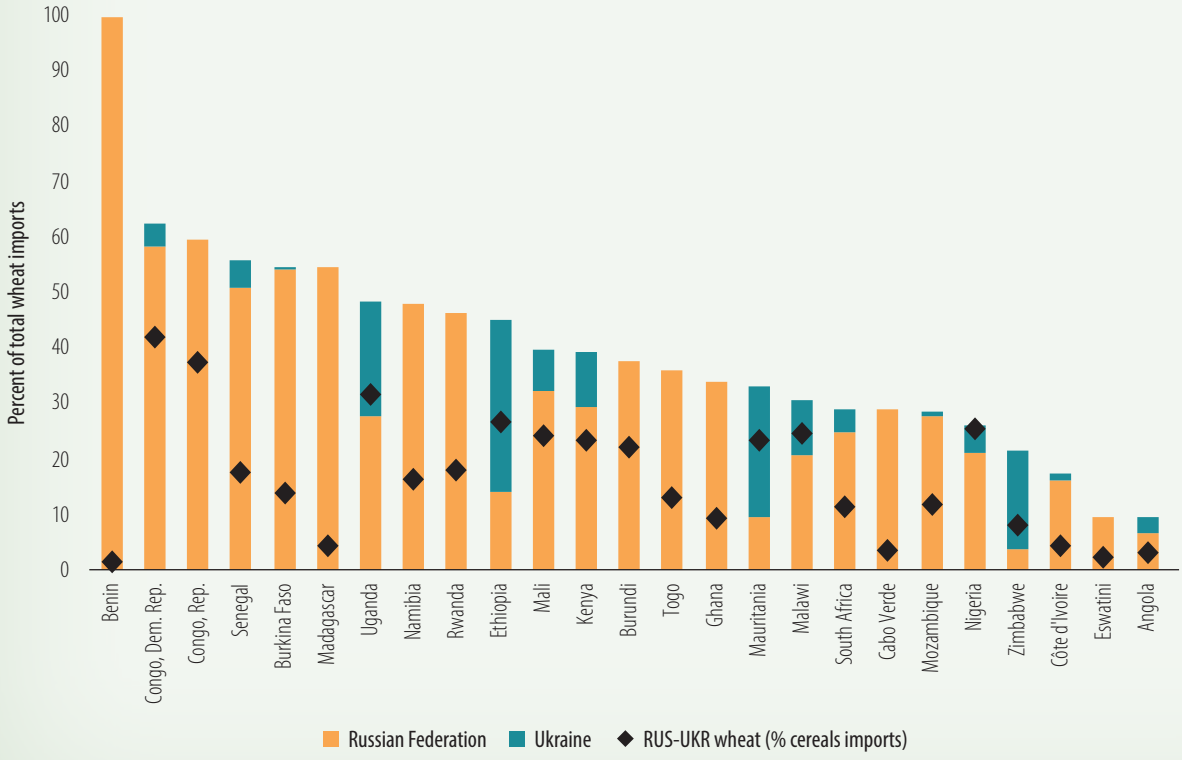


FIGURE 1.13: Import Dependence on the Russian Federation and Ukraine in Wheat (% of total wheat imports)



Source: International Trade Centre (ITC) data.

Note: The black diamonds in figure 1.13 depict the share of wheat imports from Russia and Ukraine in total cereal imports for each Sub-Saharan African country.

Several countries in the region are exposed to trade with Russia and Ukraine for edible oils—especially those importing sunflower seed oil—as well as fertilizers. Figure 1.14 plots the import share of edible oils from Russia and Ukraine across countries in the region. The countries with the greatest exposure are Sudan (25 percent of its imports come from Russia and 14 percent from Ukraine), and Gabon (11 percent of its imports come from Russia). In the case of fertilizers, the entire region is exposed, with 8.4 percent of its imports coming from Russia and Ukraine (of which 7.7 percent comes from Russia). Figure 1.15 shows the exposure of Sub-Saharan Africa to

The import shares of edible oils and fertilizers from Russia and Ukraine vary across Sub-Saharan African countries.

FIGURE 1.14: Import Dependence on the Russian Federation and Ukraine in Edible Oils (% of total edible oil imports)

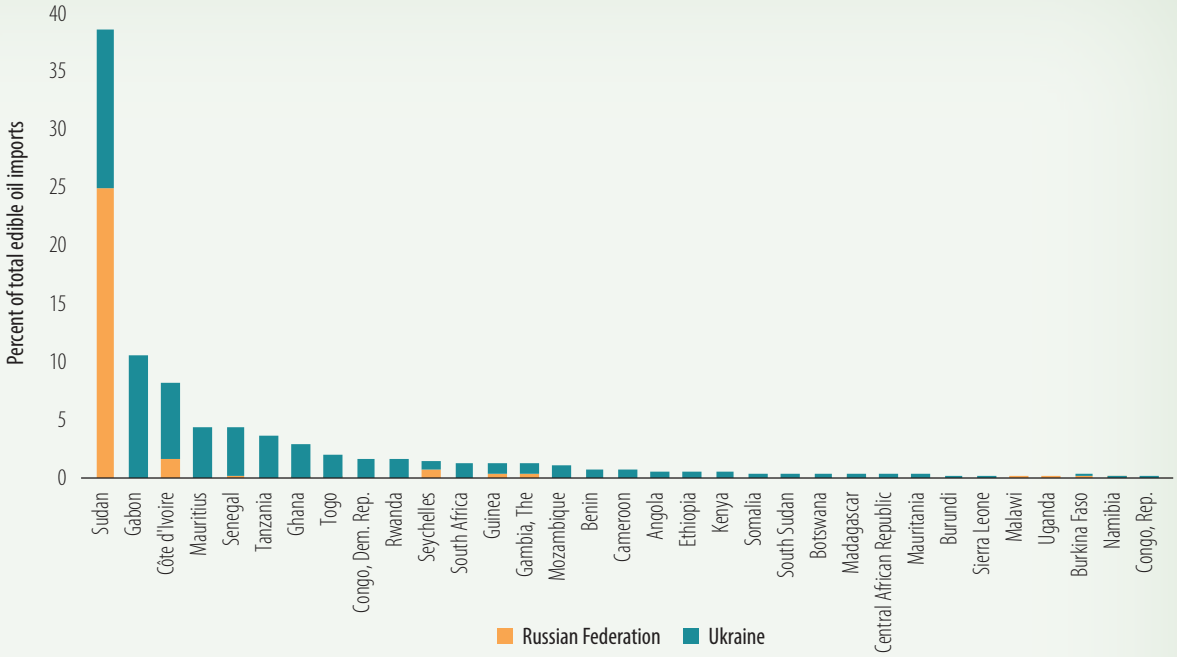


FIGURE 1.15: Import Dependence on the Russian Federation and Ukraine in Fertilizers (% of total fertilizer imports)

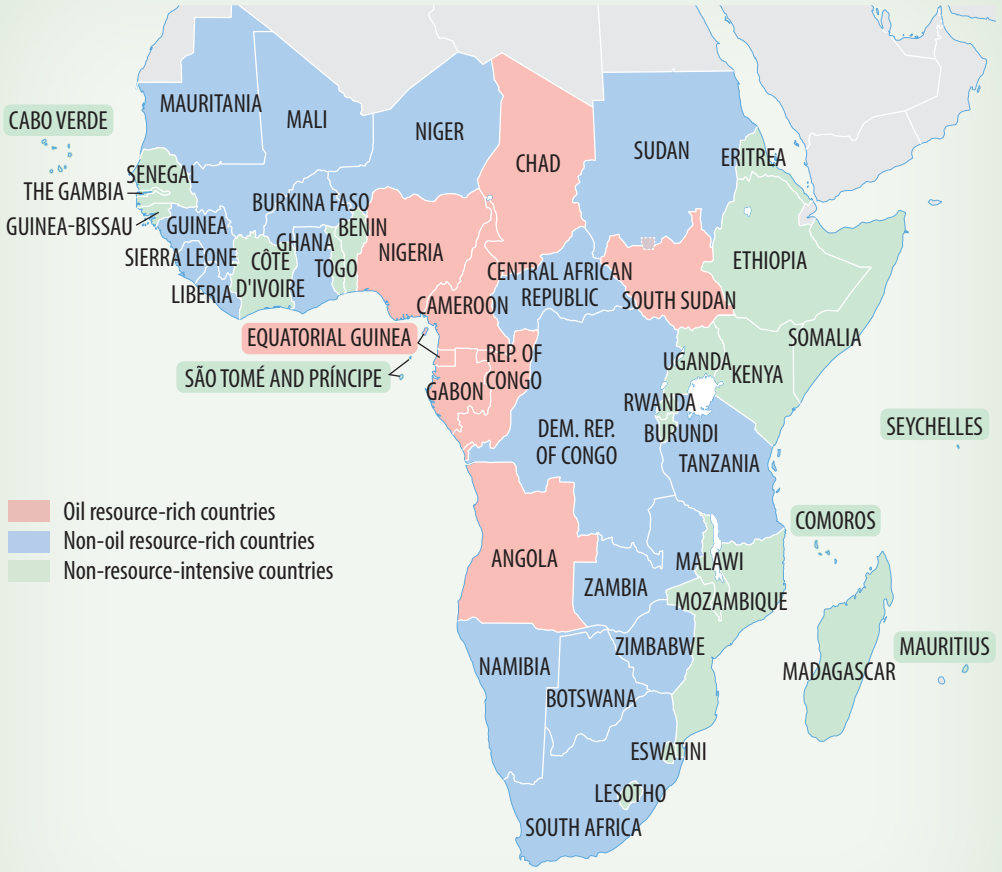
Source: International Trade Centre (ITC) data.
Note: Values are average shares for 2019–20.

fertilizer imports from Russia and Ukraine. West African countries like Senegal, the Republic of Congo, Mauritania, Ghana and Côte d'Ivoire have moderate to high exposure.[34]

The impact of rising global commodity prices on African countries' terms of trade is uncertain. For instance, the terms of trade may deteriorate in countries that are net oil importers or food importers and which lack other commodities to offset the increase in oil and food prices. On the other hand, the terms of trade may improve in countries with a diversified basket of commodities.[35] Map 1.1 shows the wide heterogeneity in natural resource abundance across countries in Sub-Saharan Africa. Oil abundant countries in the region (e.g. Angola, Nigeria, the Republic of Congo, and Gabon) are expected to benefit from higher oil prices—although the windfall will be constrained in some of these countries by their inability to increase exports due to persistent oil production problems. Many oil importers in the region will benefit from the rally in global prices for industrial metals (South Africa and Zambia) and precious metals (South Africa, Tanzania, and Ghana).

The impact of the Russia-Ukraine conflict on commodity prices has compounded existing challenges in global food markets, including increasing prices and tightening supplies due to the COVID-19 pandemic, shipping constraints, high energy costs and recent extreme weather events (e.g. droughts and floods). Figure 1.16 depicts the year-to-date evolution of international prices of selected commodities. At the onset of the conflict, global commodity prices increased at a faster pace with higher volatility than in the pre-conflict period. International prices of

MAP 1.1: Commodity Abundance in Sub-Saharan Africa



Source: International Monetary Fund.

Note: Oil resource-rich countries are defined as countries where net oil exports make up 30 percent or more of total exports. Non-oil resource-rich countries denotes those countries where nonrenewable natural resources represent 25 percent or more of total exports. The non-resource-intensive countries refer to those countries not classified as either oil exporters or other resource-intensive countries.

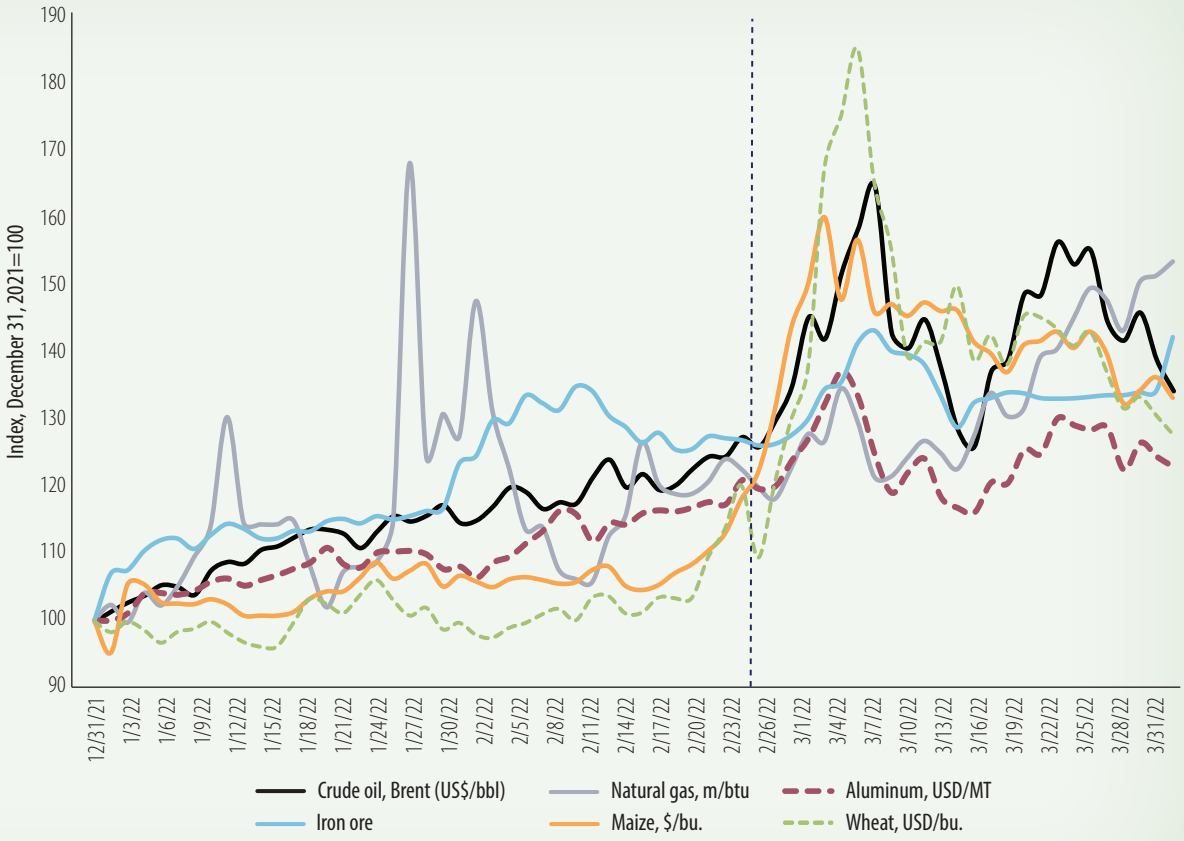
34 Benin buys most of its fertilizers in bulk each year through a public tender. It has bought almost all fertilizers from OCP Morocco until 2020 when 100 percent came from Russia since the Moroccan fertilizer producer lost the bid. Except for 2020, Morocco tends to be the main supplier of fertilizers to the West African country.

35 The high level of oil prices will also affect countries that are shielding the impact on their consumers through fuel subsidies (e.g. Nigeria and Ethiopia).

wheat and maize have increased by 40 percent from January to March 2022, with most of the increase taking place at the onset of the conflict. Crude oil and natural gas prices grew by 39 and 31 percent from January to March 2022, respectively, while iron ore and aluminum prices increased by 33 and 21 percent, respectively.

Global commodity prices have increased at a faster pace and with higher volatility since the Russia-Ukraine conflict.

FIGURE 1.16: Evolution of Selected Commodity Prices in 2022 (Index, December 31, 2021=100)



Source: Bloomberg Analytics.

Note: Information for the EMBI sovereign spreads and exchange rates as of March 31, 2022. bbl = barrel; bu = bushel; m/btu = million British thermal units; MT = metric tons.

Although rising commodity prices pose a challenge to some Sub-Saharan African countries, they could also provide *opportunities* if proper economic policies are put in place. Policy options in response to existing market disruptions could differ depending on whether the associated shocks are transitory or permanent. If the shock is transitory, governments need to explore or strengthen mechanisms to capture the windfall from higher prices—and deploying some of these resources to protect the poor and vulnerable. A more permanent shock might provide incentives for metal and mineral exporters in the region to expand production. For instance, South Africa is the top producer of platinum (67 percent of world production in 2020) and palladium (39.8 percent of world production in 2021) and can accommodate the demand unmet by trade disruptions and sanctions in Russia, which is an important producer of palladium and, to a lesser extent, platinum. In addition, South Africa produces manganese, zirconium, and tungsten—metals associated with manufacturing steel, aluminum, microwave filters, light bulbs, and cathode ray tubes, among other products. Meanwhile, as the top producer of cobalt in the world, the Democratic Republic

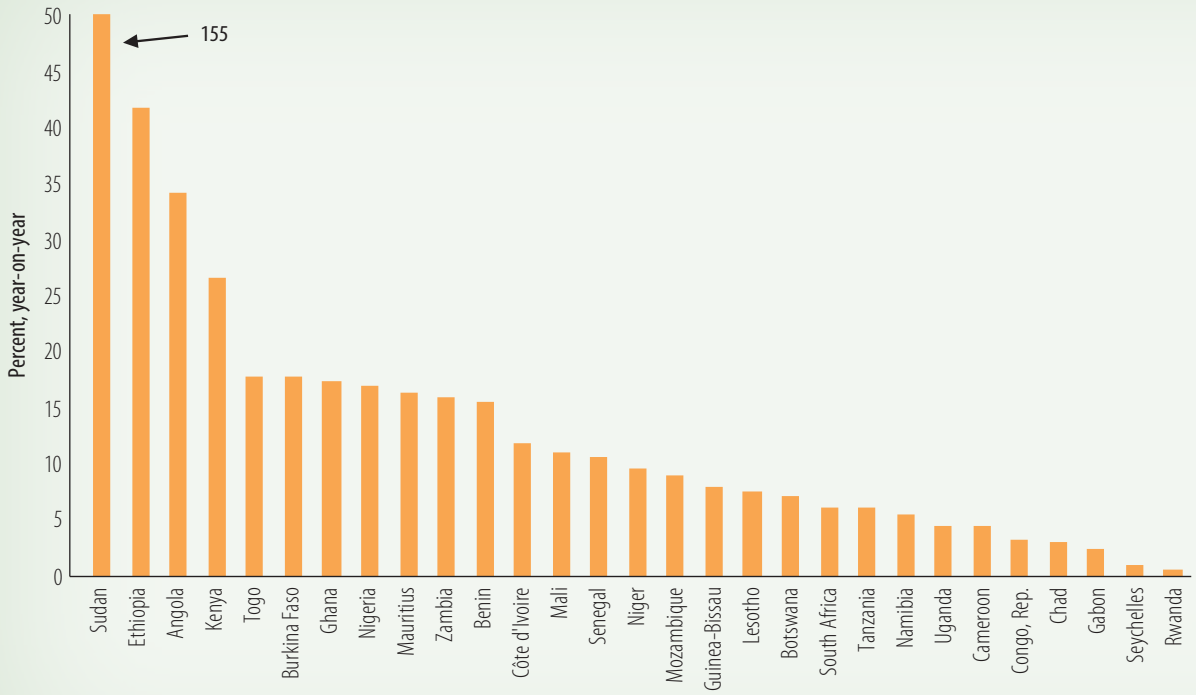
of Congo could become a critical supplier to help fulfill world demand. It is necessary for African metal and mineral exporters to invest in new capacity to expand mining production.

Incumbent producers (e.g. Angola and Nigeria) and countries with recent discoveries of oil and gas (notably, in East Africa) could also potentially play an important role in the world export supply of energy commodities—especially if trade between Western countries and Russia does not fully recover after the war. To reap the benefits from high oil prices, sustainable extraction of crude oil and adequate management of oil resource windfalls are required. Finally, a big push to modernize agricultural processes in Sub-Saharan African countries could reduce their dependence on wheat and/or maize imports from other regions, and countries with excess supplies could increase their intraregional exports of these cereals.

Domestic Inflation

Soaring commodity prices will translate into higher inflation: more specifically, elevated fuel and food prices will affect consumer inflation across several countries in the region. Prior to the outbreak of hostilities in Ukraine, supply chain problems, high transportation costs, and devastating weather effects from floods and droughts, etc. were already pushing up food prices in several low- and middle-income Sub-Saharan African countries. Among countries in the region with monthly food inflation data available from March 2021 to February 2022, more than four out of five countries experienced year-on-year food inflation that exceeds 5 percent—while nearly half of them experienced two digit food inflation. Sudan, Ethiopia, Angola, and Kenya have the highest rates of food inflation in the region as of February 2022 (figure 1.17).

FIGURE 1.17: Domestic Food Inflation, February 2022 (percent, year-over-year)



Consumer price inflation continues rising across Sub-Saharan African countries due to the conflict between Russia and Ukraine.

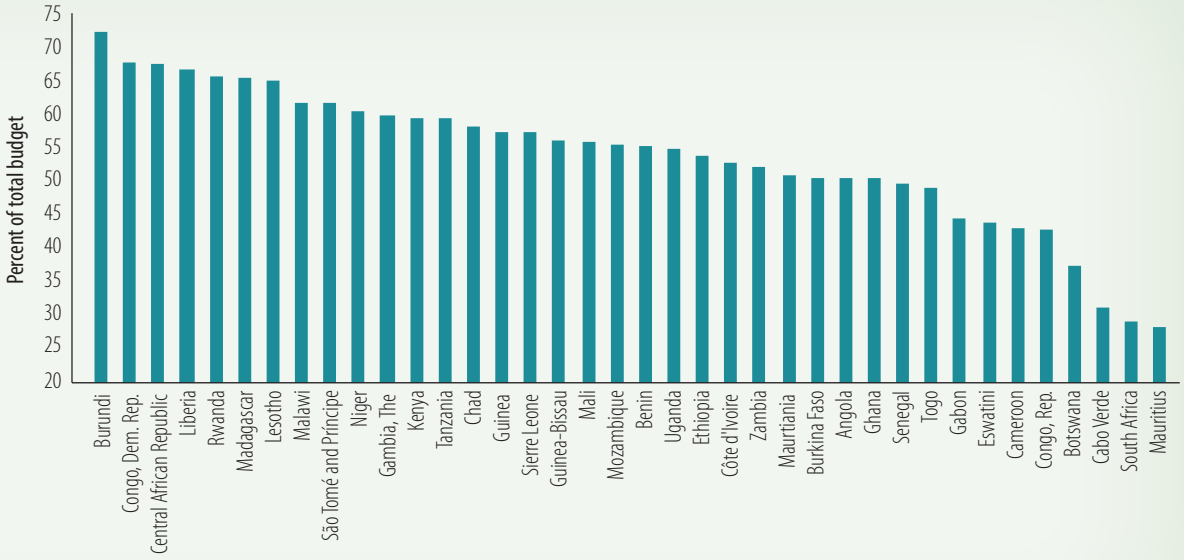
Source: Haver Analytics.

Note: The figure depicts the year-on-year inflation of the food and non-alcoholic beverages component of the Consumer Price Index in February 2022 or the latest data available.

The increase in food prices has especially affected poor households in Sub-Saharan Africa where food constitutes a higher share of household budgets. Based on Consumer Price Index (CPI) information, food expenses account for 40 percent of consumer spending while they account for 17 percent of household expenditures among advanced economies.[36] Consequently, within African economies, the impact of rising food prices will affect poorer households more than wealthier ones, as the share of food expenditures in the budget of the former is higher. Figure 1.18 plots the national share of food expenditures in household budgets across several countries in the region. The median share of food expenditures is 55.8 percent, with proportions ranging from 28.4 percent (Mauritius) to 73 percent (Burundi). The shares of food expenses in household budgets in Benin, Mozambique, and Uganda are close to the regional median. For the median country in the region, food accounts for 60 percent of the budget for households in the lowest quintile of the income distribution while it accounts for 49 percent of the budget for those in the highest quintile.

The share of spending on food is relatively high among the poor in Sub-Saharan African countries.

FIGURE 1.18: Food Share in Households' Budgets across Sub-Saharan African Countries (% of total budget)



Source: International Household Survey Network.

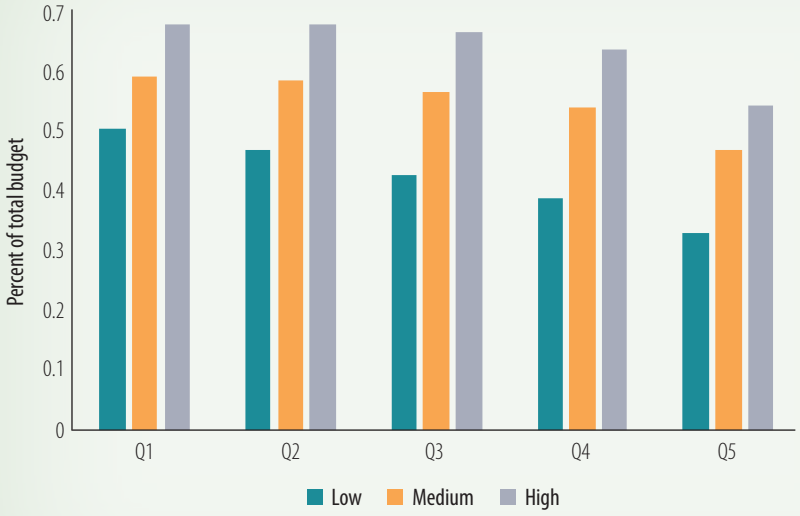
Note: Low, medium, and high food spending propensity is defined by the 33rd and 67th percentiles of the distribution of the national food budget share across 38 countries in the region. Budget shares do not account for household production.

Regional aggregates, however, hide the heterogeneity of food budget shares across quintiles of the income distribution. Figure 1.19 depicts the food budget shares for countries in the region with low (bottom tercile), intermediate, and high (top tercile) national food budget shares. Poorer households (Q1 and Q2) in countries with low food budget shares nationally tend to spend less than those with higher food budget shares. For instance, households in the bottom 20 percent of the income distribution tend to spend 51 percent of their budget on food in countries with low food spending propensity while that proportion climbs to 69 percent in countries with high food expenditures at the national level. While the top 20 percent households still spend 55 percent of their budgets on food in countries with high national food spending shares, that

36 Bogmans et al. (2022).

share is considerably lower (33 percent) in countries with low national food spending shares. Although all households will be affected by rising food inflation, the poorer households (bottom 60 percent) in countries with high shares of national food expenditure will suffer the most.

FIGURE 1.19: Food Share across Quintiles of the Income Distribution, by Propensity to Spend on Food (% of total budget)



Source: International Household Survey Network.

Note: Low, medium, and high food spending propensity is defined by the 33rd and 67th percentiles of the distribution of the national food budget share across 38 countries in the region. Budget shares do not account for household production.

The share of spending on food is relatively high among the poor in Sub-Saharan African countries.

Rising food and energy prices are fueling consumer inflation in many countries in the region. The strength and persistence of this pass-through may lead to further tightening of monetary policy in some Sub-Saharan African countries and the abandonment of a dovish stance in others. Prior to the invasion of Ukraine, central banks in African countries were already hiking policy rates in response to the acceleration of inflation—in most cases, above their targets (e.g. Angola, Lesotho, Mozambique, Rwanda, South Africa, and Zambia). On March 21, 2022, the Bank of Ghana raised its benchmark rate by 250 basis points to 17 percent, the biggest interest hike in 20 years.

Global Financial Conditions

The Russia-Ukraine conflict—through increases in commodity prices and further disruptions in global supply chains—may lead to higher and more persistent global inflation. This global inflation, in turn, could affect developing countries' domestic inflation. In response to a more persistent global inflation shock, central banks of advanced countries may hike policy rates at an earlier- and stronger-than-anticipated pace, further tightening global financial conditions. Along with the unprecedented economic and financial sanctions imposed by the West against Russia, this conflict has led to a reversal in the appetite for risk that is weighing on economic recovery and consumer sentiment as the international prices of energy commodities (crude oil, natural gas, and coal) continue rising.

Countries entering this new period of uncertainty with weaker fundamentals will experience sharp economic and financial effects. Recovery from the pandemic crisis remains uneven and incomplete for many developing countries, including Sub-Saharan African economies. At the same time, government debt and vulnerabilities remain high for some countries in the region while public sector borrowing needs are still significantly higher than pre-pandemic levels. Debt

Sovereign spreads have increased, while exchange rates have diverged in Sub-Saharan Africa since the start of the Russia-Ukraine conflict.

FIGURE 1.20: Sovereign Spreads in Selected Sub-Saharan African Countries (Index, December 31, 2021=100)

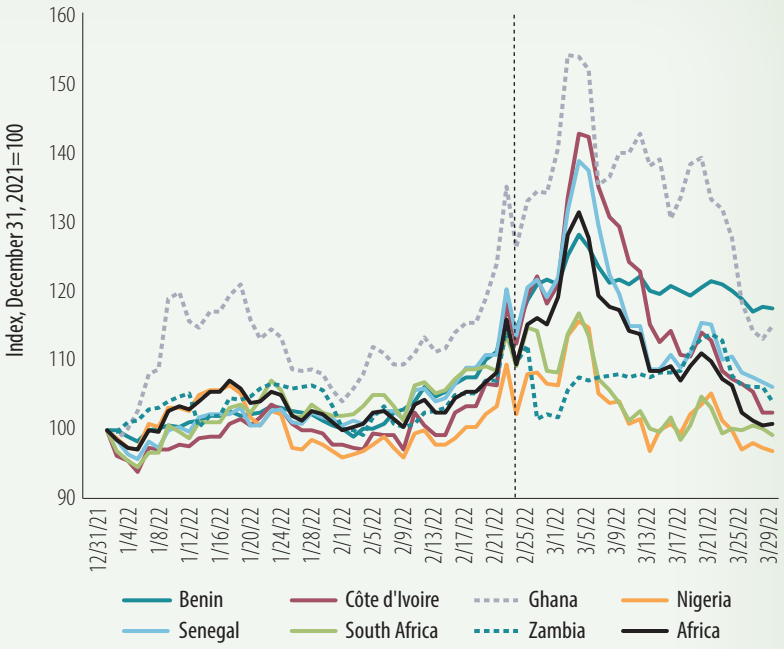
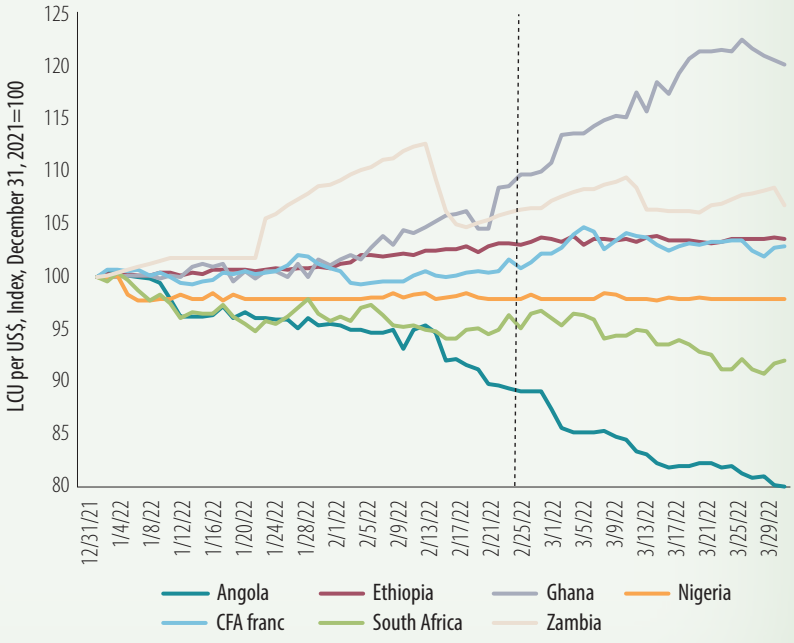


FIGURE 1.21: Exchange Rates in Selected Sub-Saharan African Countries (LCU per US$, index December 31, 2021=100)



Source: Bloomberg Analytics.

Note: Information for the EMBI sovereign spreads and exchange rates as of March 31, 2022. EMBI=Emerging Market Bond Index; LCU=local currency unit.

vulnerabilities in Sub-Saharan African countries worsened at the onset of the conflict, especially in countries with high external imbalance and risk of debt distress. Those countries will continue to experience a weakening of their currencies and widened sovereign spreads. Figures 1.20 and 1.21 depict the year-to-date evolution of sovereign spreads and exchange rates for selected Sub-Saharan African countries, respectively. There is greater volatility in financial prices at the onset of the Russia-Ukraine conflict, especially in sovereign spreads, although year-to-date variations in those prices remain moderate. This is not the case of countries with existing macroeconomic imbalances such as Ghana and Zambia. As of mid-March, sovereign spreads have increased so far this year by 375 basis points in Ghana and 170 basis points in Zambia. Additionally, the Ghanaian cedi has depreciated nearly 20 percent since the start of 2022 while the Zambian kwacha has weakened by 6 percent.

Foreign Financing

Russia is a relatively small player in Africa in terms of foreign direct investment (FDI). Foreign investments originating from Russia account for less than one percent of the region's total FDI stock. Therefore, it is difficult to establish where FDI holdings originating from Russia are ultimately located given that their main destination is Cyprus—an off-shore financial center that is used as an intermediate stop for investments that are finally destined elsewhere.[37] About 90 percent of Russian greenfield investment commitments since 2003 have been in the metals, coal, oil, and gas sectors.[38] Although Russia's total investments in Sub-Saharan Africa are fairly small, there are several mining operations owned by Russian enterprises in Angola, Guinea, Nigeria, Sudan, and Zimbabwe. For instance, United Co. Rusal International PJSC—a Russian aluminum company—has invested heavily in the extraction of iron ore and bauxite in Guinea and has additional operations in Nigeria. Diamond producer Alrosa PJSC has projects in Angola and has increased the number of prospecting grants that it holds in Zimbabwe. Russia's Vi Holding has a joint venture platinum mining project in Zimbabwe, and Esimath has gold mining operations in Sudan. Figure 1.22 plots the FDI in resource-rich countries in Sub-Saharan Africa in 2020.[39] Nine resource-rich countries in the region have a ratio of FDI to GDP that exceeds five percent, ranging from 5.1 of GDP (Chad) to 39.4 percent of GDP (the Republic of Congo). Five of these nine countries are rich in oil (Chad, the Republic of Congo, Equatorial Guinea, Gabon and São Tomé and Príncipe) while the other four are rich in metals and mineral ores (Mauritania, Mozambique, Sierra Leone, and Togo).[40] Sub-Saharan African countries with Russian investments in mining have low FDI-to-GDP ratios; namely, Guinea (2.1 percent of GDP), Zimbabwe (1.1 percent of GDP), and Nigeria (0.6 percent of GDP).

In an environment with limited resources, donors may shift their aid portfolios to increase assistance to Ukraine in the near term. Consequently, this could imply a reallocation of donors' portfolio away from African countries. Aid agencies have already expressed concerns that donors are cutting emergency funds from conflicts in West Africa and droughts in East Africa due to the conflict. For instance, aid organizations—including Oxfam and the Norwegian Refugee Council—are reporting that donors have cut assistance to Burkina Faso by 70 percent to support their operations in Ukraine—with disastrous consequences for the more than 1.7 million people fleeing from jihadist violence. In Somalia, the United Nations has warned that the conflict in Ukraine may create funding problems for a drought that has already affected a third of the population. Figure 1.23 depicts the amount of (net) official development assistance as a percentage of gross national income (GNI) among African countries in 2020. More than 25 percent of countries in the region receive foreign aid that exceeds 10 percent of GNI, ranging from the Gambia (10.9 percent of GNI) to the Central African Republic (31.6 percent of GNI).[41] The countries with the greatest foreign aid dependence are prone to multiple shocks, including climatic shocks (droughts and cyclones), fragility, and conflict, among others.

37 Milesi-Ferreti (2022).

38 FT fDi Intelligence (2020).

39 Resource-rich countries are defined according to the criteria used in Cust and Zeufack (2022): a low-, lower-middle, or upper-middle income country that had natural resource revenues or exports of at least 20 percent of total fiscal revenue and exports. It also includes countries with identified reserves where production has not started, is starting or has reached significant levels (Sierra Leone, Madagascar, Mozambique, the Central African Republic, Uganda, Tanzania, Togo, São Tomé and Príncipe, and Ghana).

40 São Tomé and Príncipe has significant deep water hydrocarbon reserves that it is exploring in the Joint Development Zone with Nigeria, and the Exclusive Economic Zone (EEZ).

41 Note that the foreign aid presented here includes humanitarian aid in addition to aid going directly in the government's balances or supporting public investment projects. In the case of Burundi, the aid channeled to support government development programs is only three percent of GNI while total foreign aid exceeds 22 percent of GNI.

The import shares of edible oils and fertilizers from Russia and Ukraine vary across Sub-Saharan African countries.

FIGURE 1.22: FDI in Resource-Rich Countries in Sub-Saharan Africa (% of GDP)

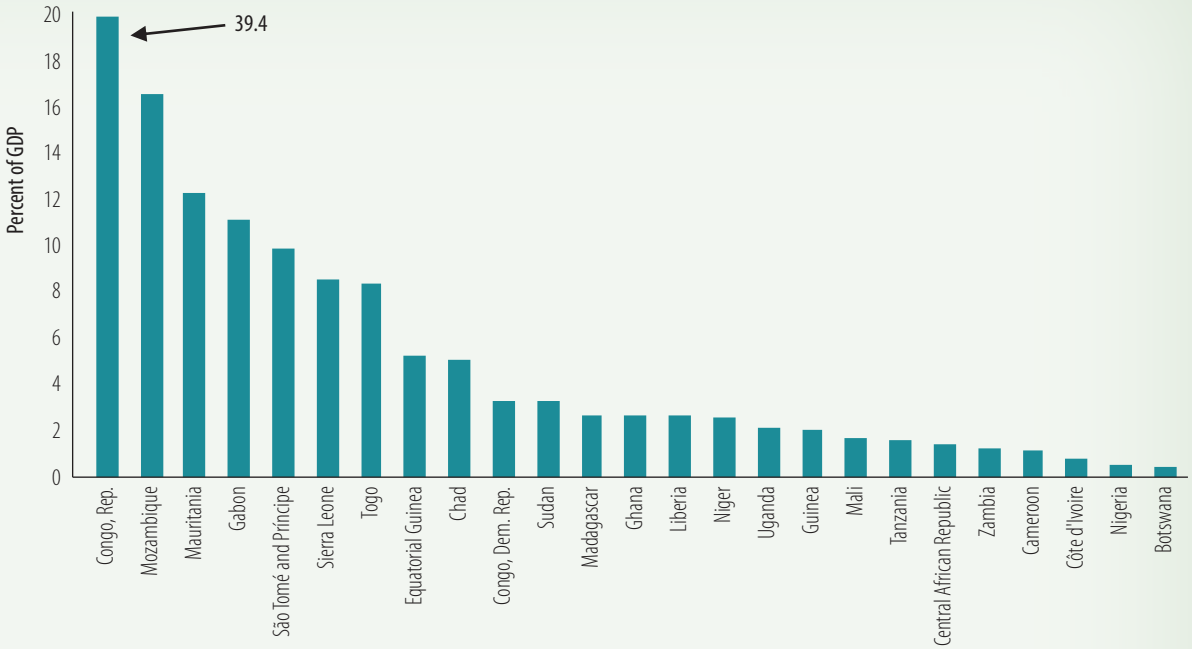
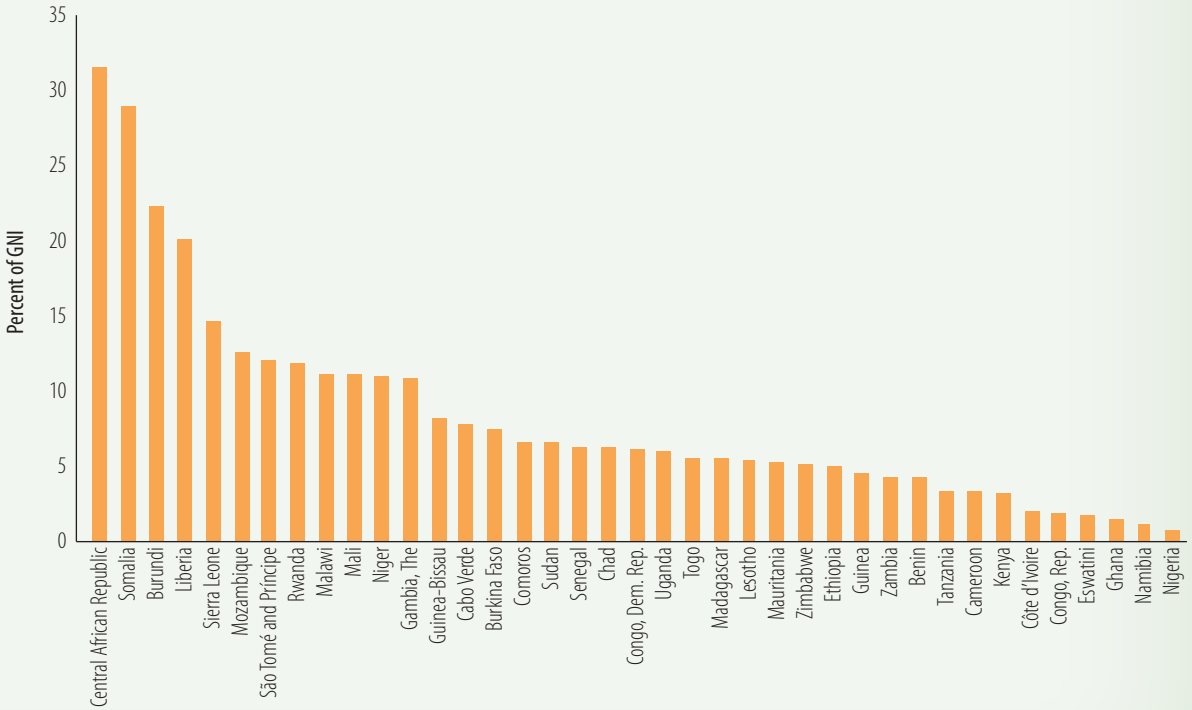


FIGURE 1.23: Net Official Development Assistance across Countries in Sub-Saharan Africa (% of GNI)



Sources: UNCTAD's World Investment Report; World Bank's World Development Indicators.

Note: Net official development assistance (ODA) consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients. It includes loans with a grant element of at least 25 percent (calculated at a rate of discount of 10 percent). FDI= foreign direct investment; GDP = gross domestic product; GNI = gross national income.

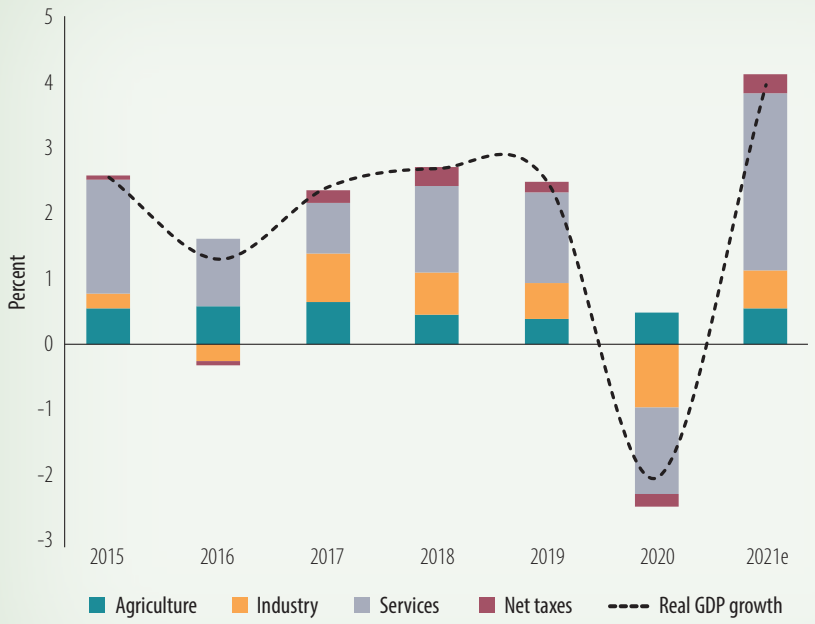
1.4 ECONOMIC DEVELOPMENTS

Sluggish Recovery Albeit Elevated Commodity Prices

Since emerging from its first recession in 25 years, economic growth in Sub-Saharan Africa is estimated at 4 percent in 2021, up by 0.7 percentage point from the October 2021 *Africa's Pulse* projection, and up from -2.0 percent in 2020. The upward revision of growth in 2021 from the October forecast reflects growth upgrades of 1.2 and 0.3 percentage points for Nigeria and South Africa, respectively. Growth in Angola, however, was downgraded by 0.2 percentage point. The growth rate is supported by elevated commodity prices, recovery in global trade, and removal of the restrictions imposed during the first wave of the COVID-19 pandemic. However, growth recovery in the region lost the pace seen in the first half of 2021 due to the impacts of the Delta variant of COVID-19, elevated debt levels in many countries, lingering supply bottlenecks, the plateauing of metal and mineral prices, rising inflation, and tightening financial conditions. On the production side, growth in Sub-Saharan Africa was supported primarily by the buoyed service and industrial sectors, while favorable weather conditions boosted the agriculture sector (figure 1.24). On the expenditure side, the recovery was supported by private consumption—as a result of the easing of COVID-19 restrictions—as well as weak growth in gross fixed investment (figure 1.25). Net exports held back economic activity as the increase in imports surpassed that of exports.

The Russia-Ukraine war is expected to affect the region through direct channels (exposure through trade and financial linkages) and indirectly through commodity prices as these two countries are major exporters of key commodities.[42] However, given the sources of growth in the region and the nature of the economic linkages with Russia and Ukraine, the war in Ukraine might have a marginal impact on economic growth and on overall poverty—as this shock affects mostly the urban poor and vulnerable people living just above

FIGURE 1.24: Contribution to GDP Growth, Supply Side (% points)



On the production side, the recovery was supported by the service, industrial, and agriculture sectors.

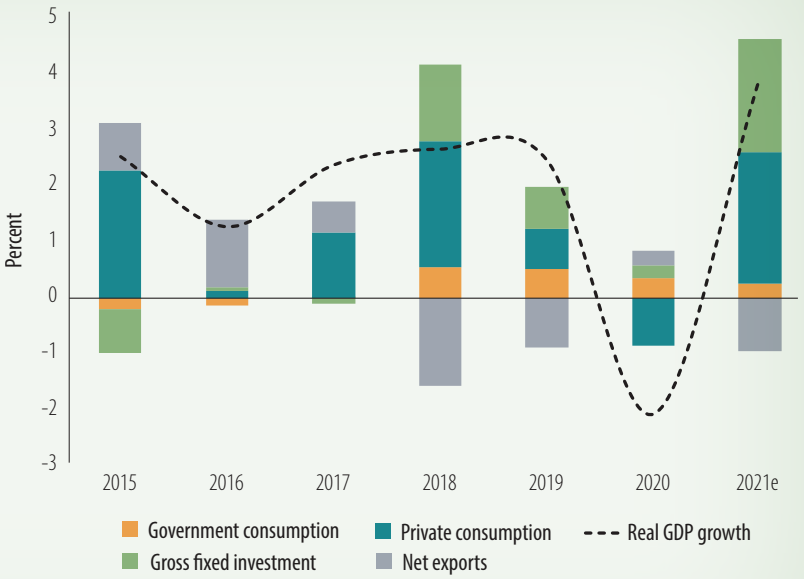
Source: World Bank staff projections.

Note: Change in inventories and statistical discrepancy are not displayed. e=estimate; GDP=gross domestic product.

42 Russia and Ukraine account for significant proportions of global exports of wheat (25 percent), fertilizers (13 percent), platinum (13 percent), nickel (12 percent), oil and gas (10 percent), cereal (8 percent), and fats and oils (6 percent). See subsection 1.3 for more details.

On the expenditure side, the recovery was supported by private consumption and weak investment growth; it was held back by the performance of net exports.

FIGURE 1.25: Contribution to GDP Growth, Demand Side (% points)



Source: World Bank staff projections.

Note: Change in inventories and statistical discrepancy are not displayed. e=estimate; GDP = gross domestic product.

the poverty line. Taken together, Russia and Ukraine represent less than 2 percent of world trade, which suggests that the direct impact through trade linkages is expected to be limited. Nevertheless, the indirect impact is expected to be substantial, but it will affect the subregions in Sub-Saharan Africa differently. The Russia-Ukraine conflict poses additional challenges to the recovery of net commodity importing countries but offers opportunities for net exporters. Resource-rich countries could benefit from rising commodity prices to replenish reserves that were exhausted during the 2020 recession. However, negative terms of trade will pose a threat to net importers of oil and food commodities, due to the further rise in inflation.

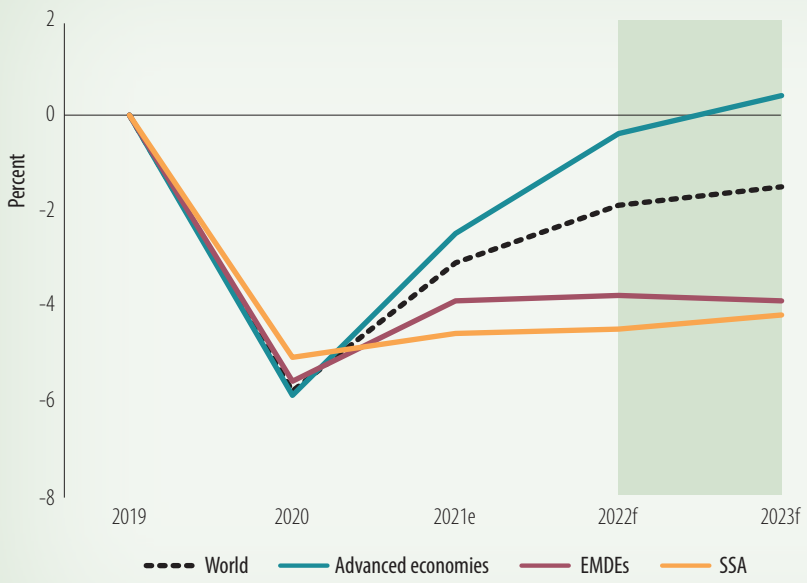
As a result of negative supply shocks that predated the Russia-Ukraine war, stagflation is posing challenges to monetary policy making. Central banks are facing a trade-off between accommodating the weak economy with the risk of exacerbating inflationary prospects and fighting inflation at the high cost of triggering a recession. Many central banks in the region have chosen the second policy option so far and embarked on a tightening cycle, but others have maintained a more dovish stance. The number of the central banks hiking policy rates is on the rise as a reaction to monetary policy normalization in advanced economies, specifically in the United States. Attempting to curb inflation arising from supply shocks with monetary policy might be ineffective, especially in the case of most African countries, which are characterized by underdeveloped financial sectors and important informal sectors. Inflation will more likely remain elevated while output will contract.

Elevated inflation adds uncertainty above the lingering effects of the COVID-19 crisis, which the region is struggling to mitigate, exacerbating inequality between rich and poor countries. In addition, rising insecurity and conflicts in the Sahel region (Burkina Faso, Chad, Mali, Mauritania, Niger, and northeastern Nigeria) could hamper the strong recovery seen in most West African Economic and Monetary Union (WAEMU) countries, while creating instability in the entire subregion.

The scarring effects induced by the COVID-19 pandemic combined with climate-related issues present long-term risks to the outlook for Sub-Saharan African economies, constraining the region from reaching the twin goals of ending poverty and achieving shared prosperity. Yet, the region can seize this opportunity of rising commodity prices to strengthen resilience to

these challenges. From subsequent waves of new variants, it is evident that Sub-Saharan Africa was more strongly affected than any other region partly due to inadequate social safety nets (figure 1.26). While potential output in advanced economies is expected to revert to its pre-pandemic trend in 2022, it will be down by 4.2 percent in Sub-Saharan Africa in 2023. The recovery in the region involves a structural transformation process geared towards the creation of more and better jobs. These jobs can be seen as the best form of social protection to shield the most vulnerable from a wide array of shocks, including the Russia-Ukraine war and climate change, while at the same reducing long-term scars from the pandemic. Mounting risk and uncertainty from short-term challenges, namely, tightening global financial conditions and the war in Ukraine, will weigh on already-stretched public finances as well as raise public debts further. The number of countries in or at risk of debt distress has increased considerably. Policies that foster resource mobilization have become urgent to reduce debt sustainability concerns and mitigate default risks. In 2023, a recovery in global demand is expected as most of the shocks dragging down the global economy dissipate. Growth in the region is expected to rebound in 2023 following improvement in global growth, elevated commodity prices, easing of austerity measures, and accommodative monetary policy as a reaction to falling inflation. In addition, supply disruptions might ease thanks to the lifting of most of the coronavirus restrictions in many countries, particularly in China. As a result, on the demand side, consumption and investment will pick up, and on the supply side, the industrial sector will grow faster.

FIGURE 1.26: Output Deviation from Pre-Pandemic Trend



The COVID-19 pandemic left scarring effects on economic activity in Sub-Saharan Africa, which is projected at 4.2 percent below the pre-pandemic level in 2023.

Source: World Bank staff projections.
Note: EMDEs = emerging markets and developing economies; f = forecast; SSA = Sub-Saharan Africa.

Elevated inflation, contractionary fiscal and monetary policy, supply disruptions, and growing uncertainty will affect both non-resource-rich and resource-rich countries in 2022. Non-resource-rich countries will recover from the shock in 2023, supported by the buoyant service sector, while resource-rich countries will pick up only a year later. Among resource-rich countries, oil-rich countries will gain from elevated commodity prices while economic activity in metal and mineral exporters (excluding South Africa) will expand in 2023 at 5.2 percent, from 4.7 percent in 2021 and 2022.[43] Of the three richest economies in the region, high oil prices will contribute to growth in Angola and Nigeria in 2023, whereas the South African economy will drag the regional

43 Including South Africa, metal and mineral exporting countries will contract to 2.8 and 2.6 percent in 2022 and 2023, respectively.

recovery owing to weak investment reflecting structural obstacles, such as electricity outages, that continue to hinder economic activity.

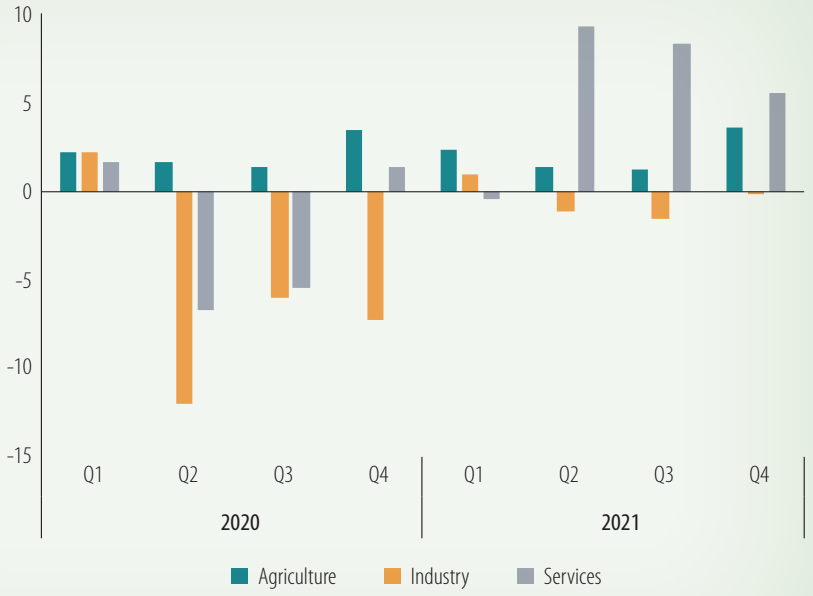
While dealing with short-term shocks, countries should not lose sight of overcoming structural challenges, which will be necessary to achieve the ambitious twin goals of poverty reduction and shared prosperity. Some steps are needed to attract investment in human and physical capital, particularly in the fields of digitalization and green technology. The aim is to turn from missing the opportunity of the 2004-14 commodity boom, toward taking advantage of the current surge in prices (annex A).

Sub-Saharan Africa's Three Largest Economies

Nigeria's economy grew by 4.6 percent (year-over-year) in 2021Q4, a little over the 4.1 percent in the previous period (2021Q3), and at a faster pace than pre-pandemic growth. Real GDP growth is expected to have expanded by 3.6 percent in 2021, 1.2 percentage points above the October 2021 *Africa's Pulse* projection, and exceeding population growth of 2.6 percent for the first time since 2015. On the demand side, the economic expansion was supported by private consumption expenditure associated with accommodative monetary and fiscal policy, while private investment continued to grow moderately, reflecting high uncertainties due to security issues. On the supply side, the service sector remains the key driver of the economy (figure 1.27). The industrial sector dragged down the pace of recovery, owing to supply chain disruptions coupled with the seasonal decline in crop production. Industrial production was down by 3.1 percent (quarter-over-quarter). Weak production in the oil sector weighed on recovery in 2021. Oil production dropped from 1.57 million barrels per day in 2021Q3 to 1.50 million barrels per day in 2021Q4.

In Nigeria, the service sector remains the key driver of the economy.

FIGURE 1.27: GDP Growth in Nigeria, by Sector (%)



Source: Nigeria National Bureau of Statistics.
Note: GDP = gross domestic product.

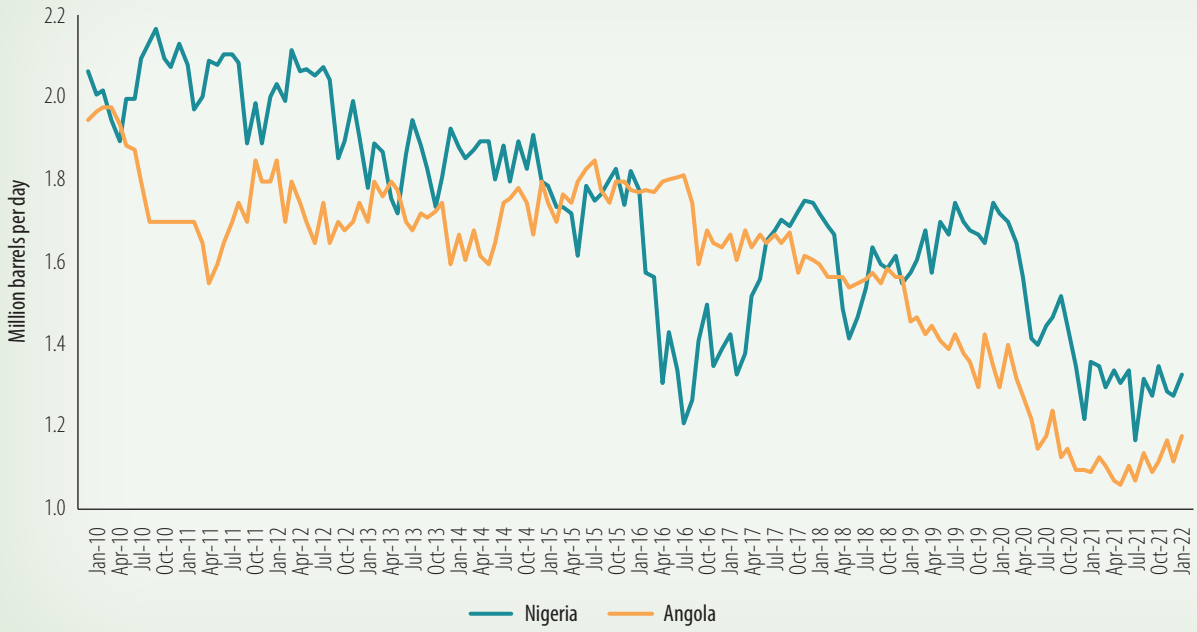
The South African economy expanded by 1.2 percent (quarter-over-quarter) in 2021Q4, falling short of recovering the losses in the previous quarter after contracting by 1.5 percent (quarter-over-quarter), dragged by the outbreak of the Delta variant of COVID-19 as well as disruption caused by unrest in the Kwazulu-Natal and Gauteng provinces. The economy grew somewhat in

the fourth quarter due to less stringent containment measures implemented by the government to contain the (more transmissible but less harmful) Omicron variant of the coronavirus. Growth in South Africa is estimated at 4.9 percent in 2021, revised up by 0.3 percentage point from the earlier forecast for a stronger rebound from the 6.4 percent contraction in 2020. On the demand side, the expansion was driven by strong household consumption expenditure, particularly expenditure on durable and semi-durable goods. Gross fixed capital formation continued to disappoint after the damage caused to capital stock from the July unrest, it grew by 1.9 percent (quarter-over-quarter). Investment continued to lag its pre-pandemic level due to electricity outages, political uncertainty including on the macroeconomic outlook and the business environment, and persistently weak state-owned enterprises (SOEs). General government expenditure rose by a mere 0.1 percent (quarter-over-quarter) in 2021Q4. The weak private investment amid structural constraints are especially concerning as they inhibit South Africa's economic growth potential. On the production side, the service and agriculture sectors supported growth in 2021Q4, while the industrial sector struggled to regain its pre-pandemic traction.

The economy of Angola is expected to emerge from prolonged years of recession since the collapse of oil prices in 2014, as it is estimated to grow 0.2 percent in 2021, 0.2 percentage point down from the previous forecast, supported by good performance in the non-oil sector and elevated oil prices. Outside the three big regional economies, there is a stark divergence in performance between resource-rich and non-resource-rich countries, which emerged since the commodity price collapse of 2014 and persisted in 2021 (see annex A). While growth in resource-rich and non-resource-rich countries was comparable in the pre-collapse period (2004-14), at 5.3 and 5.5 percent, respectively, the estimates for 2021 are 3.5 and 4.7 percent, respectively.

FIGURE 1.28: Angola and Nigeria: Oil Production (million barrels per day)

Oil production in oil-rich countries has struggled to meet OPEC quotas due to insufficient investment.



Source: U.S. Energy Information Administration.

Resource-Rich Countries

Resource-rich countries failed to capitalize on the elevated commodity prices during the boom period of 2000-14.[44] In particular, oil-rich countries (Angola, Chad, Nigeria, and the Republic of Congo) have struggled to meet their OPEC quotas due to insufficient investment in the oil sector (figure 1.28). Chad registered a dismal performance in 2021, remaining depressed at -1.2 percent from -1.6 percent in 2020. The Republic of Congo continued in recession for seven consecutive years. Real GDP growth was down by -3.5 percent in 2021, 2.3 percentage points down from the October 2021 projection, as oil production dropped, and the non-oil sector underperformed. Economic performance in South Sudan was poor in 2021 as floods affected both agriculture and oil production, and the COVID-19 pandemic delayed new investments to replace exhausted oil wells. Metal and mineral resource-rich countries emerged from negative territory (-5 percent) in 2020 to grow by 4.8 percent in 2021 on the back of elevated commodity prices. Growth was particularly robust in the Democratic Republic of Congo, being revised upward to 5.7 percent from the October 2021 projection of 3.6 percent. Similarly, the economy expanded in Botswana by 12.1 percent, exceeding the early forecast of 8.5 percent, driven by strong performance of the non-mining sectors—particularly public sector services. Underperforming sectors include agriculture, forestry and livestock, and accommodation and food services. Other metal and mineral resource-rich countries with positive real GDP growth boosted by high metal and mineral prices include Guinea (3.1 percent) and Liberia (4 percent). Meanwhile, Niger (1.4 percent) and Zambia (3.6 percent) were among the worst performers, with the rebound in Zambia supported by favorable terms of trade and improved business confidence after the presidential election.

Non-Resource-Rich Countries

Non-resource-rich countries rebounded strongly from the 2020 recession, expanding by 4.7 percent thanks to accommodative macroeconomic policies, increase in net exports, and resilience to the COVID-19 pandemic. This is particularly the case among non-resource-rich countries in the WAEMU, such as Benin (6.6 percent), Burkina Faso (7 percent), and Senegal (6.1 percent). The West African non-resource-rich countries withstood first the collapse of commodity prices in 2014, with solid macroeconomic fundamentals, and then the aftermath of the 2020 recession (annex A). Inflation and deficits were under control and consistent with WAEMU targets. This in turn helped the countries to rebound alongside advanced economies and emerging markets and developing economies. Likewise, Kenya (6.7 percent) and Rwanda (10.9 percent) did exceptionally well, emerging from the recession and regaining their pre-pandemic growth paths. Rwanda is one of the strongest performers in the region, with robust growth of 10.3 percent in 2021Q4 thanks to its effective management of the COVID-19 pandemic, which translated into strong expansion of the industrial and service sectors. Unlike non-resource-rich WAEMU countries, the coronavirus had a more protracted adverse impact on economic activity among non-resource-rich countries in East Africa. Additionally, Ghana, Ethiopia, Malawi, and Mozambique fell short of replicating the success of most non-resource-rich countries in part because of elevated debt levels, and in some cases insecurity. In Ghana and Malawi, the disappointing performance underscores the poor management of public finances and, the

44 Cust and Zeufack (2022).

need for significant growth-enhancing reforms, while growth was held back in Ethiopia and Mozambique by the ongoing civil war in the Tigray Region and insurgency in Cabo Delgado, respectively. The estimated real GDP growth of 6.3 percent in 2021 for Ethiopia is about half the average growth recorded over 2004-2014. Tourism-dependent countries, Mauritius and the Seychelles, were hit hard by the pandemic, yet they managed to navigate the recovery process well, and growth was up by 3.9 and 7.9 percent, respectively.

FIGURE 1.29: South Africa: PMI, Manufacturing Production, Mining Production, and New Vehicle Sales

South Africa has entered the new year on strong footing.

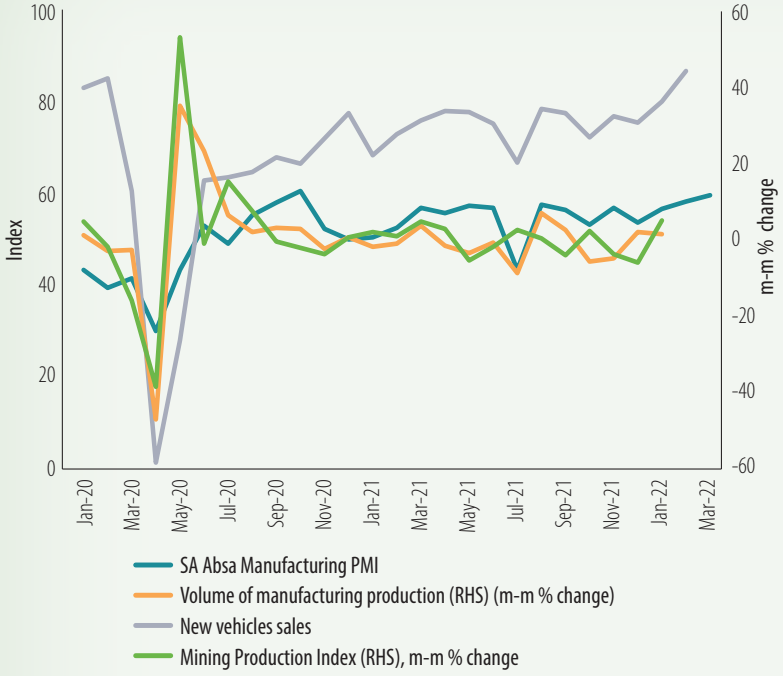
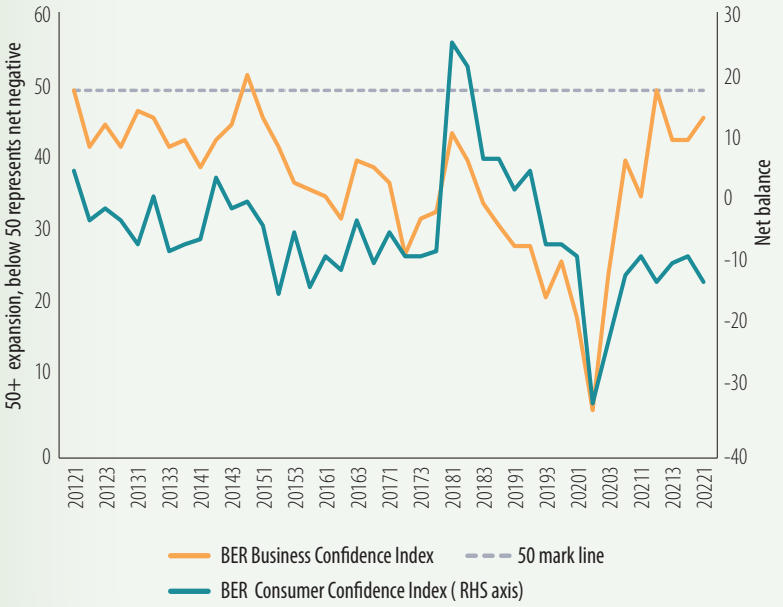


FIGURE 1.30: South Africa: Business and Consumer Confidence Index

Private sector sentiment has improved, while consumer confidence remains weak.



Sources: Figure 1.29: Statistics South Africa; Haver Analytics 2022. Figure 1.30: Bureau of Economic Research.

Note: Consumer confidence is expressed as a net balance derived as the percentage of respondents expecting an improvement less the percentage expecting a deterioration. m-m = month-over-month; PMI = Purchasing Managers' Index; SA = South Africa.

High-Frequency Data

Incoming data signal a slow pickup in economic activity in AFE after the Omicron variant disruption in December 2021. In South Africa, December data highlighted the weakness of the economy stemming from travel bans and mild restrictions imposed by the government to limit the effects of the Omicron variant. The contraction was noticeable in manufacturing (-0.1 percent) and mining (-5.3 percent) production (figure 1.29). By contrast, recent data point to a steady recovery, albeit with mounting uncertainty arising from the Russia-Ukraine conflict. After dropping from 57.2 in November to 54.1 in December, the manufacturing PMI bounced back in January to 57.1 and surged further to 60 in March.

Total vehicle sales followed a similar trend, increasing for two consecutive months after dipping in December, and were up by 18.4 percent (year-over-year) in February. Manufacturing and mining production reversed the poor performance of December 2021, and were up by 2.9 and 0.1 percent (year-over-year), respectively, in January 2022. The largest contributions to mining production came from manganese ore (19.6 percent), diamonds (16.3 percent), and gold (7.0), whereas manufacturing production was mainly supported by food and beverages (11.5 percent). These data suggest that the manufacturing sector is behind the rebound in economic activity. The positive picture from incoming data is echoed by improved private sector sentiment, with the RMB/BER Business Confidence Index up from 43 in 2021Q4 to 46 in 2022Q1, the highest level since its collapse in 2021Q2 caused by the effects of the Delta variant and riots (figure 1.30). Unsurprisingly, the survey preceded the Russia-Ukraine conflict. By contrast consumer confidence dropped in 2022Q1, reflecting negative sentiment from the Ukraine war as well as the steep uptick in fuel prices in March, with the expectation that they will remain elevated for the coming months. Exports of precious metals and stones receded, driving down exports by 16.1 percent in January from the previous month. As a result, the current account surplus plummeted to 1.9 percent of GDP in 2021Q4 from 3.5 percent 2021Q3.

Crude oil production in Angola has been on the rise since June 2021, up by 0.12 million barrels per day as of February 2022 (figure 1.28). Oil revenues increased considerably in 2021 on the back of high oil prices combined with recovery in production from June to December 2021. Angola's oil production has been on the back foot since 2015. The country resorted to the non-oil sectors, specifically the agriculture sector, as the engine of economic growth. The government's reform program with the International Monetary Fund (IMF), higher oil prices, and fiscal consolidation have provided impetus to investors, increasing business confidence to positive territory in 2021Q4.

Declining COVID-19 cases propelled activity in Kenya, which recorded an uptick in the PMI to 52.9 in February from 47.6 in January 2022. The current account deficit widened in December. Business confidence has been zigzagging since the economy emerged from the 2020 recession, reflecting slow progress in reducing COVID-19 cases throughout 2021, supply chain disruptions, and looming uncertainty associated with the presidential elections. Rwanda was among the hardest hit countries by the pandemic in the subregion, with soaring cases of the Omicron variant in December and January. Nevertheless, the service sector showed strong performance in 2021Q4 thanks to better management of the pandemic with an accelerated vaccination rollout. Industrial production retreated by 8.4 percent in January compared with December. The picture is different on a year-over-year basis, registering a leap of 30.3 percent. Furthermore, exports and imports ebbed in January by 21 and 11.1 percent, respectively. In Zambia, the PMI in February edged up to positive territory (50.3) after a short setback in January (49.9) preceded by four consecutive months above the threshold of 50, thus reflecting positive private sector sentiment since the election of a market-friendly president. The economy stayed resilient to negative effects induced by the different COVID-19 waves. However, the Ukraine war would most likely derail the momentum as inflation remains elevated and could be aggravated by the rising price of fertilizer and depreciation of the domestic currency. From a deficit in November, the current account in Botswana recorded a trade surplus (12.7 percent) on the back of favorable diamond exports in December. Total exports climbed by 6.7 percent while imports slumped by 24.7 percent.

In AFW, high-frequency data reveal few disruptions due to the Omicron outbreak. In Nigeria, the Stanbic IBTC Bank Nigeria PMI jumped from 53.7 in January 2022 to 57.3 in February, the highest level since the country recovered from the recession. This suggests firm momentum of private sector activity since November 2019. The non-oil sector was behind this surge. As war persists in Ukraine, the oil sector is set to gain from high prices. Nevertheless, elevated fuel and food prices combined with supply disruptions would pose challenges to consumers due to rising headline inflation. In addition, the high cost of fuel subsidies associated with the surge in fuel prices may deteriorate the country's fiscal balance. Finally, socioeconomic issues that have been amplified since the oil price decline in 2014 continue to prevail. Addressing the persistent food insecurity, increasing poverty, and insecurity remain the key priorities for inclusive growth. The PMI in Ghana was down to 49.6 in February, from 50.8 in January. This decline followed six consecutive months of positive private sector sentiment. Mounting public debt as well as rising consumer inflation are key factors behind the negative perception in the private sector. Businesses pass high input costs directly to consumers. Additionally, the persistent depreciation of the domestic currency, which lost 20 percent already this year, fuels the already elevated rate of inflation. As a result, inflation breached the upper bound of the official target for six consecutive months. The central bank reacted aggressively in March with the highest rate hike ever, raising the policy rate by 250 basis points to 17 percent. The Russia-Ukraine war will affect the Ghanaian economy directly through trade with both Russia and Ukraine and indirectly through commodity prices.

Overall, incoming data suggest that WAEMU countries have entered the new year on the front foot as private sector activity improved in 2021Q4. The Omicron virus outbreak induced mild effects compared with the AFE subregion. However, the AFW subregion faces insecurity arising from coups in Mali, Burkina Faso, and Guinea and an attempted coup d'état in Guinea-Bissau. In Côte d'Ivoire, the Harmonized Index of Industrial Production registered a deceleration in activity (-2.3 percent year-over-year).[45] The mining sector mimicked the same pattern as industrial production in December, down by 2.4 percent from a jump of 17.8 percent the month before. The setback in activity is attributed to temporary disruptions in electricity supply caused by climate-related factors. Looking at 2021 as whole, the performance in December was a blip in a strong rebound of the economy, illustrated by broad-based, robust improvement in several indicators throughout the year, supported by accommodative monetary and fiscal policies, coupled with easing of mobility restrictions. However, the momentum could be offset by Russia's invasion of Ukraine from rising fuel and food prices together with supply disruptions, exerting upward pressure on domestic consumer inflation, which is already above the WAEMU convergence criteria threshold of 3 percent.

Similarly, the December readings of manufacturing and mining production in Senegal indicate weakening later in the year by 5.5 and 8.9 percent (year-over-year), respectively. Unlike other countries in the region, which will be indirectly affected by the war in Ukraine through rising commodity prices only, Senegal imports some commodities from Russia and Ukraine. Its imports from these countries include essential commodities: about 15 and 10 percent of Senegalese wheat and mineral fuel imports, respectively, came from Russia in 2020. Senegal depends on Russia for sulfur imports, which were estimated at 20 percent of its total import demand in 2020.

45 On a monthly basis, growth in the industrial production index slowed to 1.4 percent in December from 8.8 percent in November. However, it grew by 7 percent on average in 2021.

In Burkina Faso, industrial production showed an uptick of 0.6 percent in 2021Q3, down from 12.6 percent in the previous quarter.

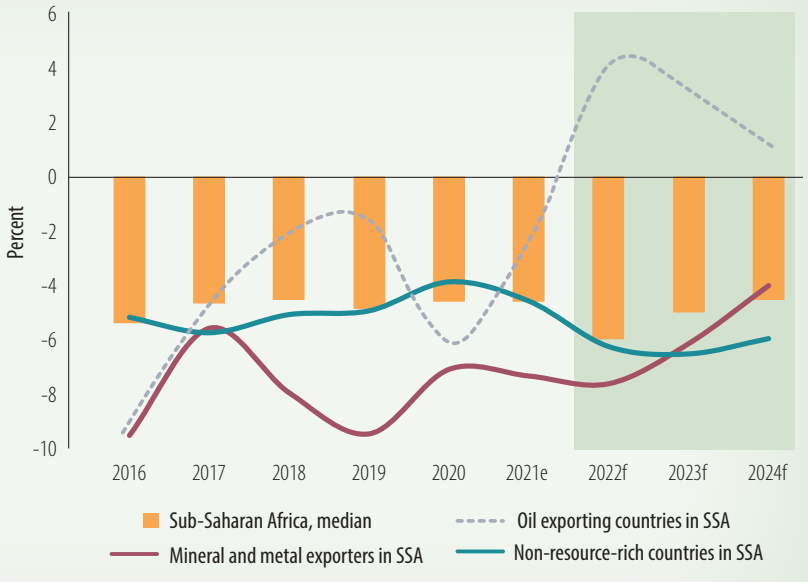
The Central African Economic and Monetary Community (CEMAC), particularly oil-rich countries (Chad, the Republic of Congo, Gabon, and Equatorial Guinea), has continued to gain from elevated oil prices. Consequently, countries in the subregion, such as the Republic of Congo, which have been in debt distress will have breathing space from rising government revenue. This will also provide impetus for external balances. Nevertheless, limited capacity in the oil industry remains a significant hindrance to reaching the OPEC quotas. The region should be prepared to face the pass-through of rising food prices stemming from the Russia-Ukraine war to consumer inflation. Fear of heightened inflation is not a concern for Gabon as inflation has been muted in the country.

External Position

The median current account deficit is estimated to have remained unchanged at 4.6 percent of GDP in 2021, and it is projected to widen to 6 percent of GDP in 2022 before recovering to 4.6 percent in 2024 (figure 1.31). The forecast of the rising deficit in 2022 reflects the unfavorable terms of trade for some metal and mineral exporters and non-resource-rich countries from elevated import bills. Mozambique and the Seychelles are projected to witness record deficits in the region of 32.5 and 27.7 percent, respectively, in 2022. Unlike most metal and mineral exporters, Zambia is projected to register a surplus of 10.7 percent of GDP in 2021 and 3.7 percent of GDP in 2022. Oil-rich countries are predicted to move from a deficit of 2.4 percent of GDP in 2021 to a surplus of 4.1 percent of GDP in 2022. This positive performance of oil-rich countries echoes the surge in oil prices stemming from the Russia-Ukraine war. Angola and the Republic of Congo are forecast to record surpluses of 9.1 (11) and 9 (15.3) percent of GDP in 2021 (2022), respectively, while some metal and mineral exporters (Botswana, the Democratic Republic of Congo, Ghana, Namibia, South Africa, Tanzania, Zambia, and Zimbabwe) will also benefit from favorable terms of trade shocks from the war.

Marked divergence in the current account balance: surplus in oil-rich countries, and deficit in non-resource-rich countries and metal and mineral exporters.

FIGURE 1.31: Evolution of the Current Account (% of GDP)



Source: World Bank staff projections.
Note: e = estimate; f = forecast; GDP = gross domestic product; SSA = Sub-Saharan Africa.

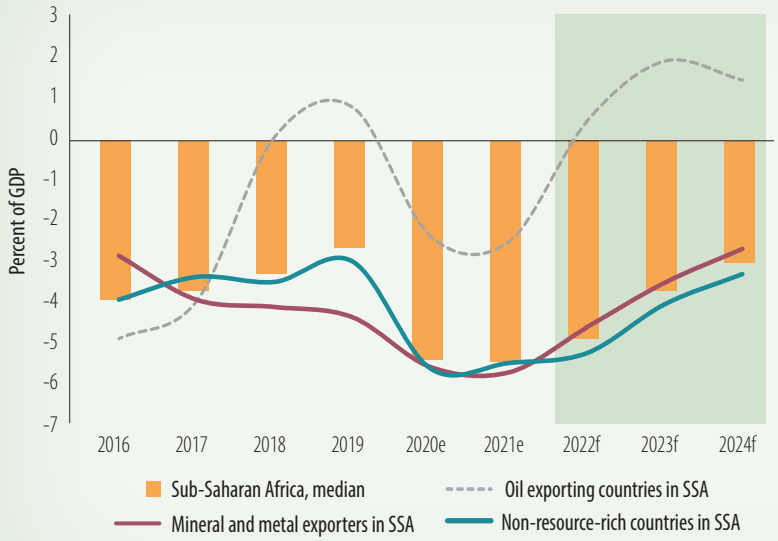
The current account surplus deteriorated in South Africa to R120 billion (1.9 percent) in 2021Q4, from R216 billion (3.5 percent) in 2021Q3 as imports increased faster than exports. The current account was held back by

unfavorable terms of trade as the rand price of exports of goods and services declined while import prices increased, supported by the surge in oil prices. South Africa is estimated to have registered a surplus of 3.7 percent of GDP in 2021 thanks to favorable terms of trade, and it is expected to narrow in 2022 (0.4 percent). The current account balance is expected to record a deficit of 1.5 percent of GDP in 2024. South Africa's long history of weak competitiveness—attributed to labor and product market rigidities—constitutes a challenge over the medium term. Bold reforms are needed to boost export volumes and gain even more from favorable commodity prices while generating more and better jobs in the formal and informal sectors (annex A). Incoming data for Botswana show a current account deficit of 2.1 percent of GDP in 2021, brought down mainly by a marked decrease in diamond exports in 2021Q4, from small surpluses in the first three quarters. The economy could revert to its trade surplus pattern with favorable terms of trade associated with commodity prices. However, as rising oil prices place noticeable pressure on the import bill and China's demand for diamonds softens, the current account balance could be under pressure in 2022. In Mauritius, travel bans on Southern African countries are expected to have slowed the recovery in services receipts in 2022Q1. Services receipts gained momentum following the full reopening of borders in October 2021. The current account deficit is expected to widen in Senegal to 10.8 percent of GDP in 2022 from 10.2 percent in 2021. However, this deficit is projected to narrow in 2024 to 5.8 percent of GDP from the oil price dynamics, which will also raise foreign exchange reserves and support the currency.

Fiscal Deficit

The median fiscal deficit is expected to remain unabated at -5.5 percent of GDP in 2021 and narrow to -4.9 percent of GDP in 2022 (figure 1.32). Deficits are set to decline more in metal and mineral exporters (-4.6 percent of GDP) given the gains from the terms of trade compared with non-resource-rich countries (-5.3 percent of GDP) in 2022. The fiscal account in oil-rich countries is projected to recover from a deficit in 2021 to a small surplus in 2022. The Russia-Ukraine war is expected to exert more pressure on government spending in non-resource-rich countries, especially those with fuel subsidies. However, given their elevated debt, Sub-Saharan African countries do not have enough fiscal space to provide the support needed to vulnerable households and firms without jeopardizing debt sustainability. Assistance from multilateral donors will still be required

FIGURE 1.32: Fiscal Balance in Sub-Saharan Africa (% of GDP)



The elevated price of oil will generate fiscal surplus in oil-rich countries, while the fiscal deficit will decline steadily elsewhere.

Source: World Bank staff projections.
Note: e = estimate; f = forecast; GDP = gross domestic product; SSA = Sub-Saharan Africa.

for most countries in the region. Countries in or at risk of debt distress should seek to engage with creditors to reach a debt restructuring before they fail to meet their contractual obligations (World Bank 2022a).

In South Africa, the commitment to fiscal consolidation in the 2021/22 budget reflects the primary goal of the government to keep debt on a sustainable path. The deficit target for the fiscal year 2021/22 was set at 5.5 percent of GDP, down from 6.6 percent of GDP previously. The forecast to turn the current deficit into a surplus of 0.6 percent of GDP was shortened by one year to 2023/24. Yet, there is mounting pressure weighing on the government to keep providing fiscal support to vulnerable people, especially those who have been strongly affected by the different waves of COVID-19 and the social unrest in July 2021. In addition, with the election approaching within the ruling party, the government might find it difficult to resist the demand from trade unions for an upward revision of the wage bill. Rising unemployment (35.3 percent) is an additional obstacle to revenue mobilization.

Persistent fuel subsidies, increasing military spending for security purposes, and rising debt servicing costs weigh heavily on public finance to keep public debt at a sustainable level in Nigeria. The fiscal balance deteriorated considerably in several Sub-Saharan African countries as governments scaled up spending to mitigate the prolonged effects of the pandemic on firms and vulnerable households. In Cabo Verde, for example, the government provided emergency support to struggling SOEs, with Cabo Verde Airlines accounting for almost half of it. To return to its pre-pandemic consolidation trajectory, the Government of Ghana proposed reforms that promote fiscal and debt sustainability. After resistance from the opposition, the Parliament approved the E-levy tax of 1.5 percent on digital transactions. The proposed tax is expected to increase the tax base by generating US$1.1 billion in revenue in 2022. Nevertheless, these efforts are not enough to address the country's debt sustainability problems. Revenue from the mining sector remains weak, while pressing needs for government support continue to weigh on public finance. However, there are prospects of increasing revenue from favorable prices of gold and oil. In Mauritius and the Seychelles, the governments deployed extensive state support programs in response to the COVID-19 pandemic to expedite the pace of reopening the borders to tourists.

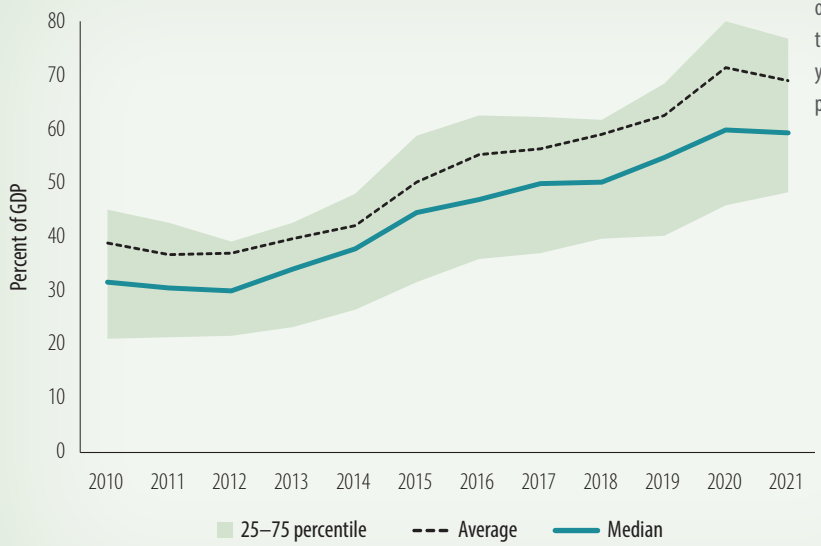
Debt Levels and Debt Vulnerabilities

The austerity measures implemented by governments in the region to address rising concerns about debt sustainability coupled with fear of losing access to market have been insufficient to bring debt to the pre-crisis level. The median debt-to-GDP ratio remained elevated, with little change at 61 percent in 2021. Following the pandemic shock, public debt climbed to 60 percent of GDP in 2020, from 57 percent of GDP the previous year, as governments deployed fiscal support to vulnerable firms and households to shield them from the negative effects of the pandemic. Public debt was already climbing during the years prior to the pandemic (figure 1.33).

Debt dynamics in the region are somewhat tied to commodity price fluctuations and various debt relief initiatives. Debt started rising in 2011 at the peak of the commodity price super-cycle when pressure mounted on revenue from the retreat in commodity prices. Before 2011, Sub-Saharan African countries managed to bring public debt down to 31 percent of GDP, from as high as 90 percent in 2000. The upward trend in debt resumed after bottoming in 2011 and

was exacerbated by the fall in commodity prices in 2014, due to revenue shortfalls and income losses. Excluding Nigeria, public debt skyrocketed in oil-rich countries from 2015 to 2016 by 15 percentage points, while it increased marginally in non-resource-rich countries (6.1 percent). Public debt rose a year earlier by 11.5 percent in metal and mineral exporters.

FIGURE 1.33: Evolution of Public Debt in Sub-Saharan Africa (% of GDP)

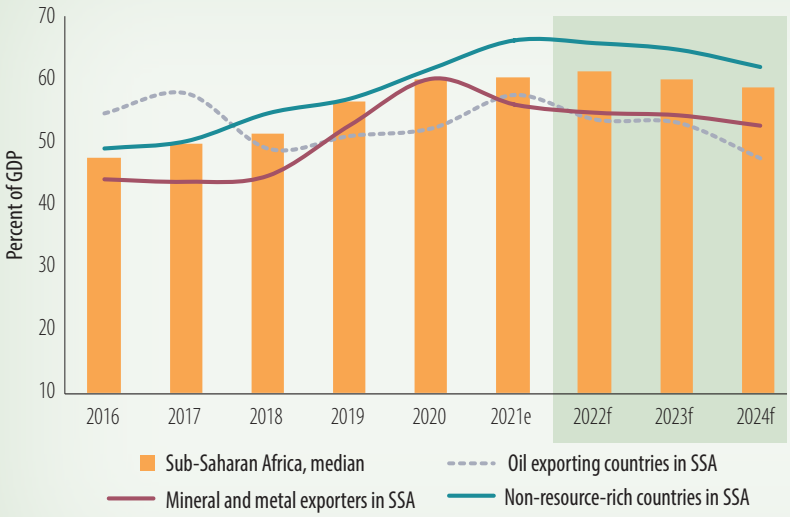


Public debt was on an upward trend during the years prior to the pandemic.

Source: World Economic Outlook, IMF Database, October 2021.
Note: GDP = gross domestic product.

The government debt of Sub-Saharan Africa in 2021 hides considerable differences across country groups. It was up by 5.3 and 4.5 percentage points in oil-rich and non-resource-rich countries, respectively, reflecting rising fiscal deficits (figure 1.34). In oil-rich countries, the elevated debt was mostly in line with rising debt in Nigeria and South Sudan but held down by Angola and the Republic of Congo. It is projected to go down in 2022 supported by high oil prices. Public debt declined marginally among mineral and metal exporters (4.1 percentage points), and it is expected to stabilize around 54 percent of GDP in the near future. The uptick in public debt in non-resource-rich countries is associated with the dilemma faced by policy makers to unwind or maintain support to vulnerable firms and households. Particularly, among countries with high public debt, there is little prospect that there will be significant debt reduction in Ghana, Rwanda, and South Africa. In some countries, increasing government subsidies will weigh on public finance and increase public debt further. Russia's invasion of Ukraine, with its consequences for the terms of trade, provides an opportunity for further debt reduction in oil-rich and metal and mineral exporters.

FIGURE 1.34: Government Debt in Sub-Saharan Africa (% of GDP)



Public debt is projected to remain elevated in non-resource-rich countries and decline in resource-rich countries.

Source: World Bank staff projections.
Note: e = estimate; f = forecast; GDP = gross domestic product; SSA = Sub-Saharan Africa.

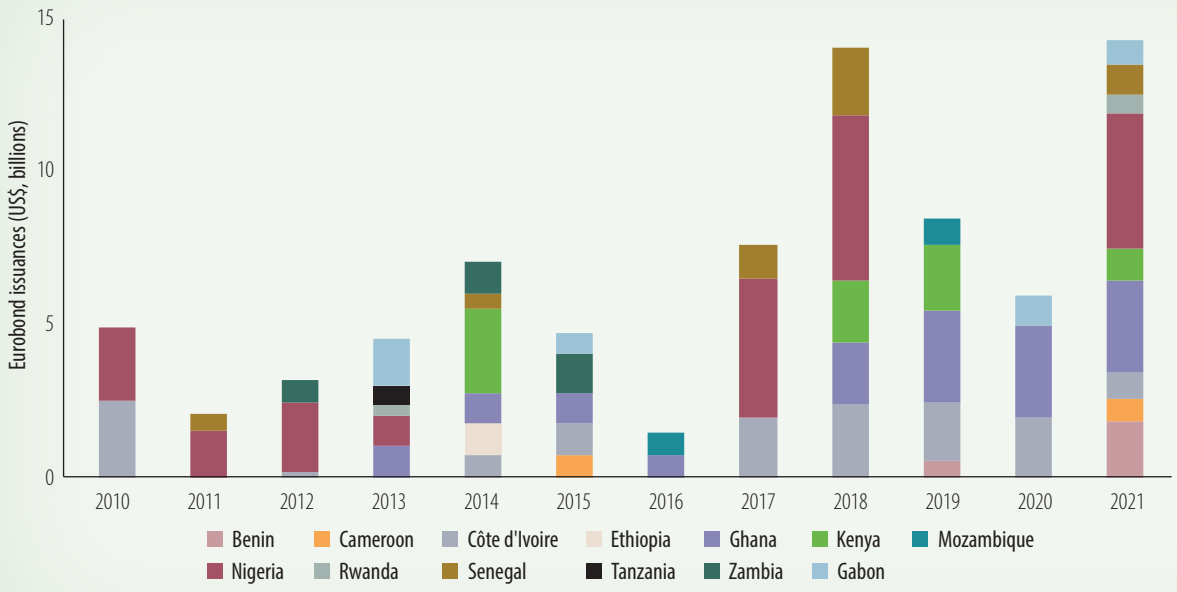
According to official data, Ghana's public debt rose to 77.8 percent of GDP (equivalent to US$58.23 billion) as of the end of September 2021 compared to 76.1 percent of GDP at the end of 2020 (US$50.8 billion). The 2021 and 2020 debt levels were significantly higher relative to the much lower pre-COVID-19 debt-to-GDP ratio of 62.4 percent (US$39.4 billion) in 2019. At the end of September 2021, the share of domestic debt in total public sector debt was 52.1 percent., with external debt accounting for the remaining 47.9 percent. Rwanda's debt-to-GDP rose by more than 40 percentage points over the past seven years, driven by borrowing to meet the development needs envisaged in the National Strategy for Transformation, but also due to the robust COVID-19 response. The public debt is estimated to have reached 74.9 percent of GDP in 2021, equivalent to US$8.1 billion. Most of Rwanda's debt is owed to multilateral donors on concessional terms. Multilateral creditors accounted for about 80 percent of total external public debt by 2020. In South Africa, although the fiscal consolidation process is moving at a slow pace, it is in the right direction. The 2022 budget indicates a commitment to fiscal consolidation with a revised target debt-to-GDP ratio to peak at 75.1 percent in 2025, compared with the initial target of 78.1 percent a year later.

Public debt rose somewhat among WAEMU countries after the escape clause was enacted to support the segments of the population that were highly affected by the pandemic. Nevertheless, debt in WAEMU countries remains among the lowest in the region, but it is increasing steadily in some countries (Guinea-Bissau, Senegal, and Togo). Similarly, except for Gabon and Equatorial Guinea, public debt has not risen to alarming levels in CEMAC countries. Many countries benefited from the financial support of multilateral donors in 2021, which allowed countries to continue helping those who were hardest hit by different waves of the coronavirus. However, this short-term debt relief is not sufficient to reverse the upward trend in debt accumulation. Instead, countries need to strive for sustained economic growth, achieve increased overall levels of fiscal and current account balances, and attract FDI.

In the recent decade, Sub-Saharan African countries shifted from reliance on multilateral debt to accessing international financial markets for debt finance of large infrastructure projects and in some cases to free up fiscal space. Liabilities from bilateral and private creditors have been the main contributors to debt accumulation. China alone accounted for 59.3 percent of total official bilateral debt in 2019. Aside from the Comoros and Malawi, China lent more to oil- and mineral-rich countries. As a result, non-concessional external debt has stagnated while external debt has risen sharply. For example, in Ghana the share of international market debt stock in total external debt has increased from 8.2 percent in 2012 to an estimate of 42 percent in 2021. The energy sector has become a fiscal burden costing the government 1 to 2 percent of GDP (more than a billion dollars) annually due to revenues being consistently below costs. In August 2021, Rwanda issued its second 10-year Eurobond of US$620 million at a coupon rate of 5.5 percent, as part of its debt management strategy. More than 70 percent of the amount raised was used for repaying about 85 percent of the existing US$400 million Eurobond issued at a coupon rate of 6.25 percent (with payments scheduled in 2023) and refinancing an expensive RwandAir debt of about US$112 million.

Countries in the region raised US$14 billion in Eurobonds in 2021, from US$5.9 billion in 2020 (figure 1.35). Nigeria had an additional Eurobond issuance of US$1.2 billion in March 2022 while Angola raised US$ 1.75 billion in April 2022. The JP Morgan Emerging Market Bond Index (EMBI) Global spread for African issuers declined during the first half of 2021, after jumping sharply in March 2020 as the pandemic crisis unfolded (figure 1.36). It has been trending up again since June 2021, reflecting mounting uncertainty driven by the outbreak of the Delta variant. Ghana was the main contributor to the rising number of COVID-19 cases in the region. Investors and agencies have raised concerns about the fiscal situation and the credibility of Ghana's medium-term fiscal plans. These concerns resulted in two credit rating downgrades by Fitch and Moody's as the fear of effective loss of access to the international capital market soared. Gabon, which registered the second highest spread in the region, received a favorable rating of B- by Fitch on the grounds of oil price improvement, which is expected to translate into high revenue and help the fiscal balance in 2022. In Mozambique, negative sentiment by investors due to rising debt and opaque management of public finance kept spreads high throughout 2021, but sentiment shifted at the dawn of the new year from high to moderate risk.

FIGURE 1.35: Eurobond Issuances as of December 2022 (US$, billions)

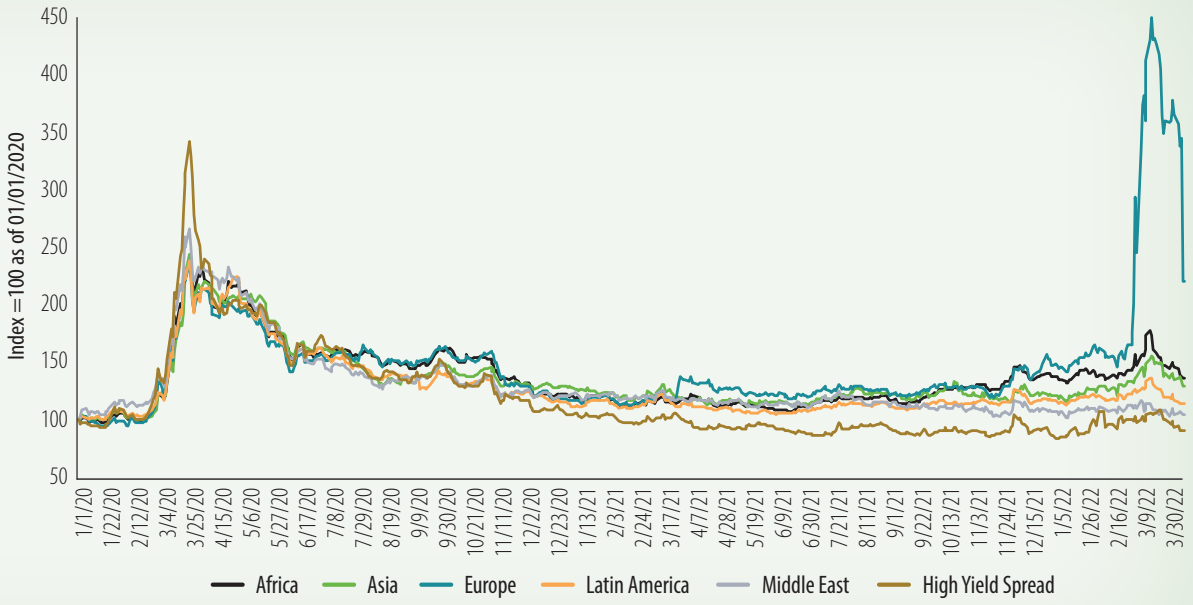


Reliance on multilateral debt in accessing international financial markets is on the rise.

Sources: Bloomberg; World Bank staff estimates.
Note: Data are as of end-December 2021.

Mounting uncertainty prompts increased EMBI spreads in several countries, reflecting investors' fears.

FIGURE 1.36: JP Morgan Emerging Market Bond Index Spreads

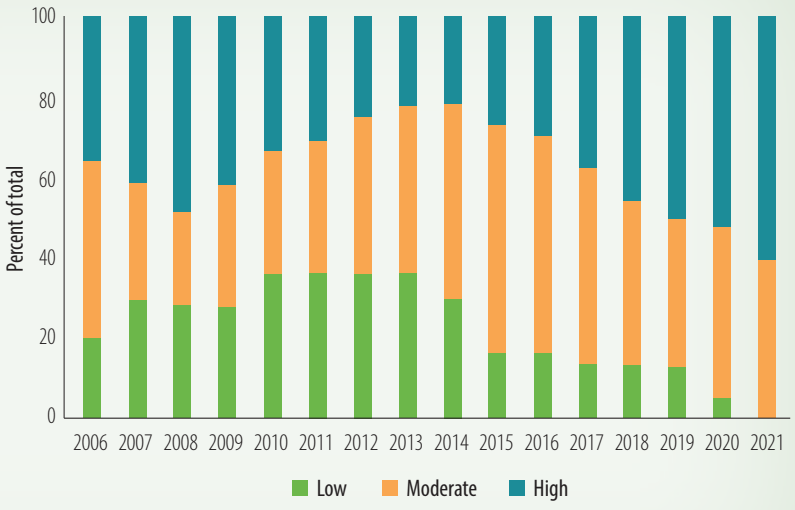


Sources: Bloomberg; World Bank staff estimates.
Note: Data are as of April 1, 2022.

Projections of rate hikes combined with the war in Ukraine pushed up EMBI spreads in several countries, reflecting investors' fears about debt sustainability, with Ghana still leading the way. Risk could rise further if the war is ongoing or the Federal Reserve Bank increases policy rates more aggressively than anticipated. Consequently, this could lead to a marked jump in spreads in countries that are in or at risk of debt distress or have exposure to exchange rate or interest rate risks, massive depreciation of domestic currencies, and capital flight, which could eventually result in a financial crisis. In 2021, countries in the region are at moderate or high risk of debt distress, and the share of countries in high risk of debt distress grew from 52.6 percent in 2020 to 60.5 percent in 2021 (figure 1.37).

The proportion of countries at high risk of debt distress has risen.

FIGURE 1.37: Evolution of Risk of External Debt Distress (% of countries)



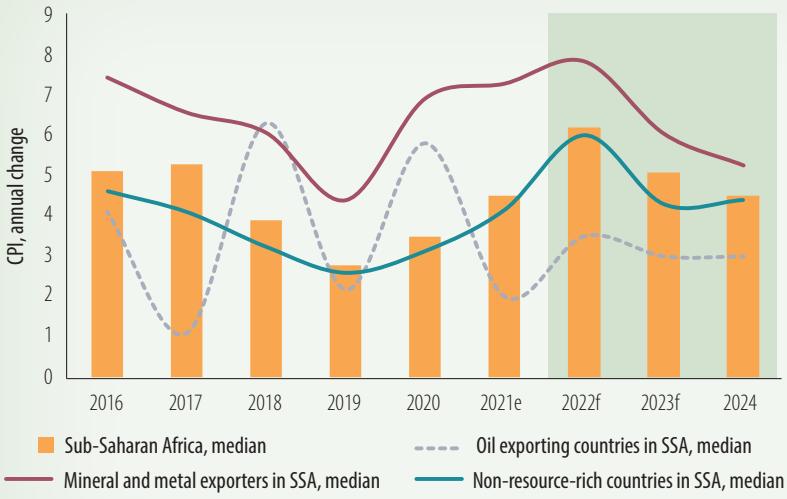
Source: World Bank staff estimates as of February 2022.
Note: The data cover joint World Bank–International Monetary Fund debt sustainability analyses for low-income countries in Sub-Saharan Africa. The number of countries varies by year.

Inflation and Exchange Rates

Inflation in Sub-Saharan Africa picked up pace in 2021 to 4.5 percent, from 3.5 percent in 2020 (figure 1.38). Inflation is projected to jump to 6.2 percent in 2022 and down to 5.1 and 4.5 percent in 2023 and 2024, respectively. Higher food and fuel prices as well as depreciation of exchange rates across the region, particularly in Ghana, contributed to the inflation outlook (figures 1.39 and 1.40). Strong global recovery combined with the surge in commodity prices and supply disruptions were underlying factors behind the pickup in food and fuel prices to consumer prices. The ongoing Russia-Ukraine conflict amplified an already-bleak outlook for inflation in the region with remarkable consequences for domestic currencies. The rapid pass-through of food prices to consumer prices coupled with the exchange rate depreciation is largely explained by the high contribution of food in the CPI basket of Sub-Saharan African countries, which is over 40 percent. Low-income households have been the hardest hit as they allocate a large share of consumption expenditure to food and fuel. Inflation is a form of tax on poor people, with the possibility of increasing inequality and poverty while jeopardizing the objectives of reducing poverty and achieving inclusive growth. If not addressed, elevated inflation may lead to social unrest and conflicts.

FIGURE 1.38: Inflation in Sub-Saharan Africa, 2016–2024f

Stagflation caused by negative supply shocks poses a challenge to policy makers.

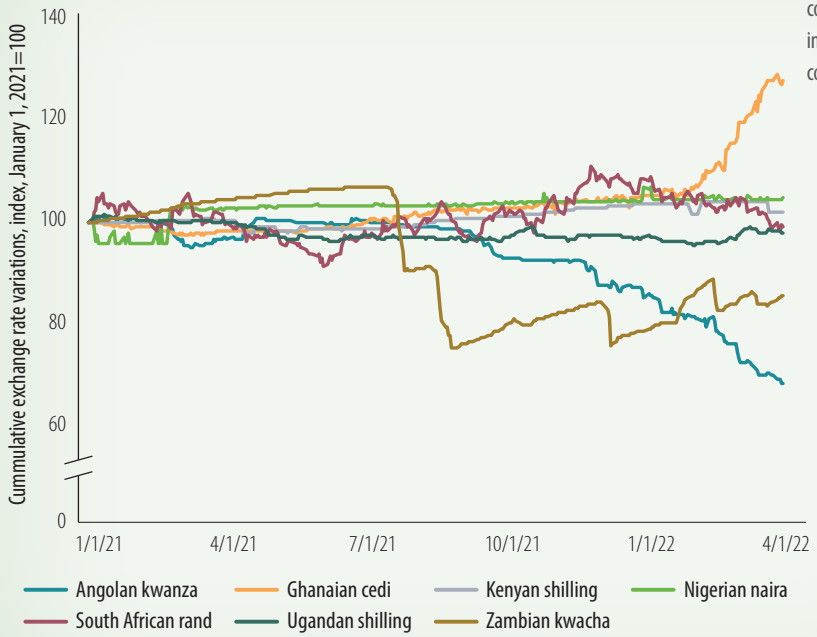


Source: World Bank staff projections.

Note: Inflation is measured by percentage changes in the consumer price index (CPI) using data from the MFMOD database, World Bank. CPI = Consumer Price Index; e = estimate; f = forecast; SSA = Sub-Saharan Africa.

FIGURE 1.39: Exchange Rates in Countries in Sub-Saharan Africa (local currency vis-à-vis US dollar)

Exchange rate depreciation fueled consumer price inflation in many countries.



Sources: Bloomberg Analytics (exchange rates); Haver Analytics (food prices).

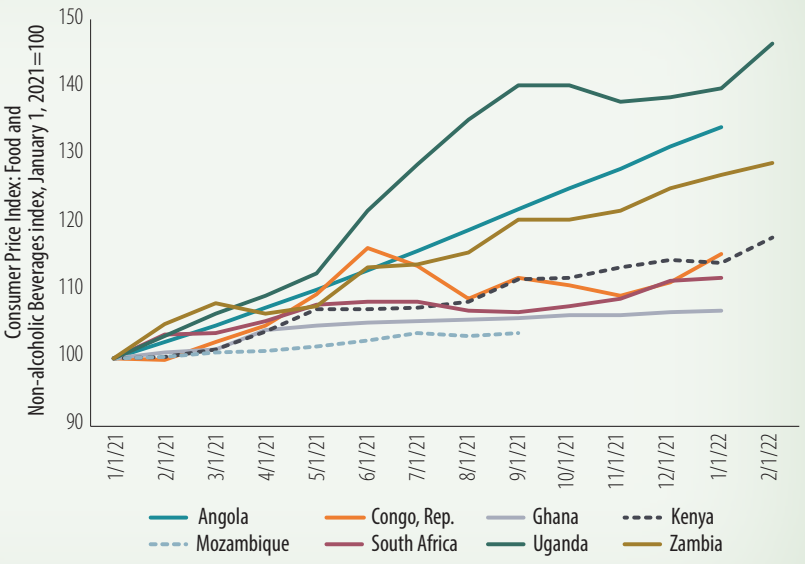
Note: Exchange rate data are as of April 1, 2022.

In South Africa, inflation remained elevated at 5.7 percent (year-over-year) in February for two consecutive months, slightly down from 5.9 percent in December 2021.[46] The moderation was due to lower fuel prices whereas food prices continue to explain higher consumer prices. The South African Reserve Bank reacted to the inflation profile by raising the policy rate by 25 basis points in March to 4.25 percent for three consecutive meetings. Core inflation, however, remained somewhat lower at 3.5 percent (year-over-year). In 2021, inflation hovered around the midpoint of the official target at 4.6 percent. However, ongoing developments in international food and fuel prices will accelerate inflation to 5.5 percent in 2022, but it will revert back and settle around the midpoint of the target in 2023. Other options to protect consumers from high fuel and gasoline prices include a two-phased approach to a temporary partial reduction in the fuel levy. Official estimates indicate that the fuel levy will cost approximately R6 billion in income tax and will be funded by the liquidation of a fraction of the strategic crude oil reserves, with little to no effects on the fiscal framework.

Inflation dynamics in Nigeria paint a completely different picture from the one in South Africa. Unlike South Africa, where inflation has been within the target band of 3 to 6 percent since 2017, inflation in Nigeria has been above the upper limit band of 6 to 9 percent since the recession in 2016. It reached a four-year high in 2021, reaching 17 percent, from 13.2 percent a year earlier. Rising food prices are the underlying factor behind the surge of headline inflation in Nigeria. Food prices have increased due to import restrictions and a nonflexible exchange rate management (figure 1.39). The current regime is keeping the official exchange rate of the naira artificially strong while the naira has weakened significantly on the parallel market. Additionally, the central bank has restricted importers' access to foreign currency for 45 products and has reduced the supply to other importers. Inflation reached a four-year high at 18.2 percent in March 2021, then eased to 16.0 percent in October 2021 as food price inflation fell from a peak of 22.9 percent in March to 18.3 percent. Headline inflation rose to 15.7 percent in February 2022, up by 0.1 percentage point from the two preceding months. Food and fuel shortages put pressure on consumer prices despite fuel subsidies. Inflation is expected to remain high as the negative effects of the war in Ukraine are still

The rapid pass-through of food prices to consumer prices is largely explained by the high contribution of food to the CPI basket in Sub-Saharan African countries.

FIGURE 1.40: Food Price Index in Countries in Sub-Saharan Africa (January 2021=100)



Sources: Bloomberg Analytics (exchange rates); Haver Analytics (food prices).
Note: Exchange rate data are as of April 1, 2022.

46 The effects of the war on inflation are not yet reflected in the current data. Consumer inflation data as of February 2022 contain information that may somewhat capture the effects of the outbreak of the war in Ukraine.

coming through, with an annual projection of 14.8 percent for 2022. Going forward, headline inflation is forecast to decline gradually to 13 and 11 percent in 2023 and 2024, respectively.

A similar pattern can be seen in Angola where headline inflation has been fluctuating around the 20 percent mark since 2017, way above the average inflation of 12 percent over 2006-14. Incoming data provide evidence that inflation is expected to rise to 25.6 percent in 2021 from 22.3 percent in 2020, then drop remarkably to 12.3 percent in 2023 and drift further down by 2.8 percentage points in 2024. In addition to the role played by movements in commodity prices, the exchange rate has exerted upward pressure on inflation since the adoption of the flexible exchange rate regime. The Angolan kwanza has strengthened with the current rebound in oil prices, appreciating 20 percent this year against the U.S. dollar as of March 2022. Nevertheless, the appreciation of the Angolan kwanza was accompanied by persistent inflation in 2021. Volatility in commodity prices poses upside risks to the inflation outlook in Angola. In general, inflation is low and stable in oil-rich countries, with median headline inflation estimated at 2 percent in 2021, down from 5.8 percent in the previous year, and settling at 3 percent in 2023 and 2024.

The inflation rate in metal and mineral exporters in Sub-Saharan Africa tends to be higher than the regional median (figure 1.38). Estimated at 7.3 percent in 2021, inflation is predicted to pick up to 7.9 percent in 2022 before moderating to 6.1 percent the next year and 5.3 percent in 2024. Among metal and mineral exporters, Zambia stands out with an inflation rate in double digits. The kwacha depreciated over 50 percent against the U.S. dollar, while reserves declined to US$1.2 billion against at least US$1.3 billion in debt service obligations in 2020. As a result, Zambia became the first Sub-Saharan African country to default on Eurobonds during the COVID-19 crisis in 2020. CPI inflation averaged 15.7 percent in 2020 and is estimated to rise to 22.1 percent in 2021 before falling to 13 percent in 2022. The decreasing trajectory of headline inflation will bring inflation to 9.7 percent—closer to the upper limit of the central bank's objective range of 6 to 8 percent. Other metal and mineral exporters have elevated inflation just above the central bank's objective or closer to the upper bound of the target band.[47]

The median headline inflation among non-resource-rich countries mimics quite closely the trend of the region. It rose from 3.1 to 4.2 percent in 2021 and 6 percent in 2022, and it is expected to return to 4.4 percent in 2024. Unsurprisingly, despite mounting pressure on consumer prices across the region, inflation has been contained at levels that are consistent with the official objective of 1 to 3 percent in the WAEMU and CEMAC subregions throughout 2021, averaging 3.4 and 2.2 percent, respectively. It is projected to stabilize around 2.4 percent in WAEMU and 2.6 percent in CEMAC by 2024. Subdued inflation dynamics are associated with fixed exchange rate regimes. The activation of the escape clause following the COVID-19 pandemic has set inflation in the subregion on an upward trend. In Côte d'Ivoire, consumer prices are predicted to remain above the target for most of the forecasting horizon, converging back to 3 percent only in 2024. Inflation has been drifting above the upper limit of the central bank's target in Ghana for six successive months. Several factors contributed to rising prices in Ghana, predominantly the exchange rate. The central bank reacted aggressively in March by increasing the policy rate by a record high of 250 basis points. Elsewhere, inflation is on the rise in Rwanda, where, after a

47 Inflation is high in Botswana (7.5 percent), the Democratic Republic of Congo (9.5 percent), Guinea (12 percent), Liberia (8.2 percent), and Sierra Leone (14.2 percent).

prolonged deflationary episode, it is expected to stay high yet consistent with the central bank's target. Although elevated, the inflation rate is still consistent with the central bank's objective of 2.5 to 7.5 percent in Kenya. The ongoing war in Ukraine and drought will place significant pressure on inflation in 2022. It is expected to persist above the central bank's objective in the Gambia, Malawi, and Mozambique. The central bank of Mozambique reacted swiftly by raising its policy by 200 basis points in March, the second increase since the advent of the pandemic, to curb inflationary pressures arising from the Ukraine war and the impacts of the tropical cyclones that struck the country earlier in 2022. Projected to rise to 6.4 percent in 2022 from 5.7 percent in 2021, inflation is set to stabilize marginally below the official target at 5.6 percent in 2023.

The stagflation caused by negative supply shocks poses a challenge to policy makers who face the dilemma of supporting the weak economy, at the cost of high inflation, or fighting inflation, which can in turn induce recession. Many central banks in the region have opted for the second option. In total, eight central banks have embarked on a tightening cycle since 2021 to keep a lid on inflationary pressures, while five central banks have opted for policy rate cuts.[48] The number is set to increase following monetary policy normalization in advanced economies, specifically in the United States. High inflation will weigh on economic activity, increase inequality and poverty, and lead to food insecurity. Many countries have resorted to providing subsidies to mitigate inflationary pressures. This strategy could worsen public finance, increase public debt, jeopardize debt sustainability, and limit market access.

The ongoing Russia-Ukraine conflict raises the prospects of further increases in inflation in the region with remarkable consequences for domestic currencies. Central banks will face the serious challenge of fighting stagflation. Over and above the trade-off between ensuring price stability or supporting economic activity, policy makers need to evaluate the persistence of this shock. And policy options need to be country dependent. Countries in or at risk of debt distress should be reluctant to worsen the situation by ignoring the shock. Instead, they should react swiftly to stop prices from rising further. Countries with credible monetary policy could move gradually while communicating effectively with the public.[49] Meanwhile, they should seek assistance from multilateral donors or agree on fiscal adjustment programs.

48 Countries whose rates have increased since 2021 include Angola, Ghana, Lesotho, Mozambique, South Africa, Zambia, and Zimbabwe. Those with rates that have decreased are the Democratic Republic of Congo, Liberia, the Seychelles, South Sudan, and Uganda.

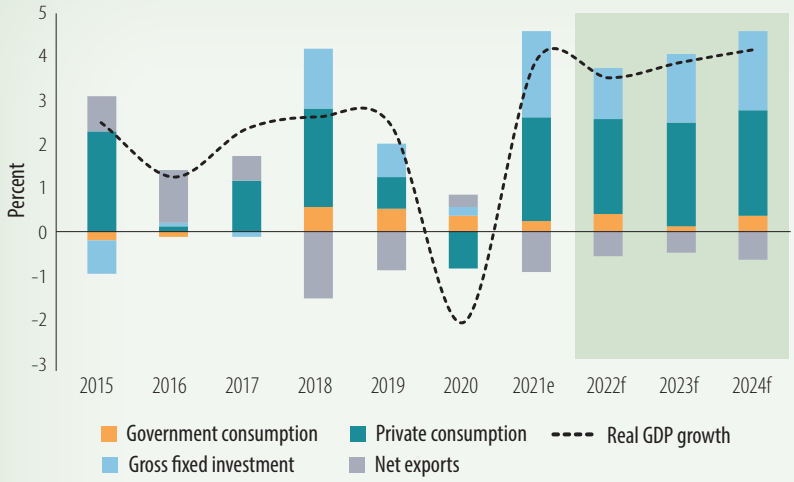
49 Evidence from South Africa shows that central bank credibility and effective communication delay or reduce exchange rate pass-through to inflation (Kabundi and Mlachila 2019).

1.5 OUTLOOK

Growth in Sub-Saharan Africa is projected to decelerate from 4 percent in 2021 to 3.6 percent in 2022, and it is estimated at 3.9 and 4.2 percent in 2023 and 2024, respectively. The growth deceleration in 2022 reflects several short-term headwinds, including the slowdown in the global economy (particularly in the United States and China), lingering effects of the coronavirus pandemic, elevated inflation, rising financial risks owing to high public debts reaching unsustainable levels, continued supply disruptions, and the war in Ukraine. Given limited trade exposure, the impacts of the Russia-Ukraine conflict are expected to be negligible. Of the region's three largest economies, South Africa's growth is expected to decline by 2.8 percentage points in 2022, dragged by persistent structural constraints, while Angola and Nigeria are projected to continue with the momentum of 2021, up by 2.7 and 0.2 percentage points, respectively, thanks partly to elevated oil prices and good performance of the non-oil sector.

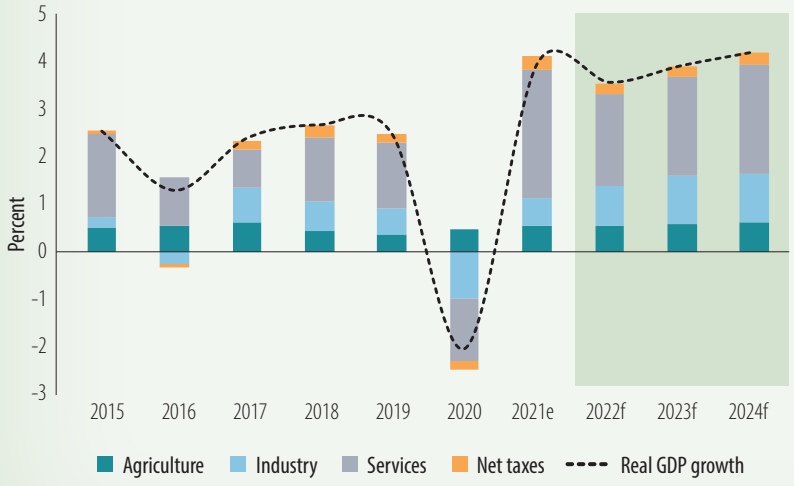
From the October 2021 forecast, growth was revised upward for both 2022 and 2023 by 0.1 percentage point. This upswing is supported, on the demand side, by a strong rebound in private consumption expenditure and a timid recovery in investment, while net exports continue to hold back growth due to strong imports and subdued exports, particularly among non-resource-rich countries (figure 1.41). On the supply side, regional growth is prompted by the strong performance of the service sector and a gradual return in industry (figure 1.42). Excluding Angola, Nigeria, and South Africa—the largest economies in the

FIGURE 1.41: Contribution to GDP Growth, Demand Side (%)



On the demand side, the drivers of growth include private consumption expenditure and investment.

FIGURE 1.42: Contribution to GDP Growth, Supply Side (%)



On the supply side, regional growth is prompted by the strong service sector and a gradual return in industry.

Source: World Bank staff projections.

Note: Change in inventories and statistical discrepancy are not displayed.
e = estimate; f = forecast; GDP = gross domestic product.

region—growth is projected at 4.1 and 4.9 percent for 2022 and 2023, respectively. Non-resource-rich countries are projected to be negatively affected by rising commodity prices, dragging down growth in the region. The opposite occurs with resource-rich countries, whose growth would be propelled by favorable terms of trade. The Ukraine war would nudge further the performance of the extractive sector in resource-rich countries while pulling down non-resource-rich countries as their import bills jump.

With per capita growth averaging 1.4 percent for 2023, it is less likely that Sub-Saharan Africa will manage to reduce poverty in the coming years. Along with this, the long-term objective of attaining inclusive growth is far from materializing. Mounting inflation in many countries will aggravate the situation. It is imperative for the region to take actions now with a long-term perspective instead of focusing only on fixing short-term challenges. Many countries squandered the gains from the commodity boom episode in 2000-14. Renewed favorable terms of trade should benefit the region by bridging the gap between rich and poor and eliminating poverty.

There are considerable differences in the growth outlook across Sub-Saharan African economies. In Angola, the economy is expected to pick up speed, growing by 2.9 percent in 2022 and 3.1 percent in 2023. Growth was revised down by 0.1 percentage point, then up by 0.3 percentage point for 2022 and 2023, respectively. Disappointing petroleum extraction and refining continue to be the biggest drag to economic activity since 2015. High inflation represents another risk to the outlook. It is set to fluctuate above the central bank's target until 2024, nevertheless trending down steadily. On a positive note, recent projects in the oil sector and prospects that more will come along with elevated oil prices are projected to boost the economy. Finally, support will also come from the vibrant agriculture sector, which has been one of the key drivers of non-oil output.

Growth in Nigeria is forecast to increase to 3.8 percent in 2022 and stabilize at 4 percent in 2023-24. Real GDP growth was revised up by 1.2 percentage points for both periods compared with the previous forecast. Nigeria's economy is still dependent on the oil sector. Oil-related revenue contributes 40 to 60 percent of fiscal revenue, while oil and gas account for 80 to 90 percent of total exports. Weak oil production, below the OPEC quota, held back the recovery process. Although at a slower pace than the average 7 percent during the boom period, growth prospects for the Nigerian economy are somewhat bright thanks to high oil prices coupled with reforms initiated by the passing of the Petroleum Industry Act and the completion of the Dangote refinery expected in 2023. Risk remains high on increasing fuel subsidies, which could weigh heavily on public finance and pose debt sustainability concerns. Nevertheless, public debt as a percentage of GDP is currently moderate.

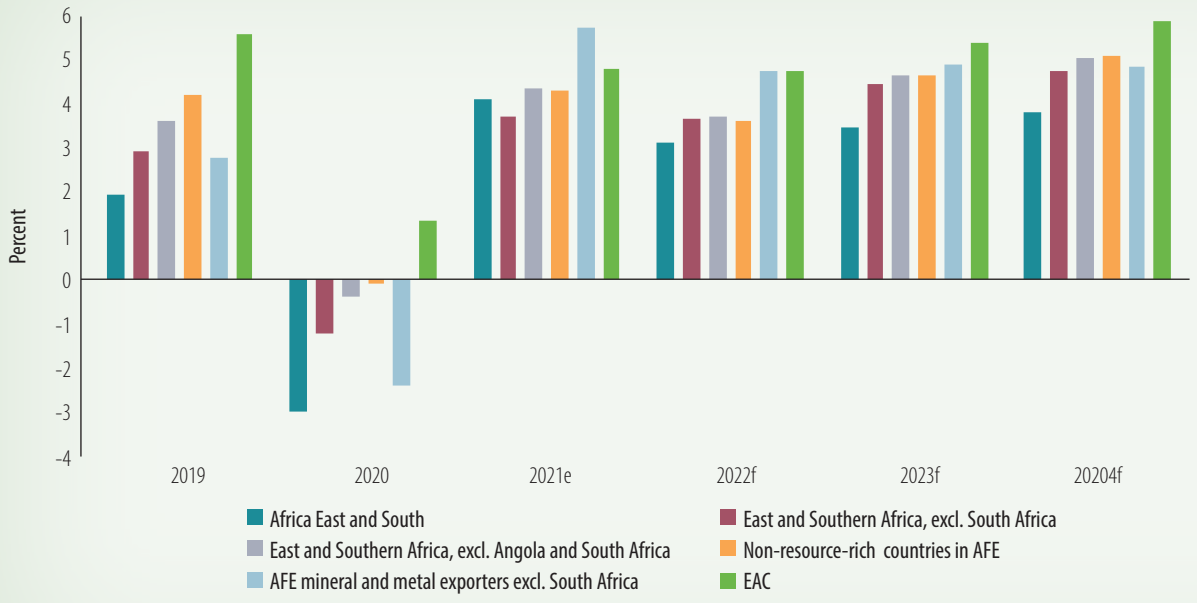
In South Africa, the economy is projected to return somewhat above its potential growth of 1.1 percent in 2023 and nudge up to 1.8 percent in 2024. The forecast for 2022 is in line with the previous forecast, at 2.1 percent, and the prediction for 2023 is up by 0.1 percentage point. Several factors threatened the growth prospects of the South African economy before the outbreak of the pandemic, but the latter has amplified the situation. With elevated unemployment of about 35.3 percent, revenue mobilization cannot be achieved easily—thus endangering fiscal consolidation plans. Public debt will remain elevated, which in turn will crowd out the financing of private investment. The current account balance could return to pre-

pandemic structural deficits if the prices of the commodities the country imports rise, which will weigh on the exchange rate and cause inflation to soar. Another challenge facing the country is the poor management of state-owned enterprises (SOEs). Rigidities in the product and labor markets hinder the country's competitiveness, prevent the emergence of non-resource sectors, and render exporting more expensive. As a result, with potential growth closer to 1 percent, the economy will be unable to achieve significant reductions in structural unemployment, poverty, and inequality. Elevated oil prices are expected to translate into more inflation, which will affect the poor disproportionally. The Russia-Ukraine war adds uncertainty to the outlook. The country can gain if the terms of trade are favorable, but it will lose if the inflationary effects outweigh the benefit of high commodity prices.

Excluding Angola, Nigeria, and South Africa, growth is projected to be slightly higher than that of the region as a whole in 2022 (4.1 percent) and 2023 (4.9 percent), down by 0.5 percentage point from the October 2021 forecasts. Output growth in 2022 is down by 0.1 percent from 2021. Prospects for the AFE subregion show a sustained recovery (4.1 percent) from the recession, down to 3.1 percent in 2022, and then settling around 3.8 percent in 2024 (figure 1.43). The outlook for the subregion looks slightly better when Angola and South Africa are excluded. Outside South Africa, metal and mineral exporters are set to grow by 4.8 percent in the coming three years, reflecting gains from favorable terms of trade. The Democratic Republic of Congo and Zambia are expected to benefit from rising metal prices in the short and medium term, while in the long run they will gain from the transition away from fossil fuel, which is expected to increase the demand for metals. Market-friendly policies adopted by the new administration

FIGURE 1.43: GDP Growth Forecasts for East and Southern Africa

AFE depicts good performance in non-resource-rich countries and some metal and mineral exporters.



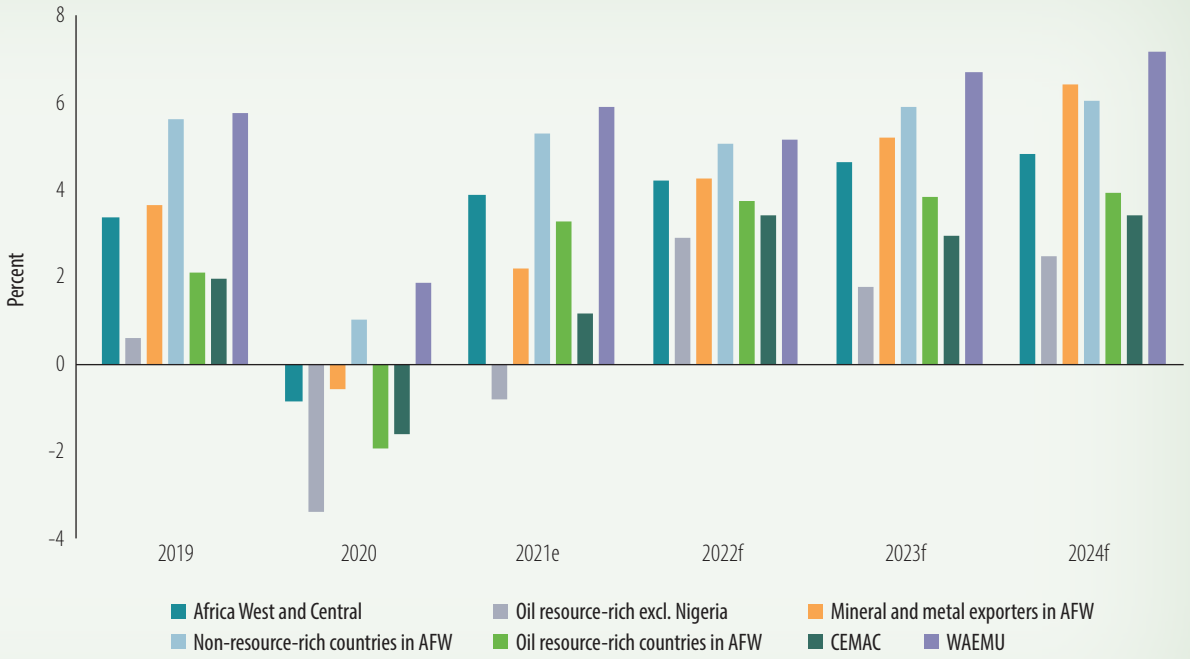
Source: World Bank staff projections.
Note: AFE = East and Southern Africa; e = estimate; EAC = East African Community; f = forecast; GDP = gross domestic product.

in Zambia brought back confidence and are set to attract back foreign investors, depending on the country's debt deal with various creditors. In Botswana, several projects that are underway in solar power, digital connectivity, expansion of diamond mining, and the Khoemacau copper and silver mine, will support growth in the medium term.

Growth contraction in 2021 was associated with inflationary effects in non-resource-rich countries. Rwanda and the Seychelles are expected to register the biggest growth moderation in 2022, down by 4.1 and 3.3 percentage points, respectively, followed by Ethiopia (3 percentage points), South Africa (2.8 percentage points), Zimbabwe (2.2 percentage points), Madagascar (1.8 percentage points), and Kenya (1.7 percentage points). The East African Community (EAC) is projected to exhibit the highest growth in the subregion. The EAC is characterized by a diversified economy that is more integrated than other regions in Sub-Saharan Africa, except WAEMU. The Russia-Ukraine conflict is exerting pressure on inflation, which in turn may derail growth in the near term. Fuel subsidies in Kenya have contributed to stopping fuel prices from rising. This has been successful so far, but it will place pressure on public finance if the war continues.

AFW shows strong performance among WAEMU and resource-rich countries.

FIGURE 1.44: GDP Growth Forecasts for West and Central Africa



Source: World Bank staff projections.

Note: AFW=West and Central Africa; CEMAC=Economic and Monetary Community of Central Africa; e = estimate; f = forecast; GDP = gross domestic product; WAEMU= West African Economic and Monetary Union.

The AFW subregion is projected to grow 4.2 percent in 2022 and 4.6 percent in 2023 (figure 1.44). The 2022 forecast is revised up by 0.6 percentage point compared to the October 2021 forecast, largely reflecting upgrades in Nigeria. Excluding Nigeria, the subregion's growth is set at 4.8 percent in 2022 and firmed at 5.6 percent a year later. Oil resource-rich countries excluding Nigeria will grow slower at 2.9 percent in 2022 and down to 1.8 percent in 2023. This deceleration in 2023 reflects continued dismal performance of Equatorial Guinea since 2015. After recovering from a prolonged recession in 2022, the country is set to return to recession in 2023, and growth will remain subdued in 2024. The downward trajectory of output growth is associated with falling oil production. Moderate performance among oil-rich countries is mirrored by growth in CEMAC countries of 3.4 percent in 2022, followed by a decline to 2.9 percent in 2023 before regaining the path of 2022. The same pattern is seen in Gabon, whose growth is projected at 3.3 and 3 percent for 2022 and 2024, respectively, with a setback in 2023 (2.6 percent). By contrast, the growth forecast for Cameroon shows sustained robust performance, reaching 4.4 percent in 2024. Unlike other oil-rich countries in CEMAC, the Cameroonian economy is somewhat diversified. Metal and mineral exporters are forecast to grow steadily by 4.3 percent in 2022 and consolidate their performance further in 2023 by 5.2 percent. In Ghana, the economy is projected to pick up pace in 2022, growing by 5.5 percent, then slowing gradually to 5 percent in 2024, lower than the pre-pandemic average growth, which was around 7 percent. This moderate performance reflects debt management problems that are still looming on the economy, with few prospects for improvement.

Growth in WAEMU will average 6.3 percent over the next three years. This strong performance is supported by robust industrial and service sectors. After a short-lived correction in 2022, the economy of Côte d'Ivoire will recover its pre-pandemic growth path. The country is projected to be the fastest growing economy at 5.7 percent compared to other WAEMU members in 2022, reflecting steady growth in the agriculture sector. In Senegal, growth is set to slow to 4.4 percent in 2022 from 6.1 percent in 2021. Real GDP growth is projected to rebound sharply to 8.5 percent in 2023 and 10.6 percent in 2024, the highest in the region, a stronger pace than the country's pre-pandemic growth, reflecting the start of hydrocarbon production. The vibrant secondary sector, specifically extractive activities, is the main driving force behind this positive outlook. Ongoing projects in gas and oil will generate more revenue in the near term. The risk of conflict in the Sahel poses significant uncertainties to the outlook.

1.6 RISKS TO THE OUTLOOK

Risks in Sub-Saharan Africa are tilted to the downside. External risks include growing stagflation in the world economy and the challenges it poses for monetary policy, a more aggressive than expected tightening cycle of monetary policy in advanced economies, the resurgence of more transmissible and virulent variants of the coronavirus, social unrest in many parts of the continent due to elevated fuel and food prices fueled by the war in Ukraine, and the zero-COVID-19 policy implemented in China. Potential domestic risks include a cascade of sovereign and corporate defaults due to debt unsustainability, deterioration of security in the Sahel region and elsewhere, and severe weather conditions.

External Risks

Countries have experienced stagflation globally since the outbreak of the COVID-19 pandemic, and Sub-Saharan African countries have been affected with rising inflation in an environment of fragile growth. The Russia-Ukraine war has exacerbated the inflation profile in many countries. More specifically, non-resource-rich countries that are dependent on oil and gas imports would see a worsening of their current account balances and weakening of their exchange rates as their import bills rise sharply. Depreciation of the domestic currency could increase debt even more, thus leading to a cascade of sovereign and corporate defaults, leading eventually to financial crises. Countries will face the dilemma of fighting inflation with the risk of inducing recession or supporting economic activity with the potential costs of high inflation. In this instance, monetary policy might not be well equipped to curb inflation if it is driven by cost-push factors.

More aggressive monetary policy tightening could generate uncertainties similar to those seen during the taper tantrum of 2013. Given the elevated debt levels in Sub-Saharan Africa and that countries in the region are in high or moderate debt distress, aggressive tightening of financial conditions would trigger flights to safety, which could subsequently weigh on domestic currencies, leading to massive depreciations, and more likely causing financial crises. Countries in or at high risk of debt distress are more vulnerable in this case.

A resurgence of another variant of COVID-19 that is easily transmissible like the Omicron variant and more virulent such as the Delta variant would put more strain on the region. Countries are too economically fragile now, compared with the time when the pandemic first surged, to resort to more restrictive measures in line with those employed during the first wave. Such a shock would be particularly severe as it would occur concurrently with the ongoing commodity price shock. Measures like complete lockdowns would be difficult to employ since they would lead to another recession, worse than that of 2020 because of the lack of fiscal space and compound effects. Hence, many vulnerable people would be left stranded, which could result in social unrest in many parts of the region.

Although the Ukraine war is expected to exert limited effects on output in the region, the indirect impacts on fuel and food price inflation could worsen the social unrest already seen in some countries and lead to political instability, especially in countries where tensions are elevated. The region was still wrestling with the long-term consequences of different waves of the coronavirus along with the effects of harsh weather conditions when surges in fuel and food price inflation further aggravated the situation. Social unrest could damage institutions and lead to fragility, conflicts, violence, and failed states.

Finally, China's strict COVID-19 lockdowns imposed in Shanghai (the country's financial center and home to its busiest container port), manufacturing hubs (Shenzhen, Dongguan, and Changchun earlier this year), and agricultural provinces (Jilin, Liaoning, and Heilongjian) could amplify supply chain disruptions, propel increases in prices of agricultural products, and affect China's trade with the rest of the world. As a major trading partner of the region, any disruption in China is expected to hit the region through various channels. The direct spillover is through trade and financial linkages, and the indirect spillover is via effects on commodity prices.[50]

Domestic Risks

Elevated public debts in Sub-Saharan Africa raise sustainability concerns as many countries face the risk of losing access to the international financial markets. Countries are implementing austerity measures to prevent debt from rising further. However, in many countries, these measures do not find political support given the pressure from the public at large. Faced with rising sovereign and corporate spreads, debt servicing costs are set to rise. This in turn could lead to a series of defaults.

The situation in the Sahel is worsening with an increasing incidence of coups. This instability would increase uncertainty and hold back investment, especially FDI, which the subregion needs the most. The conflict could negatively affect the governance of the WAEMU as a bloc, damage institutions, and create more countries affected by fragility, conflict, and violence and failed states. Regional trade is already under severe threats. Similarly, persistent conflicts in some parts of the AFE subregion could bring more instability and threaten the African Continental Free Trade Agreement.

Adverse weather conditions could hamper the outlook's prospects in AFE. Extreme weather conditions cause disruptions in the Horn of Africa, inducing high volatility in crop and livestock yields. Recurrent incidence of food insecurity in Ethiopia, Madagascar, and Zambia is partly due to weather factors. This adds pressure to already tightened food supplies amid the war in Ukraine and supply chain disruptions. Similarly, unfavorable weather conditions could affect the supply of cocoa from Côte d'Ivoire and Ghana, the world's two largest producers.

50 China is the region's major trading partner and creditor, contributes the most to FDI inflows in the continent, and is the first importer of most of commodities globally.

1.7 POLICIES

The looming threat of stagflation worldwide amid a landscape of multiple new and covariate shocks puts emphasis on the need for African policy makers to implement short-term policies to mitigate the impact of rising food and fuel prices on the vulnerable segments of the population, and medium- to long-term policies that build economic resilience by fostering productivity growth and creating more and better jobs for the African population.

Monetary authorities in the region are faced with the short-term dilemma of anchoring inflationary expectations and curbing inflation pressures at the cost of withdrawing support to a sluggish economy. In response to higher inflation, Sub-Saharan African central banks are tightening their monetary policy by raising their benchmark interest rates. However, this type of monetary tightening might not be effective in bringing down inflation for two reasons: (1) inflation is being driven by a series of supply shocks (climatic shocks and commodity prices) rather than by demand shocks, and (2) there is weak monetary policy transmission in countries with underdeveloped domestic financial markets and large informal sectors.[51] On the other hand, rising inflation as a result of food and fuel prices could threaten the stability of the currency in countries with fixed exchange rate regimes—especially those with inadequate international reserves or lack of fiscal space to shoulder the adjustment.

In this context, policy makers in the region are opting for solutions other than monetary tightening to mitigate the impact on the population of rising inflationary pressures as a result of food and fuel inflation. Trade policy has the potential to play a key role by ensuring the free flow of trade of food across borders in the region. Avoiding export bans and other types of restrictions is critical to prevent shortages and even higher prices. Temporarily reducing or waiving import duties on staple foods and energy commodities can provide some relief. Some countries in the region have implemented or are planning to implement (1) price regulations (especially on fuel), (2) investigations of supply shortages caused by unscrupulous speculators, (3) temporary reduction in the value-added tax on regular household goods (for example, food, cooking oil, and gas), and (4) subsidy schemes to shield consumers (particularly in fuel products), among others. These measures can potentially have important fiscal costs if commodity prices remain elevated—and some of them might introduce allocative distortions if they are not withdrawn in a timely fashion. Amid limited fiscal space, financing these policy responses to help contain prices might require further concessional lending. Finally, income support can also be provided through targeted social assistance and insurance so that the urban poor and the urban population at risk of falling below the poverty line can cope with these shocks (section 2).

Over the medium to long term, policies that accelerate structural transformation through productivity-enhancing growth and the creation of more and better jobs are essential.[52] A combination of actionable measures is needed to improve the resilience of the economy by shoring up productivity and job creation, as well as enhancing the resilience of social protection systems to combat extreme poverty and build resilience to shocks, as well as to help create and accumulate productive assets.

51 Alberola and Urrutia (2020) find that informality dampens the inflationary pressures from demand and financial shocks, while it exacerbates them for aggregate supply shocks.
52 Volumes 23 and 24 of the *Africa's Pulse* provide a detailed discussion of the framework of economic transformation for jobs and its associated policies.

Delivering structural transformation with more and better jobs requires implementing policies that build competitive advantages across all sectors of the economy, strengthening the learning capacity of private and public firms, fostering market competition and contestability, and addressing economywide inefficiencies. Building resilience in agriculture will help boost the productivity of African farmers and reduce the risk of food insecurity. In this context, avoiding past mistakes (for instance, restrictions and bans on food staples) is critical to ensure steady international trade of foodstuffs. Measures to keep food supply chains operational without breakdowns in transportation and logistics are also essential. Digital solutions can be implemented to connect farmers with existing and new markets, as well as to expand e-commerce platforms. Policies that promote the development of competitive food and agricultural value chains can help build resilience.

Industrialization provides an opportunity for job creation, as a more productive and resilient agriculture sector releases labor in search of non-agricultural jobs. Policies that foster within-firm productivity growth, address market distortions, strengthen the participation of firms in regional and global value chains, attract FDI, and narrow infrastructure gaps are critical. Policies that foster competitiveness across African manufacturing firms—and thus reduce excessive unit labor costs—are essential to attract and keep value chain–related jobs. In this context, creating jobs—especially in the formal sector—remains atop the policy priorities, and it is the best way to provide social protection for the population, particularly vulnerable segments.

In an environment of high volatility and uncertainty, African policy makers can build on their existing social protection programs to create greater resilience, more opportunities, and broader equity (section 2). Social protection programs need to go beyond traditional safety nets and design social insurance and active labor market programs that contribute to economic resilience by protecting urban informal workers. As the region navigates turbulent times (with more frequent and costly climate shocks, food insecurity, internationally transmitted shocks, and conflict), social protection programs need to adapt to a new, multiple-shock environment. This will require robust social protection systems that enhance economic resilience and respond to shocks, as well as build productive assets to sustain productivity growth and job creation.

Finally, emerging signs of stagflation along with tightened global financial conditions prior to the war in Ukraine were already putting the debt sustainability of African countries in jeopardy. This is compounded by the conflict as borrowing costs are rising further and currencies continue to weaken among countries in the region with macroeconomic imbalances and high risk of debt distress. Improving the existing mechanisms for debt relief and resolution is critical to reduce debt in Sub-Saharan Africa.

Building Resilience in Agriculture to Achieve Food Security[53]

The Russian invasion of Ukraine has accelerated the increase in food prices due to food shortages. A significant share of the world's cereals (wheat, maize, and barley) produced in Russia and Ukraine is not being mobilized due to the conflict, while the supply of fertilizer from Russia and Belarus to the world markets is dwindling.[54] As a result, global food and fertilizer prices have

53 The policy discussion on food security draws heavily from World Bank (2022a).

54 Wheat prices have increased by 29 percent, maize by 26 percent, barley by 33 percent, and some fertilizers by 40 percent.

soared. The impact of the conflict on global food prices is compounded by major challenges that were already fueling prices and tightening supplies, including the COVID-19 pandemic, shipping constraints, elevated energy costs, and natural disasters (droughts, floods, and others). Global food prices were already rising and fueling domestic food and headline inflation across countries in the world prior to the Russia-Ukraine conflict, due to supply chain problems, elevated transportation costs, and devastating weather effects. Nearly half of the countries in Sub-Saharan Africa registered two-digit food inflation (year-over-year), and some of their monetary authorities were already signaling the start or continuation of policy tightening.

Food security in the region faces a series of risks, including supply disruptions in world fertilizer markets. Uncertainty on the duration of the war in Ukraine could affect the crop production of the next two planting seasons if the use of fertilizers is cut back due to high prices. The impact of the conflict is compounded by already tight market conditions, where fertilizer prices have increased along with natural gas prices. Sub-Saharan Africa does not produce enough to feed the continent and, hence, is a large food importer. Growing food insecurity in the region, as a result of global food market tightness and soaring prices, could lead to social unrest and adverse political consequences. For example, massive protests are breaking out across several cities in Sudan—including the capital, Khartoum, over rising fuel, electricity, and bread prices. These demonstrations add to the social unrest that was triggered by the October 2021 military coup that took power. The question that arises is what policies are needed to make African farmers more productive and reduce the risks of food insecurity.

To begin, policy makers should avoid the mistakes of the past and avoid replicating the experience of the 2007/08 food price crisis. Restrictions and bans on food staples by exporting countries led to further increases in food prices as well as food security problems for importers. In this context, policy makers need to ensure continued food trade across borders and avoid costly panic reactions. Governments need to remove (and/or avoid imposing new) bans or tariffs/taxes on exports and imports, as well as any other trade or policy restrictions. Food stockpiling or hoarding beyond normal levels should also be avoided while improving management of strategic shocks and sanitary and phytosanitary standards for exports and imports. Digital technologies can be increasingly used for trade facilitation.

Policies to strengthen domestic food supply chains are also critical. Actions need to be taken to keep supply chains fully operational without transport or logistics breakdowns or closing of food wholesale or retail outlets. There is an increasing need to support farmers in connecting to existing and new markets—including reorienting and rewiring food supply chains from the food services sector to retail/wholesale. Governments can partner with technology, information technology, and logistics companies to establish or expand platforms for e-commerce; use digital solutions to connect producers and traders, processors, and buyers; and direct transactions between producers and consumers or food processors, and food service delivery. Public-private partnerships for supply chain flow management should be created and strengthened. As small and medium-size enterprises constitute the backbone of food supply chains in many African countries, the availability of digital solutions to link them directly with buyers or downstream supply chain firms is critical. Finally, scaling up safety net programs, accompanied by digital solutions for communication on nutrition and health, is key to protect the purchasing power of poor households and their access to food and nutrition.

Medium to long term solutions to build resilience in food markets include the implementation of cost-effective procedures to prepare for future shocks. The agenda on shock-responsive safety nets should be prioritized to target the most vulnerable, with emergency food distribution systems where needed (section 2). Policies that foster the development of competitive food and agricultural value chains can help build resilience, including providing financial support for agribusinesses to rebuild supply chains, fostering investments in storage facilities, strengthening intellectual property rights to allow modern technological transfers and innovation to boost productivity growth, and de-risking private sector investment in agriculture through credit guarantees and insurance products.[55] At the global level, a more efficient and resilient global food trade system is critical to achieve food and nutrition security.

Industrialization as an Opportunity for Job Creation

A more productive agriculture sector will reallocate surplus labor to non-agriculture sectors of the economy such as manufacturing and services. Complementary to policies boosting agricultural productivity, actionable measures need to leverage technologies to boost output, productivity, and job creation in non-agricultural activities. Recent evidence suggests that industrialization can provide opportunities for job creation across countries in the region.[56] Specifically, job growth in the manufacturing sector has been facilitated by the low average wage environment, and has been driven by the more dynamic new and young establishments. However, the era of job growth at low wages appears to be eroding. Profit margins per worker have been declining significantly regardless of the size and age of manufacturing firms—as a result of wage rates increasing at a faster pace than labor productivity.[57] Hence, new and young firms continue creating jobs although at a much slower pace as they are increasingly using more capital relative to labor.

Sub-Saharan African countries are reasonably well-integrated in the international network of manufacturing, with GVC participation that is comparable to South Asian and Southeast Asian countries.[58] These GVC linkages take place mainly through forward integration—particularly for resource-abundant countries—and reflect the dominance of primary exports and engagement in low-skill tasks. GVC participation has led to increased manufacturing employment and income gains driven by expanding global demand for manufactured goods.[59] However, these gains have been weakened by a decline in competitiveness and the adoption of labor-saving technologies to replace routine jobs in production along GVCs—particularly among workers performing routine tasks at the bottom of the value chain.[60] Africa's viable options to create more jobs in GVCs are targeting the entry and expansion of activities in high-growth end markets while promoting diversification of manufacturing GVCs from low value-added products and tasks to increase GVC income shares. Although diversification has contributed

55 Africa's food import bill has nearly tripled over the past two decades, with the bulk of the increase accounted for by cereals (particularly wheat) as well as fats and oils. Still, rising food imports represent an opportunity for accelerating poverty reduction through food import substitution. While not all countries in the region should become self-sufficient in staples—especially if they need them as feed grains—much scope remains for raising staple crop productivity in low-income countries to improve food security and reduce poverty (Christiaensen and Martin 2018).

56 Abreha et al. (2021).

57 This excludes establishments that have been in business for more than 20 years (Abreha et al. 2019).

58 The emergence of GVCs has offered developing countries new opportunities to integrate into the global economy. By enabling economies to participate in certain stages of production, GVCs avoid problems related to developing whole products to export. GVCs are also essential channels for technology spillovers and technology upgrading. The benefits associated with GVCs have led some scholars to argue that they provide a relatively easy route to industrialization (Baldwin 2016; Abreha et al. 2021).

59 Pahl et al. (2019).

60 Reijnders et al. (2016); Reijnders and de Vries (2018); Rodrik (2018).

to GVC income growth, industrial upgrading has occurred mostly in relatively less knowledge-intensive manufacturing industries.[61]

Boosting productivity among manufacturing firms may help accelerate job creation in the manufacturing sector. To accomplish this task, two types of policy reforms can be implemented: (1) reforms that lower barriers to entry, and (2) policies that boost within-firm productivity growth. As younger African firms are engines of job growth across manufacturing activities, reforms that address the key barriers to entry—ranging from easing regulations for starting a business, access to credit, physical infrastructure for essential services including transport and logistics, information and communications technologies, and power and other utilities—are central for growth of the manufacturing sector and large-scale job creation. Size-neutral interventions facilitating startups as tools to foster job growth are preferred over any type of size-dependent policies.[62]

Policies to foster within-firm productivity growth are also an important channel to ensure better employment growth prospects. Resource misallocation across/within sectors and industries is quite substantial in developing countries—and, notably, in Sub-Saharan African economies.[63] Actionable policies that are needed to raise productivity include those addressing market distortions, strengthening and upgrading participation in international trade and GVCs, attracting FDI, promoting clustering (for example, special economic zones), and narrowing the infrastructure gap. The scope for more and better job creation can be widened by the integration of African firms into regional and global value chains. Policies that foster competitiveness—and, thus, reduce excessive unit labor costs—are critical to attract and maintain value chain–related jobs.

Overall, delivering structural transformation with more and better jobs requires policies that reflect a commitment to building competitive advantages across the entire spectrum of the economy, reinforcing the learning capacity of private and public enterprises, facilitating the entry and growth of firms, and addressing economywide inefficiencies. These policies should focus on factors that drive the productivity and growth of firms and boost their capacity to adapt to emerging challenges. They also require strong synergies across multiple sets of policies in building skills, boosting competition by promoting new entry, easing labor market rigidity, improving trade facilitation, developing physical infrastructure, ensuring easy access to credit, and improving the overall business climate. Job creation, as a result of these actionable strategies, is the best form of social protection.

61 Foster-McGregor et al. (2015); Abreha et al. (2021).

62 Interventions targeting any size group of operating firms would reduce jobs and output in the aggregate by diverting skills and know-how away from innovative firms toward operators that are less likely to develop or adopt new technologies and/or products (Acemoglu et al. 2018). Evidence shows that manufacturing employment by firms of any given age, on average, is significantly smaller in India and Mexico relative to the United States. This reflects the slower growth among startups and young firms in India and Mexico due to higher barriers to investments that larger firms faced in those countries relative to their counterparts in the United States (Hsieh and Klenow 2014).

63 Cirera et al. (2020); Calderon (2022).

Seizing the Moment: Advancing Social Protection in Africa

In an environment of multiple, new, more frequent, and covariate shocks, building economic resilience is an integral part of the policy agenda that fosters structural transformation and delivers sustained income and job growth in the region. Creating jobs, especially in the formal sector, is one of the top policy priorities because it is the best way to provide social protection for the population, particularly vulnerable segments. High levels of unemployment and underemployment in the region, as well as inadequate current labor and social protection standards, hamper the delivery of social protection in many countries. Policies to foster within-group productivity (such as adoption of better technologies and management practices), address market distortions (for example, barriers to entry, insolvency procedures, and restricted access to credit), and strengthen the participation of firms in regional and global value chains are critical to create more and better jobs.

At the same time, social protection programs need to adapt to this new, more turbulent environment and expand beyond safety nets. In this context, the next generation of social protection programs should design social insurance and labor market programs that contribute to economic resilience and equity by protecting the poor and vulnerable, including urban informal workers. An increasing number of African governments are implementing social safety nets that provide cash transfers coupled with productive inclusion measures, such as micro-entrepreneurship trainings, lump sum capital provision, and savings facilitation. The evidence on the effectiveness of these programs is growing rapidly, demonstrating the improved ability of households to withstand shocks by protecting consumption, diversifying livelihoods to off-farm labor, and strengthening coping mechanisms. Furthermore, many countries have introduced labor market programs, including temporary wage subsidies paid to employers that improve the resilience of firms and their capacity to cope during economic downturns triggered by crisis.

Section 2 discusses the significant changes that are underway in social protection programs in the region amid the unprecedented expansion of social safety nets to protect the poor and vulnerable from the adverse economic effects of the COVID-19 pandemic. The pandemic has been a game changer in understanding the critical role of social protection schemes in responding to an expanded landscape of covariate shocks—epidemics, climate change, natural disasters, and conflict. It also highlighted the importance of robust safety net delivery systems for timely disbursements of cash transfers and services to address extreme poverty, help households better manage risks, and build resilience to cope with new, multiple, more frequent, disruptive, and covariate shocks, as well as to help accumulate productive assets (say, investments in education and health, physical and digital infrastructure, and preservation of natural capital) and create opportunities for the next generations.

The COVID-19 pandemic has also brought to light a series of weaknesses facing these programs as well as the much-needed next steps to build stronger systems to move toward protection for all. Three insights have emerged from the experience of the social protection response to the pandemic in Africa: (1) strengthening wide-coverage delivery systems and dynamic social registries that harness good data for rapid expansion of coverage and reach are essential; (2)

greater use of technological solutions is integral for the intake and registration of beneficiaries, as well as the assessment of needs an conditions and the provision of benefits; and (3) creating and managing fiscal space for social protection is critical for sustainability.[64]

Social protection needs to be accessible to the entire population. On the one hand, noncontributory cash and in-kind transfers will continue to support the poor and vulnerable. On the other hand, at the other end of the spectrum, formal sector workers and high-income households will continue to access mostly contributory schemes, such as (public and private) pension schemes and unemployment benefits, among others. Yet, the pandemic has evidenced the inadequacy of the current setup in supporting those in the middle of the income distribution—particularly in the informal sector. For such households, governments will need to roll out innovative social insurance and savings programs that allow flexible contributions as well as provide fiscal incentives to match contributions.

Social protection programs must be able to respond to shocks, be they economic, climatic, conflict-related, or due to pandemics.[65] Well-designed and adequately financed social protection policies can allow for rapid expansion of programs—or for mixing existing programs—to support more (and perhaps different) households in times of need. They also allow for rapid increases in the amount and frequency of benefits—to provide additional resources to households facing extraordinary circumstances.

Data collection and management will be key. The importance of African countries gradually collecting accurate and comprehensive data covering the entire population cannot be overstated. This should include information on the welfare conditions and risks/vulnerabilities of households, and the channels through which shocks propagate. This information will need to be kept up to date to allow for appropriate responses. Data from different sources will need to be integrated, including increasing the use of nontraditional forms of data, such as remote sensing, cell phones, and social media.

Social protection programs should continue building the resilience of poor and vulnerable households by supporting them in investing in productive assets and human capital. Choosing the right mix of social protection instruments (from cash transfers to public works to productive economic inclusion measures) will be paramount. Such tools can both protect and enhance households' education, nutrition, and health, while allowing communities to make better use of their natural resources and promoting investments in productive assets for income-generating activities.

Finally, making the most of the good times will enable more effective responses during the rainy days. Unfortunately, financing for the sector remains scarce and heavily donor-dependent on much of the African continent. Only through predictable and adequate budgets for the sectors, made available by countercyclical fiscal policies or contingency funds accumulated during expansionary periods, can countries build social protection programs that can respond rapidly to shocks and help their citizens weather crises.

64 Section 2 describes a series of innovations implemented by African governments so that they can rapidly identify, assess, enroll, and transfer money to people, even where prior systems were limited and social registries small.

65 Shock responsiveness would require a shift from ad hoc, untimely, and inadequate funding to advanced planning and financing of the likely response measures. With the increasing exposure to shocks, African governments should consider further advancing on this path and fully embracing the potential of adaptive social protection.

Addressing Debt Sustainability Issues to Enhance Macroeconomic Resilience

Prior to the Russian invasion of Ukraine, emerging signs of stagflation—rates of inflation exceeding central banks' targets and sluggish growth—along with tightening financial conditions were already putting the debt sustainability of countries in the region at risk. The conflict in Eastern Europe has exacerbated this situation by increasing borrowing costs and weakening currencies in some developing countries. For instance, sovereign spreads in Africa have, on average, expanded by 19 basis points, with even larger increases in Ghana (137 basis points), Zambia (136 basis points), and Benin (63 basis points). Additionally, the Ghanaian cedi has weakened against the U.S. dollar by more than 15 percent since the outbreak of the war. If a debt crisis among developing countries ensues as a result of these shocks, it might be different from episodes in the past due to the different nature of the shocks and the different composition of external creditors.

The landscape of external creditors has also changed for the Africa region compared to that of outstanding debt prior to the Highly Indebted Poor Countries Initiative and the Multilateral Debt Relief Initiative. Before these debt forgiveness initiatives were launched in the second half of the 1990s, the main external creditors of countries in the region were multilateral institutions and official bilateral creditors, with the latter group including mostly Paris Club governments. This was not the case at the end of 2020. External debt owed by Sub-Saharan African economies to private creditors (US$195 billion) is greater than that owed to multilateral creditors (US$144 billion) as well as official bilateral creditors (US$115 billion), with the latter amount including non-Paris Club governments—and, particularly, China.[66] Additionally, debt service payments on Sub-Saharan Africa's public and publicly guaranteed debt amounted to US$40 billion, and nearly two-thirds of this service was paid to private creditors (US$26 billion). Debt service paid to bilateral official creditors totaled nearly US$8 billion in 2020. A significant portion of the debt owed by Sub-Saharan African countries involves variable interest rates, thus rendering countries increasingly exposed to rate increases.

In response to the pandemic crisis, the Debt Service Suspension Initiative (DSSI) was intended to suspend debt service payments to bilateral official creditors for International Development Association (IDA)–eligible countries from May 2020 to December 2021. Given the change in the landscape of creditors, the DSSI postponed only a minority of the debt service payments for some of the eligible countries in the region and, hence, released only a limited amount of resources. It also proved difficult to coordinate the participation of private creditors in the initiative. Finally, the DSSI was intended for liquidity problems rather than solvency problems. The Common Framework for Debt Treatments beyond the DSSI was then designed to help IDA-eligible countries alleviate solvency problems, including debt restructuring. So far, only three African countries are seeking debt relief under the Common Framework (Chad, Ethiopia, and Zambia), with no signs of progress being visible yet. As is the case of the DSSI, the Common

66 International bonds constitute the bulk of external debt owed to private creditors, at US$135 billion in 2020.

Framework also faces a series of challenges. Official and private creditors may be reluctant to grant major substantial debt relief quickly, and there is uncertainty about the willingness or ability of borrowing countries to commit to credible multiyear action plans. A coordinated response might be impeded by the fact that the borrowing countries now have a complex and diverse group of creditors.

So far, the initiatives have not been successful in reducing the debt levels and vulnerabilities of IDA-eligible countries—including Sub-Saharan African countries. Improvements in the existing debt relief mechanisms are required to avoid a large wave of debt crisis among developing countries. The IMF and the World Bank have offered a roadmap[67]: (1) put in place a clear timeline for the different stages of the process—for example, formation of the creditors committee within six weeks; (2) suspend debt service to official creditors for all applicants during the negotiations; (3) evaluate the parameters and processes of the comparability of treatment, and clarify the rules and procedures for implementation; and (4) broaden the eligibility requirements for the Common Framework to include other heavily indebted and vulnerable lower-middle-income countries.

67 Estevão (2022).

ANNEX A

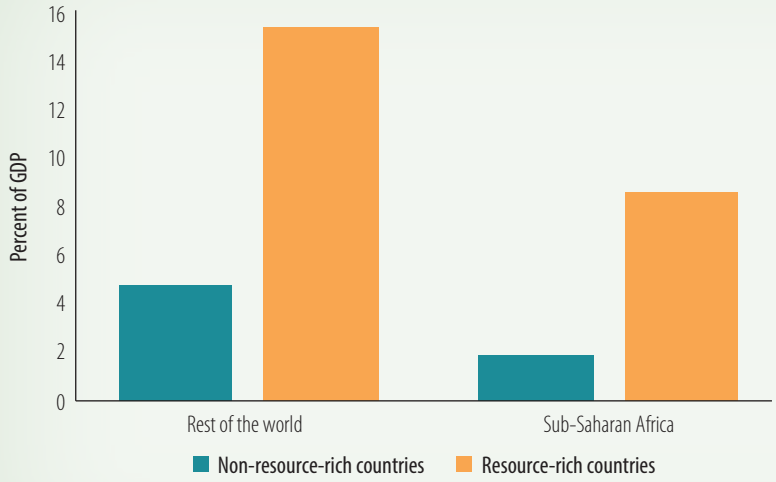
Seizing the Opportunity of a Renewed Africa's Resource Boom

International prices for many commodities have rallied and attained their highest levels as of 2022, after the 2020 global recession. The surge in prices was triggered by a rapid recovery in global demand associated with accommodative fiscal and monetary policies, supply disruptions, and greater demand for transition metals that are associated with decarbonization. After collapsing to its lowest point in half a century (US$20 in April 2020), the price of Brent crude oil jumped to US$129, its highest value in 10 years, increasing by 545 percent. Prices of base metals surged by 106 percent, reaching record highs in 2022, while agricultural commodity prices rose by 52 percent. The Russian Federation's invasion of Ukraine in February 2022, along with the subsequent sanctions imposed on Russia, prompted a sharp jump in commodity prices, especially for oil, natural gas, and wheat. The prices of most commodities reached their highest levels since the global financial crisis. Movements in commodity prices play an important role in emerging markets and developing economies (EMDEs), representing up to 50 percent of the fluctuations in business cycles (Di Pace et al. 2021; Mendoza 1995; Kose 2002). Commodity exporters will benefit from elevated prices, while the effects will be harmful for commodity importing countries.

The Sub-Saharan Africa region depends heavily on commodity prices for government and external revenues. This reliance increases even further during commodity boom periods. On average, during the boom period of 2004-14, natural resource revenues as a percentage of gross domestic product (GDP) in Sub-Saharan African resource-rich countries were 9 percentage points higher than those in non-resource-rich countries in the region and 6 percentage points higher than those in non-resource-rich countries outside the region (figure A.1). Revenues as a percentage of GDP in the resource sector were considerably high for Angola, the Republic of Congo, and Equatorial Guinea. With the commodity boom episode of 2004-14, the number of resource-rich countries in Sub-Saharan Africa increased from 16 before 2004 to 26 at the end of 2014, according to the IMF (2012) definition. Surprisingly, resource-rich countries did not benefit from the surge in commodity prices compared with their non-resource-rich neighbors (Cust and Zeufack 2022). Although resource-rich countries generated unprecedented economic

FIGURE A.1: Natural Resource Revenues Share of GDP, 2004-14

Increasing reliance on commodity revenues among resource-rich countries during the boom period.



Source: Cust and Zeufack 2022.

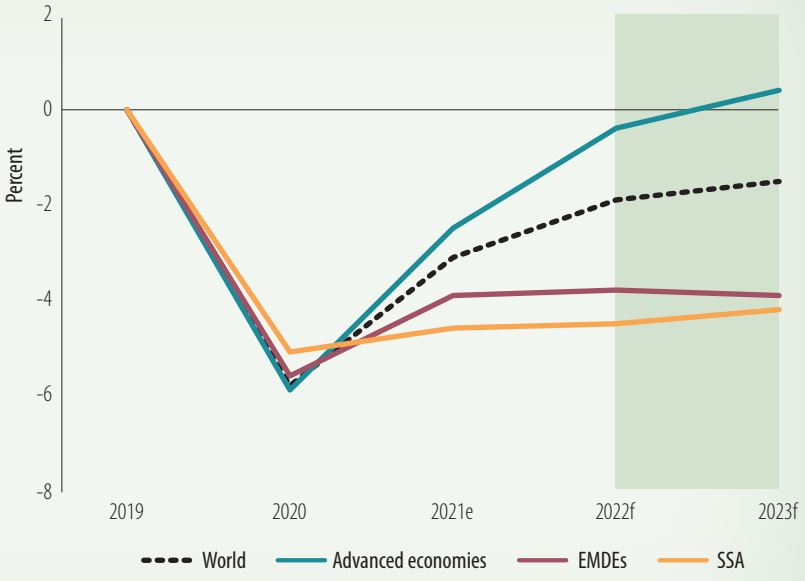
Note: The bars show averages in resource-rich and non-resource-rich Sub-Saharan Africa compared to world averages. GDP = gross domestic product; RR = resource-rich.

growth during the boom period, their performance failed to spill over to the non-resource sector. Consequently, poverty and inequality levels remained unabated.

The Sub-Saharan Africa region has exhibited a disappointing recovery from the 2020 global recession, falling behind the rebound in advanced economies and other EMDEs despite elevated commodity prices (figure A.2). The sluggish performance reflects the scarring effects of the 2020 recession combined with limited policy responses, elevated debts, supply disruptions, and rising inflation. Regional oil exporters, such as Angola, Nigeria, and the Republic of Congo, have not benefited from elevated oil prices partly due to weak investment in the oil sector, which predated the recession. Similarly, mineral exporters, except Botswana and the Democratic Republic of Congo, have fallen short of expectations given the record highs attained in metal prices.

The scarring effects of the 2020 recession have affected the Sub-Saharan Africa region more than any other region, despite elevated commodity prices.

FIGURE A.2: Output Deviation from Pre-Pandemic Trend



Source: World Bank staff projections.
Note: EMDEs = emerging markets and developing economies; SSA = Sub-Saharan Africa.

Although the short-term dynamics in commodity prices depend on the global demand stemming from recovery in economic activity, supply disruptions, and conflict, the energy transition will play an important role as a driving force behind price movements over the medium to long term. The Sub-Saharan Africa region missed the opportunity of a prolonged surge in commodity prices driven by high demand in EMDEs, particularly China. The region performed exceptionally well during the boom phase, but most of the gains were squandered when prices collapsed in 2014 and since then, the region has struggled to regain its pre-collapse growth path. The post-boom period was characterized by debt vulnerabilities, rising poverty, and worsening inequality in many resource-rich countries. Unsurprisingly, failure to harness resource wealth for economic development is not unique to resource-rich countries in Sub-Saharan Africa, as resource-rich developing countries with weak political and economic institutions face similar challenges.

The recent price dynamics offer yet another opportunity, especially for resource-rich mineral exporting countries, due to the marked increase in demand for these commodities for use in renewable energy infrastructure (say, solar panels or wind turbines), but also the manufacturing of products that are associated with green industries or energy transition (say, electric vehicle

batteries or charging stations). However, the increased fuel prices pose challenges for resource-rich countries that depend on fossil fuel energy for their exports, as consumption of fossil fuels is set to decline, setting the stage for policies that foster structural change. Agricultural exporting countries will be exposed to a downward trend in their commodity prices—thus requiring structural reforms (Baffes and Kabundi 2021). Past boom episodes have mostly ended with prolonged recessions coupled with sovereign defaults resulting in financial crises. Will history repeat itself this time?

Against this backdrop, this annex answers the following questions:

- How did the Sub-Saharan Africa region perform during the 2004-14 commodity boom episode?
- What are the opportunities to ensure inclusive growth this time?

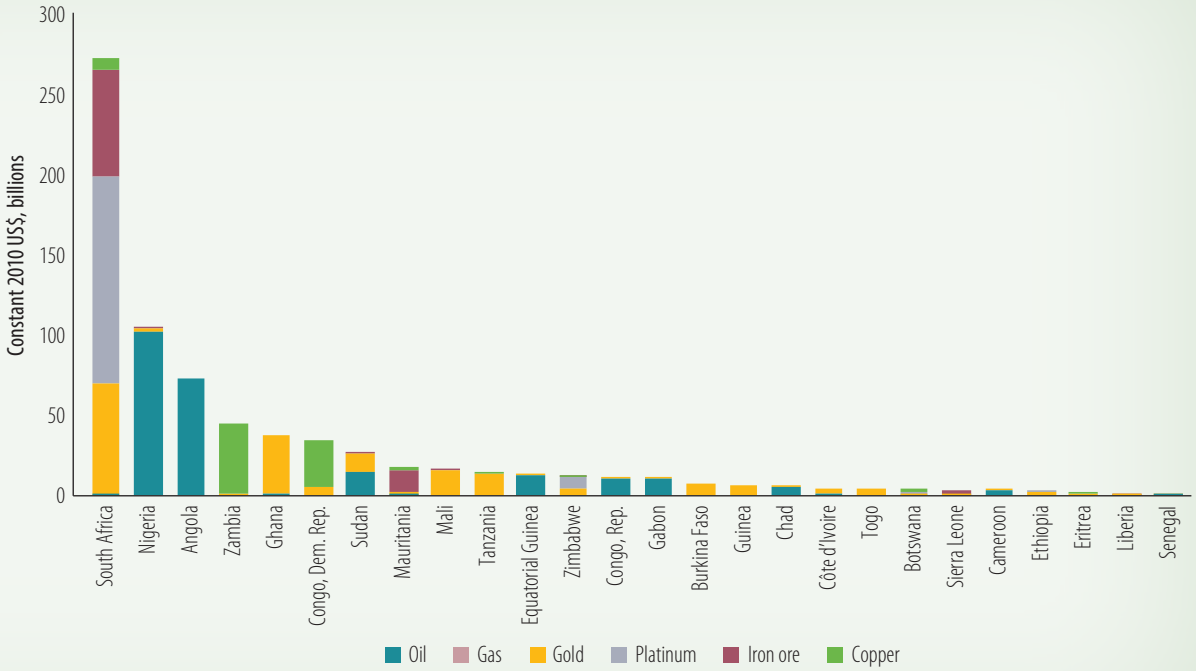
The Missed Opportunity of the Commodity Boom Episode

Commodity prices rose considerably from 2000 to 2014, on the back of strong demand from urbanization and industrialization in China, making the country the primary importer of commodities, specifically metals. China's demand for metals grew from 10 percent in the 1990s to 50 percent of world demand for metals in 2015. From 2000 to 2011, energy prices increased by 134 percent, while metal and agricultural prices rose by 113 and 78 percent, respectively. Surges in commodity prices generated unprecedented growth in the region of 5.1 percent over 2000–14, compared with 2.2 percent over 2015–18. Resource-rich countries saw a sharp drop in growth from 7 percent (oil rich) and 3.6 percent (metal and mineral rich) to 1.3 and 1.8 percent, respectively. In contrast, non-resource-rich countries experienced an uptick in growth from 4.9 percent in 2000–14 to 5.2 percent in 2015–18.

Using a sample of 48 countries, Cust and Zeufack (2022) find evidence of increasing commodity dependence among resource-rich over 2004–14. The number of resource-rich countries rose from 16 to 26, including new countries and prospective resource-rich countries based on discoveries. During the boom decade, the cumulative revenues derived from primary subsoil resources exceeded $50 billion for each of the three largest economies in the region (South Africa, Nigeria and Angola). Figure A.3 shows the extent and diversity of the commodities driving these revenues. As a proportion of GDP, primary subsoil resource revenues accounted for around 6.8, 2.8, and 9 percent in South Africa, Nigeria, and Angola, respectively, during this same period. These revenues created unparalleled levels of fiscal space for many governments, while also reflecting the scale of the boom in the resource sector. Export diversification is a form of protection against depletion of the resource base. Historical evidence suggests that some countries in Latin America and Southeast Asia have benefited from diversification (Ross 2017). This has become more urgent for oil-rich economies as it may provide insurance against a future global shift from fossil fuel consumption, driven by alternative energy technologies and taxation of carbon emissions (Cust, Manley, and Cecchinato 2017).

Revenues generated during the boom decade were primarily from the resource sector.

FIGURE A.3: Primary Commodity Revenues, 2004–14



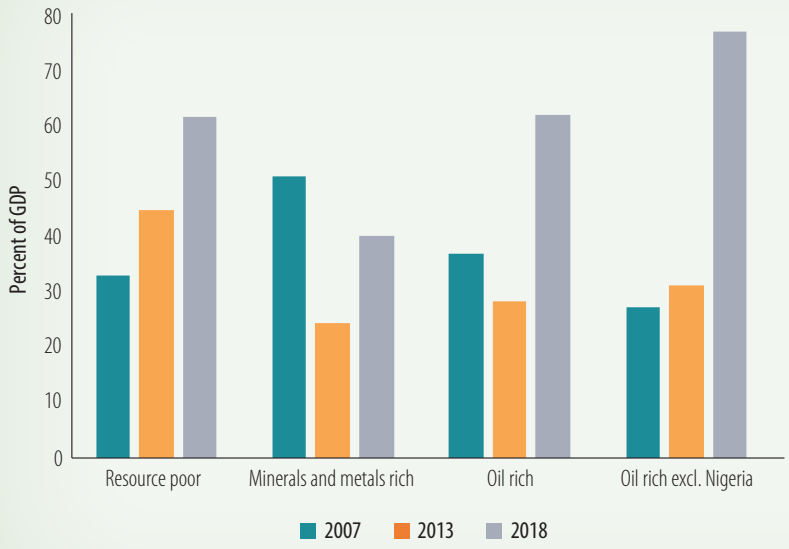
Source: Ross and Mahdavi (2015), BP and British Geological Survey.

These revenues created ample fiscal space for many governments. Importantly, this sector contributed significantly to the output of resource-rich countries with a median increase of 12.6 percent from end-2003 to 2014, which amounted to 1.3 percentage points annual additional growth. The post-boom period registered a decline in the sector's contribution to 4 percent, or 0.4 percentage point of annual growth. Conversely, in non-resource-rich countries, the contribution to output was 2.7 percent, or 0.3 percentage point annual growth. This suggests that the anemic recovery witnessed from 2015 until the dawn of the 2020 recession was primarily attributed to the poor performance of the resource sector in resource-rich countries. Economic activity in resource-rich countries depends almost solely on the resource sector.

Meanwhile, the performance during the boom period was not shared broadly, especially in resource-rich countries, where it failed to reduce poverty and inequality. Between the pre-boom (2003) and the end of the boom (2014), the poverty headcount increased by 11 and 13 percent in resource-rich and non-resource-rich countries, respectively. This surge was partly driven by population growth. For example, over the same period, the fertility rates in the most populous countries in the region were 5.9 in Nigeria and 6.5 in the Democratic Republic of Congo (United Nations Population Division). It is worth noting that although the poverty headcount increased in 13 of 25 resource-rich countries, other resource-rich countries (for example, Tanzania, Uganda, and Ghana) managed to bring it down (Cust and Zeufack 2022). Similarly, the Gini coefficient of inequality worsened in many resource-rich countries. In contrast, most non-resource-rich countries—nine of the 15 countries for which Gini data are available—recorded an improvement in their Gini coefficient by 2014 compared to 2003.

Since the majority of natural resources are owned by the government, its size increased along with many challenges to the efficient management of public finance and state-owned enterprises. Public investments were not geared toward productive sectors to ensure sustainable use of resources, which could generate high returns on investment and boost potential growth. The government had to ensure that the economy was protected from the harmful effects of resource dependence—ranging across the potential adverse channels such as Dutch disease (Corden and Neary 1982), price and revenue volatility, corruption, conflict, and profligacy. The post-boom period was also characterized by rising public debt, from 38 percent of GDP in 2013 to 59 percent of GDP in 2018. The number of countries at high risk of debt distress jumped from eight to 18 between 2013 and 2018 (Calderon and Zeufack 2020). This increase was remarkable in oil-rich countries (excluding Nigeria), jumping from 31 percent of GDP in 2013 to 73 percent of GDP in 2018, in contrast to non-resource-rich countries, where the increase was 17 percentage points between 2013 and 2018 (figure A.4). Although resource-rich countries exhibited exceptional performance during the boom, the vulnerability and lack of fiscal buffers became apparent after prices collapsed, particularly in oil-rich countries. Poor management of natural resources was somewhat caused by the lack of (fiscal and debt) transparency as well as corruption. According to the World Bank's Statistical Capacity Index and the International Monetary Fund's Special Data Dissemination Standards, the region has the lowest scores for transparency, although with a notable improvement over time and significantly higher than the level during the pre-boom and boom periods (Kubota and Zeufack 2020).

FIGURE A.4: Public Debt in Sub-Saharan Africa, by Resource Abundance (% of GDP)



Public debt jumped more in resource-rich countries compared with non-resource-rich countries during the post-boom period.

Sources: Calderon and Zeufack 2020, based on IMF World Economic Outlook Database 2018.
Note: Regional GDP is based on weighted averages by region. GDP = gross domestic product.

New Opportunities for Inclusive Growth

After missing the opportunity of the 2000–14 commodity boom, the Sub-Saharan Africa region is facing another period of elevated prices on the back of two events. First, commodity prices are recovering to pre-pandemic levels or higher (in some cases) as countries have emerged from the 2020 pandemic-related recession. Second, soaring prices have resulted from the invasion of Ukraine and the sanctions imposed on Russia. Over the short run, price dynamics are driven

by global demand, supply disruptions and, to some extent, geopolitical tensions (Kabundi and Zahid 2022). The long-run trends in prices depend largely on the energy transition, which could generate a new commodity super-cycle with high demand for some metals, such as copper, cobalt, lithium, nickel, platinum, and silver, whereas the demand for fossil fuels is set to decrease (Galeazzi, Steinbuks, and Cust 2020; Baffes and Kabundi 2021). These price dynamics present new opportunities for mineral- and metal-rich countries in the region, but they pose challenges for countries exporting hydrocarbon fossil fuels, particularly countries with recent oil and gas discoveries (Mozambique, Kenya, Senegal and Uganda). Fossil fuel-rich countries, including Angola, Chad, Nigeria, and the Republic of Congo, may face significant but uncertain downside risks to growth in the future due to the timing of the transition (World Bank 2021). Therefore, governments may need to invest in renewable natural capital and intangible assets, like knowledge, innovation, and institutions, that could help reduce countries' exposure to low-carbon energy transition risks and a downward trend in agricultural prices.

Sub-Saharan African countries, in particular those exporting the commodities needed for the transition to renewable and clean energy, should enhance their production capacity and benefit from the elevated prices. Efforts to reduce greenhouse gas emissions to zero worldwide will trigger high demand for mineral energy materials that can last for decades. The demand for each mineral depends largely on new energy technologies, which include wind turbines, solar panels, and battery storage. The International Energy Agency's net-zero emissions scenario in line with the Paris Agreement predicts a significant jump in prices of more than 40 percent for copper, 60-70 percent for nickel and cobalt, and about 90 percent for lithium associated with a greater share of clean energy technologies in total demand over the next two decades (IEA 2021). Electric cars and battery storage are set to become the largest consumers of lithium and to surpass stainless steel as the largest end user of nickel by 2040.

Over the short to medium term, mineral-rich countries should adopt structural reforms to ensure efficient use of government and export revenues. As observed in the 2004–14 boom, opacity in public finance management results in rising debt, leading to sustainability concerns and ultimately banking and sovereign default crises when prices fall (Eberhardt and Presbitero 2021; Reinhart, Reinhart, and Trebesch 2016). This suggests that mineral-rich countries should reduce corruption while promoting sustainable management of public finance in a transparent manner by disclosing granular information on the loans contracted by the government. Using the G20's Common Framework is a viable option for adjustment among countries on the brink of sovereign defaults. Countercyclical fiscal policies combined with strict enforcement of fiscal rules while avoiding the procyclical fiscal policies that are common in resource-rich countries would benefit the region this time. The region can learn from successful management of revenues based on the rigorous implementation of structural policies in Chile, a resource-dependent country. The proceeds from natural resources should benefit even the non-resource sector through diversification. However, traditional diversification of exports can be difficult to achieve in the face of the Dutch disease (Harding and Venables 2016; Ross 2019). Instead, governments could initiate a broad diversification of their asset portfolio, which includes investment in human, physical, and renewable natural capital. Such investment will push up long-term growth (World Bank 2021).

Given the pressing demand, current supply will be insufficient, resulting in excess demand and pushing up the prices of some metals. This suggests that a broad strategy to increase investment in minerals should be combined with technological innovation, supply chain resilience, sustainability standards, and recycling. In addition, resource-rich countries can avoid repeating the missed opportunity of the past commodity boom through investment in digital technology, infrastructure, and green technology. Electricity constitutes a significant obstacle to development, with about 600 million people on the continent who do not have access to electricity. The metal super-cycle offers a unique opportunity for policy makers to mitigate the scarring effects of the COVID-19 pandemic through investment in human capital, with a primary focus on education, particularly for girls. High educational attainment will reduce rampant inequality, which has worsened in resource-rich countries since the collapse of commodity prices in 2014, and at the same time provide support for the non-resource-rich sector. With a skilled labor force, the continent should be able to absorb new entrants in the labor market. Investment in science, technology, engineering, and math is key, especially if firms want to adopt digital solutions and African manufactured digital solutions tailored to their needs. Specific initiatives should be taken to encourage women's participation in the mining industry where they are currently poorly represented. Promoting primary education will also reduce instances of child labor, which is common in several mines in the Katanga and Kivu provinces in the Democratic Republic of Congo. Countries in the region that will directly benefit from the energy transition include Botswana, the Democratic Republic of Congo, Guinea, Mozambique, Namibia, South Africa, Zambia, and Zimbabwe.

The region as a whole could tap into the wealth generated by mineral-rich countries through intraregional trade facilitated by the African Continental Free Trade Area (AfCFTA). Lessons from the integration in East Asia suggest that the rise of the Asian tigers spilled over to the region via trade liberalization. In the past two decades, East Asia and Southeast Asia have benefited further from regional integration, world trade, and investment to emerge as the factory of the world through their insertion into global value chains. The AfCFTA will offer an opportunity for investors to exploit the economies of scale the region presents with its rising population, which is expected to be more than half of the global population by 2100. Likewise, the region can shift once and for all from the post-colonial model of complete reliance on extractive resources to the development of regional value chains. This model requires the industrialization of the resource sector. The value chain has already been effective in the diamond industry in Southern Africa. Initially, diamonds from Namibia were exported to London before processing, but they are now being processed in Botswana before entering the global market. Similarly, technological advances in the solar industry in South Africa can spread throughout the continent.

Finally, mineral exporters should learn from the dynamics in fossil fuel prices of the past decades to shield themselves from the inevitability of stranded assets (for countries abundant in fossil fuels). Low supply elasticity due to high costs of investment coupled with time lags between discovery and production are key underlying factors behind the persistent surge in commodity prices. Nevertheless, these long cycles should not be erroneously taken for trends. Eventually, supply responds to innovation and massive investment, pushing prices down or reaching full resource exhaustion. African mineral-rich countries should prepare themselves for the inevitable bust in the price of metals.

Section 2: Seizing the Moment: What Next for Social Protection in Africa?[1]

Social protection in Sub-Saharan Africa is undergoing profound changes in the wake of unprecedented expansions of social safety net programs to protect the poor and vulnerable from the adverse social and economic consequences of the COVID-19 pandemic. The pandemic has underscored the critical importance of safety net delivery systems and timely disbursements of cash transfers and services to address extreme poverty, help households better manage risks, and build resilience to cope with ever more frequent and disruptive shocks. However, the pandemic response has also shone a light on the unfinished agenda for building stronger, country-led social protection systems for the coming years.

Strengthening their social protection systems is a smart investment for countries in Africa. There is strong evidence on the positive impacts and cost-effectiveness of social protection for poverty reduction, human capital formation, job creation, resilience building, and female empowerment. At the same time, the recent pandemic experience has also demonstrated the critical role social protection schemes play in responding to covariate shocks such as those resulting from epidemics, climate change and natural disasters, or conflict.

This section summarizes the broad directions for reforms across the continent in key areas such as: (1) expanding coverage of social protection and diversifying objectives and instruments, including for sustaining and further expanding human capital gains and sustainable job opportunities; (2) making social protection more adaptive and responsive to shocks through stronger delivery systems that, among others, leverage new technologies; and (3) developing a systematic and diversified approach to financing social protection. Taking advantage of the opening provided by the ongoing pandemic response, the section seeks to inform and contribute to the discussion on how to "build back better" by putting people first with policy makers, implementation partners, and stakeholders across the continent.

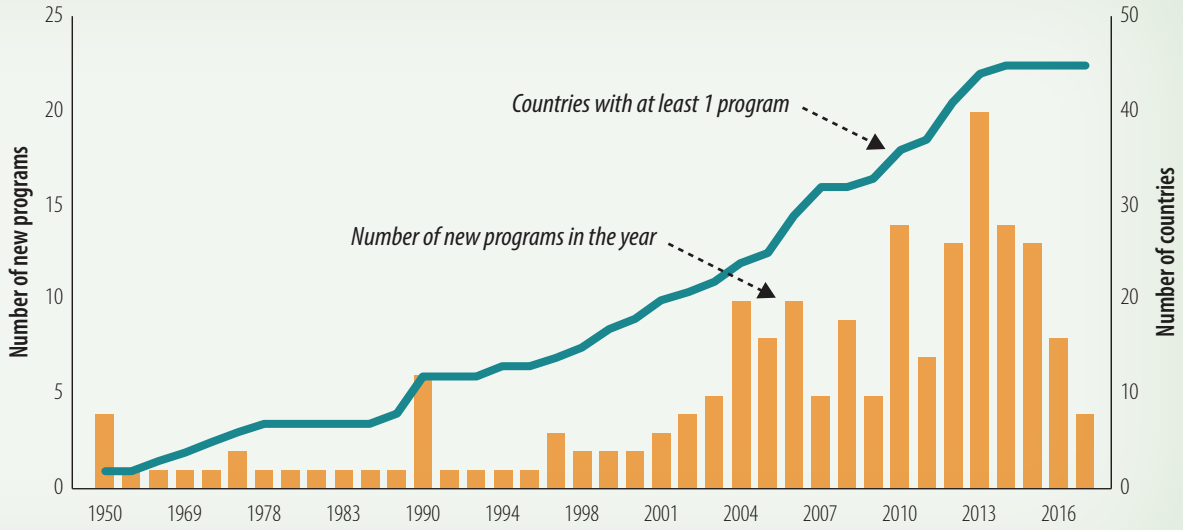
LOOKING BACK: THE EMERGENCE OF THE SOCIAL SAFETY NET AS AN INNOVATION TO PROMOTE EQUITY, OPPORTUNITY, AND RESILIENCE IN AFRICA

Sub-Saharan Africa has seen a remarkable expansion in access to social safety net programs over the past two decades. The expansion of social safety nets accelerated during and in the aftermath of the global food, fuel, and financial crises of the 2000s. Just prior to the COVID-19 pandemic, 45 countries in Sub-Saharan Africa—three times as many as those at the end of the 1990s—had introduced social safety net programs to tackle chronic poverty by increasing consumption among poor and vulnerable people (figure 2.1). Over time, the design of cash transfer programs has been increasingly directed at multiple related objectives beyond reducing consumption poverty, like protecting and promoting investments in human capital to take advantage of Africa's youth bulge, adapting to climate shocks, and supporting economic

1 This section was prepared by a team consisting of (in alphabetical order) Laura Bermeo, Luis Inaki Alberro Encinas, Felix Lung, Boban Varghese Paul, Silas Udahemuka, and Michele Davide Zini under the guidance of Paolo Belli, Christian Bodewig, Rob Chase, and Dhushyanth Raju. The team thanks Samik Adhikari, Thomas Bossuroy, Stephanie Brunelin, Evie Calcutt, Sebastian Geschwind, Iftikhar Malik, Patrick Premand, Suneha Seetahul, Yulia Smolyar, and Ramya Sundaram for inputs and contributions and Amit Dar, Ugo Gentilini, and Dena Ringold for helpful comments.

Social safety nets have expanded rapidly, increasing coverage across many countries in Sub-Saharan Africa.

FIGURE 2.1: Expansion of Social Safety Net Programs across Africa



Source: ASPIRE data presented in Beegle, Coudouel, and Monsalve 2018.

inclusion and jobs. In Africa, social safety net programs predominately focusing on cash transfers are relatively novel instruments in the social protection toolbox,[2] which previously was limited to pension schemes for formal sector workers as well as food aid for the destitute. Evidence shows strong impacts on consumption, resilience to shocks, greater school attendance and demand for health services, enhanced interest in promoting gender equity, and laying the foundation for economic inclusion of the poor and vulnerable.

Social safety nets experienced their coming of age during the COVID-19 pandemic, as governments turned to cash transfers as a preferred tool to protect the poor and vulnerable from the socioeconomic impacts of the pandemic. Africa's leveraging of social safety nets in response to the pandemic shock was part of an unprecedented expansion of social protection and labor programs around the world.[3] Countries in Africa expanded existing cash transfer programs, started new ad hoc programs, or used social protection delivery systems like social registries and payment mechanisms to provide support to more people. Often, governments leveraged recent technological advancements around novel data and digital tools to increase the reach of their safety nets. The pandemic response demonstrated the relevance of social safety nets as the tool of choice to respond to shocks. Clearly, the earlier investments in developing social safety net registries, systems, and platforms paid off. At the same time, it laid bare remaining weaknesses and the unfinished agenda.

2 Conceptually, social protection consists of: (1) noncontributory social assistance/social safety nets with cash and/or in-kind benefits and services, usually targeted; (2) contributory social insurance and pensions for old age or unemployment, typically for formal sector workers; and (3) active labor market programs.

3 By early January 2022, more than 3,800 social protection and labor measures had been planned or implemented by 223 economies in response to the pandemic, of which 45 were in Sub-Saharan Africa. See Gentilini et al. (2022).

The motivator for the expansion of social safety nets in Africa: Stalling progress on poverty reduction, high inequality, and persistently low human capital…

Africa's social safety net expansion over the past two decades was motivated by stalling progress in poverty reduction, high inequality, and persistently poor human capital outcomes. While Sub-Saharan Africa experienced relatively high economic growth between the 1990s and the mid-2010s, albeit with a consistent slowdown, particularly since 2015,[4] the continent's track record on poverty reduction and shared prosperity has been weak, and the number of poor has been increasing. Between 1990 and 2015, while global extreme poverty (at the international poverty line of US$1.90 a day) declined at the rate of 1 percentage point per year, extreme poverty in Sub-Saharan Africa fell only at the rate of 0.56 percentage point per year. Since 2015, there has been a slowdown in poverty reduction all over the world due to slowing economic growth. At the same time, unlike in other regions, in Sub-Saharan Africa, due to high population growth, the number of extreme poor has been on the rise—increasing from 283.8 million people in 1990 to 433.4 million people in 2018. Furthermore, even those escaping poverty were doing so very narrowly, as witnessed by the even slower progress in poverty reduction against the US$3.20-a-day and US$5.50-a-day poverty lines.[5]

Social safety net programs targeted to the poor are an attractive tool to address increasing inequality. Sub-Saharan Africa is one of the most unequal regions in the world. As of 2014, the average national income Gini for Sub-Saharan Africa was about 45 percent, compared to 35 percent in South Asia, East Asia, and the Middle East and North Africa.[6] Ten of the 19 most unequal countries in the world are in Sub-Saharan Africa.[7] Income inequality manifests in the form of inequality across various welfare indicators, including health and education, vulnerability to shocks, productive capacity, and more. Therefore, policy and programmatic interventions need to tackle these extreme inequality differences in a way that they can be reduced over time.

Policy makers have increasingly looked to social safety nets and modernization of delivery systems as tools to promote human capital formation. Despite improvements in some health and education indicators, human capital accumulation has been severely low across the region, particularly among the poorest households. The prevalence of stunting has reduced in Sub-Saharan Africa from 43 percent in 2001 to 32.9 percent by 2019. At the same time, primary and secondary school enrollment has improved. Nevertheless, overall human capital accumulation has been lower than in most regions—a child born today in Sub-Saharan Africa is expected to be only 40 percent productive compared to her full potential had she achieved complete education and full health. Even in countries with relatively high income levels, such as Angola, Botswana, and Gabon, human capital accumulation is low.[8] This speaks to some structural issues within these economies, which need priority attention to promote the objective of broad-based development. Within these countries, the poorest households have lower levels of human

4 In 2002-07, the economy of Sub-Saharan Africa grew at an average of about 6 percent per year compared to about 3.5 percent globally. Thereafter, it slowed due to the 2008 global financial crisis, although still expanding at an average of about 4 percent per year, compared to 2.5 percent globally, until 2015. Since then, however, Sub-Saharan Africa's economic growth has slowed further to below the global average (World Development Indicators).

5 World Bank (2020c).

6 World Bank (2016).

7 South Africa, Namibia, and Botswana have the worst inequality, followed by the Central African Republic, the Comoros, Zambia, and Lesotho (UNDP 2017).

8 World Bank (2020b).

capital accumulation than nonpoor households. For example, in Zambia in 2018, the Human Capital Index (HCI) of households in the poorest quintile was 0.41, compared to 0.52 among households in the richest quintile.[9] Similarly, in Kenya, the HCI increased on average in the 16 years between 1998 and 2014; however, the difference between the poorest quintile and richest quintile did not narrow—there was no catching up by poorer segments over time.[10] Social safety net programs, far from being handouts, promote human capital by using cash transfers as incentives to promote school enrollment and attendance, utilizing health and nutrition services, and complementing cash with services focused on encouraging good parenting practices and delivering knowledge about child development.[11] By targeting the poor, social safety nets can also help narrow within-country inequalities in human capital attainment.

...and a growing vulnerability to shocks

In recent years, social safety net programs in Africa have been increasingly focused on building resilience to shocks among poor populations. The food, fuel, and financial crisis of 2008 accelerated the expansion of social safety nets in low- and middle-income countries globally, and in Africa in particular, as governments looked to innovative ways to protect the poor. More recently, climate change and fragility have emerged as highly potent threats to the region. In 1970–74, the region experienced about five natural hazards per year, affecting 9.5 million households, but by 2015–19, this had increased to 70 natural hazards per year, affecting 91 million households.[12] The poor in Sub-Saharan Africa are more exposed to climate shocks than elsewhere—while Sub-Saharan Africa accounts for 10 percent of the global population with high flood risk, more than half of the poor exposed to high flood risk live in Sub-Saharan Africa (World Bank 2020c). Climate change threatens to deepen poverty in the region and reverse progress in human capital outcomes through damaging coping mechanisms. This is especially the case for poor households that are already living on the bare minimum. Fragility and conflict are another key threat to the region. Of the 43 economies with the highest poverty, a third are fragile and conflict-affected countries. Households in these countries face multiple deprivations, including monetary deprivation and lack of access to basic infrastructure, education, and health services. Persistent fragility and conflict stave off any form of investment and preclude the formation of human capital and assets.

In 2020 and 2021, most countries in Africa turned to their emerging social safety net programs to respond to the economic and social fallout of the COVID-19 pandemic. COVID-19, while less detrimental from a health perspective in Sub-Saharan Africa, has caused significant socioeconomic setbacks in the region, which are expected to have a lasting impact (World Bank 2020a). While the deceleration in economic growth has been lower in Sub-Saharan Africa than in other regions (-2.2 percent in Sub-Saharan Africa versus -3.4 percent globally), the poverty impacts are considerable due to the large population and existing vulnerabilities. Sub-Saharan

9 World Bank (2021b).

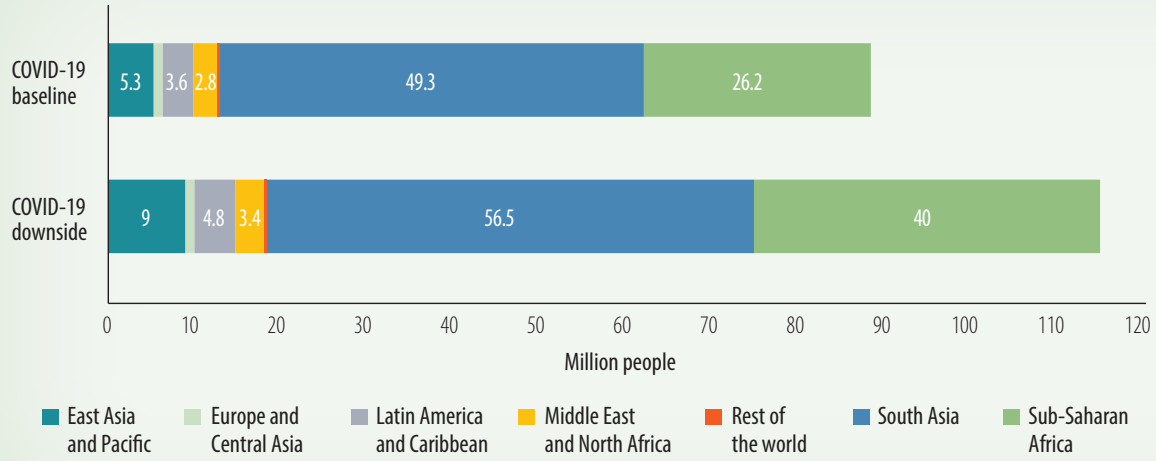
10 D'Souza, Gatti, and Kraay (2019).

11 The evidence around the positive impact of cash transfers on a range of socioeconomic indicators, dispelling the myth of social assistance as a handout, is by now overwhelming. From the African continent, among many references, see the recent impact evaluation of Tanzania's Productive Social Safety Nets program. https://documents1.worldbank.org/curated/en/150071582090321211/text/Evaluating-Tanzania-s-Productive-Social-Safety-Net-Findings-from-the-Midline-Survey.txt.

12 CRED (2022).

Africa is estimated to have added between 26 million and 40 million new poor households, or between 30 and 35 percent of the estimated global new poor in 2020 (figure 2.2). COVID-19 has also exposed new sources of vulnerability. Against pre-pandemic times when poverty was more prevalent among rural, young, and undereducated individuals, the new poor are likely those living in urban areas and engaged in informal services, construction, and manufacturing (World Bank 2020c). Beyond the immediate impact of social distancing and closures on incomes, price inflation threatens to reduce food security further.[13] At the same time, there has been an increase in social unrest in the form of violence against citizens.[14] Human capital accumulation is severely affected by school closures and related learning losses.[15]

FIGURE 2.2: New Poor at the US$1.90-a-Day Poverty Line in 2020



Economic fallout from the COVID-19 pandemic resulted in a considerable increase in poverty rates in Sub-Saharan Africa.

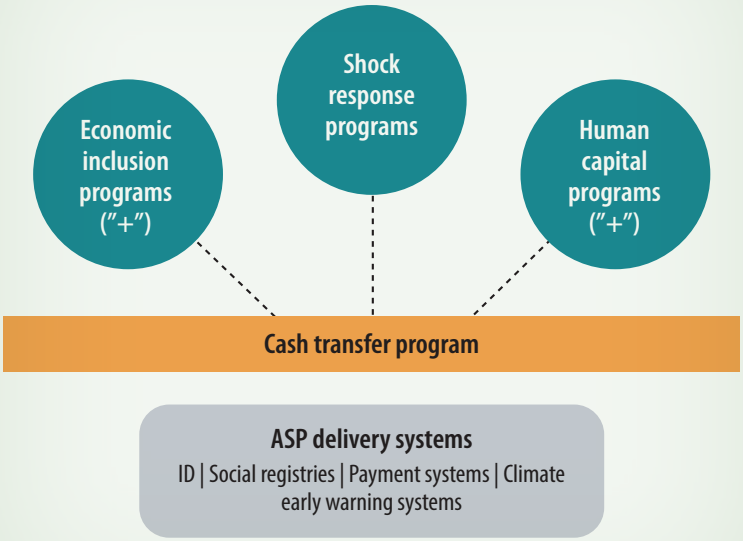
Source: World Bank 2020c.

The emergence of social safety nets as a platform for equity, opportunity, resilience, and jobs...

In view of Sub-Saharan Africa's multiple challenges, the objectives and design of social safety nets have started to diversify. Today, most cash transfers are delivered with "accompanying measures" (also called cash "plus") focusing on: (1) *early childhood development and human capital,* especially through behavioral change components; (2) *climate shock response* and mitigation in view of growing vulnerability in particular to climate shocks; or (3) *economic/productive inclusion* interventions focused on helping households build resilience to shocks and diversify their livelihoods (see figure 2.3). Such interventions typically include small productive grants, savings groups, coaching, and training, and often focus on empowering women and girls. They open a pathway to self-employment. In some contexts, public works programs provide a safety net through temporary employment, expand access to basic social infrastructure such as school and health centers, and advance greener projects such as watershed management, which can

13 World Bank (2022a).
14 World Bank (2022a).
15 World Bank (2020c).

FIGURE 2.3: Cash Transfers with Accompanying Measures ("Plus") as a Platform to Promote Inclusion, Opportunity, and Resilience



Source: World Bank.
Note: ASP = adaptive social protection.

help manage climate change through adaptation and mitigation.[16] Cash transfer programs rely on social protection delivery systems, with foundational identification systems, social registries, and payment systems, which also serve interventions beyond social protection, such as in agriculture, education, or health.

One of the key features of cash transfer programs is direct engagement with households—often the most vulnerable ones, but also the nonpoor in programs that rely on social registries as repositories of household welfare information. This allows social protection to deliver cash plus programs as well as other valuable services and messages. When cash is attached to co-responsibilities, these programs can create specific incentives for sound human capital investments, like keeping girls in school or uptake of key health and nutrition services. As such, social safety net programs provide a platform for other systematic behavioral nudges and catalyze the performance of other social sectors by stimulating beneficiaries' demand for services.

Social safety net programs have significant impacts in line with their equity, opportunity, resilience, and jobs objectives. Social safety nets are not handouts that create dependence and passivity. Instead, they are productive investments that carry returns for individuals, households, and the economy at large. Recent evidence of strong impacts underscores the case for investing in social safety net programs, strengthening their delivery systems, and taking programs to scale.[17]

- *Equity*. Cash transfer programs have been found to have positive impacts on household consumption and reduce poverty. Evidence shows that households use cash transfers for productive investments as opposed to wasteful temptation goods, with spillovers to local economies and demand for retail, services, and locally produced agricultural goods. Analysis of several national flagship programs shows that consumption increases by $0.74 for each U.S. dollar transferred, in line with the fact that poor households tend to have a very high propensity to consume, being budget constrained.[18]

16 Ethiopia's rural Productive Safety Net Program (PSNP) serves as an example of a safety net program with dual mitigation and adaptation impact. The rural PSNP focuses its public works program on community integrated and participatory watershed management in Dire Dawa, resulting in improved water table and soil table as well as diversified household livelihoods.

17 Beegle, Coudouel, and Monsalve (2018) present a meta-analysis of 57 impact evaluations of 25 programs in 13 countries in Sub-Saharan Africa.

18 Beegle, Coudouel, and Monsalve (2018).

- *Resilience*. Cash transfer programs help households build resilience to shocks, including climate shocks, by enabling them to protect consumption in the face of shocks and to protect and invest in productive assets (particularly livestock holdings) to diversify livelihoods and strengthen coping mechanisms.[19]
- *Opportunity*. Cash transfers enable households to make schooling-related investments and increase school enrollment and attendance. They also support women's empowerment (with women acting as the primary drivers of livelihood diversification in the household) and stimulate human capital–relevant parenting practices.
- *Livelihoods and jobs*. Cash transfers coupled with productive inclusion programs help households build sustainable livelihoods, including outside agriculture. As such, they represent a critical first step toward self-employment opportunities for the extreme poor, especially the youth.[20]

Impacts are reinforced when involving a "plus" approach. Associated services (plus) can be cost-effective because they build on the existing platform of cash transfers and the associated delivery systems.[21] For the national social safety net program in Niger, for example, the cash plus approach, which combines traditional cash transfers with productive inclusion, has been shown to significantly increase consumption, raise shock resilience, and help households build sustainable livelihoods (see box 2.1).[22] It has also been shown to improve women's labor participation, revenues, and various dimensions of psychosocial well-being, all while being highly cost-effective (Bance, Bermeo, and Kabemba 2021; Bossuroy et al. 2021).

BOX 2.1: Toward More Sustainable and Resilient Livelihoods and Income-Generating Activities: Evidence on Impacts of Productive Inclusion Programs in the Sahel

Countries in the Sahel have started to deliver integrated productive inclusion interventions as part of national safety net systems to support extreme poor households' economic activities and encourage diversification. Impact evaluation results from Niger show that the productive measures undertaken led to a large and sustained increase in consumption and food security. The evaluation tested three packages with common features involving coaching, savings facilitation, and micro entrepreneurship training as well as variations involving (1) a lump-sum capital grant ("capital"), (2) psychosocial interventions with life skills training and community sensitization on aspirations and social norms ("psychosocial"), and (3) a full package of all elements. These government-led interventions came as a "plus" on top of the regular cash transfers delivered by the national safety net system.

In Niger, significant impacts were observed in the short run and were then sustained 18 months post-intervention for the three productive inclusion packages. Impacts on yearly household consumption were estimated between 7 and 15 percent ($267 to $566), making the productive measures highly cost-effective: the packages with psychosocial components had cumulative welfare impacts that already exceeded their costs 18 months after the intervention (figure B2.1.1).

19 Premand and Stoeffler (2020) find that beneficiaries of a multiyear government cash transfer program in rural Niger can better mitigate the effects of droughts through savings, asset accumulation, and income smoothing.

20 Bossuroy et al. (2021).

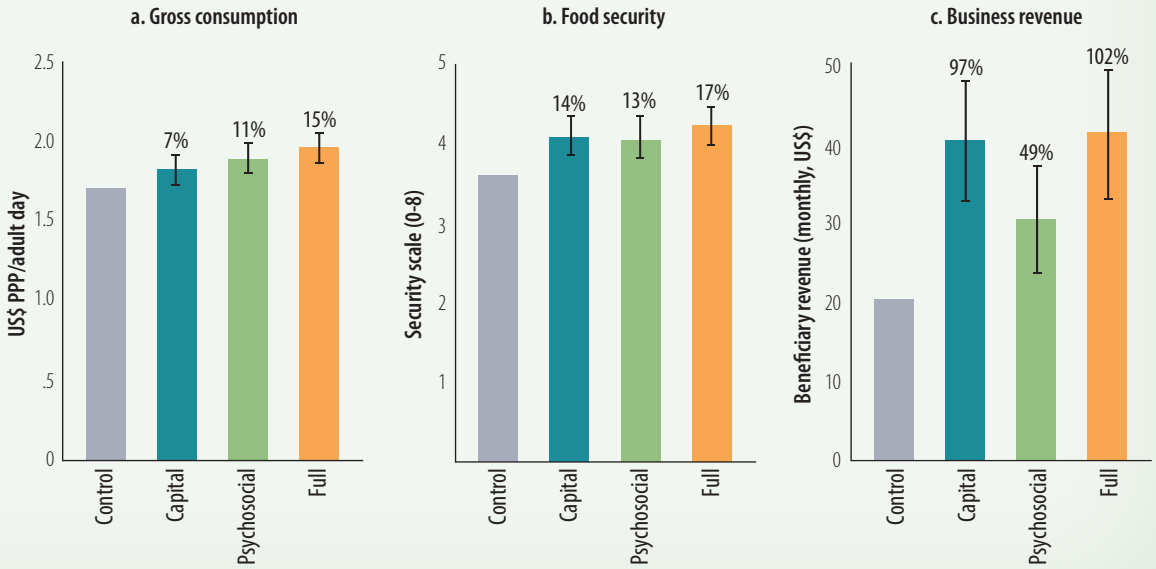
21 Premand and Stoeffler (2020); Bossuroy et al. (2021); Andrews et al. (2021). .

22 Premand and Stoeffler (2020); Bossuroy et al. (2021).

BOX 2.1
Continued

In particular, the psychosocial package had a lower cost per beneficiary and growing impacts on consumption over time, making it particularly cost-effective. Food security also substantially improved. The measures helped households boost investments and diversify off-farm income-generating activities, with large impacts on participation and earnings in off-farm businesses. Beneficiaries of the psychosocial and full packages had business revenues about twice as large as those of control households. The program also led to meaningful changes in psychological and social well-being. Beneficiaries experienced stronger social and financial support, higher trust, and stronger social cohesion. Women reported greater aspirations and increased control over earnings and productive activities.

FIGURE B2.1.1: Impacts of Productive Inclusion Measures in the Sahel 18 Months Post-Intervention



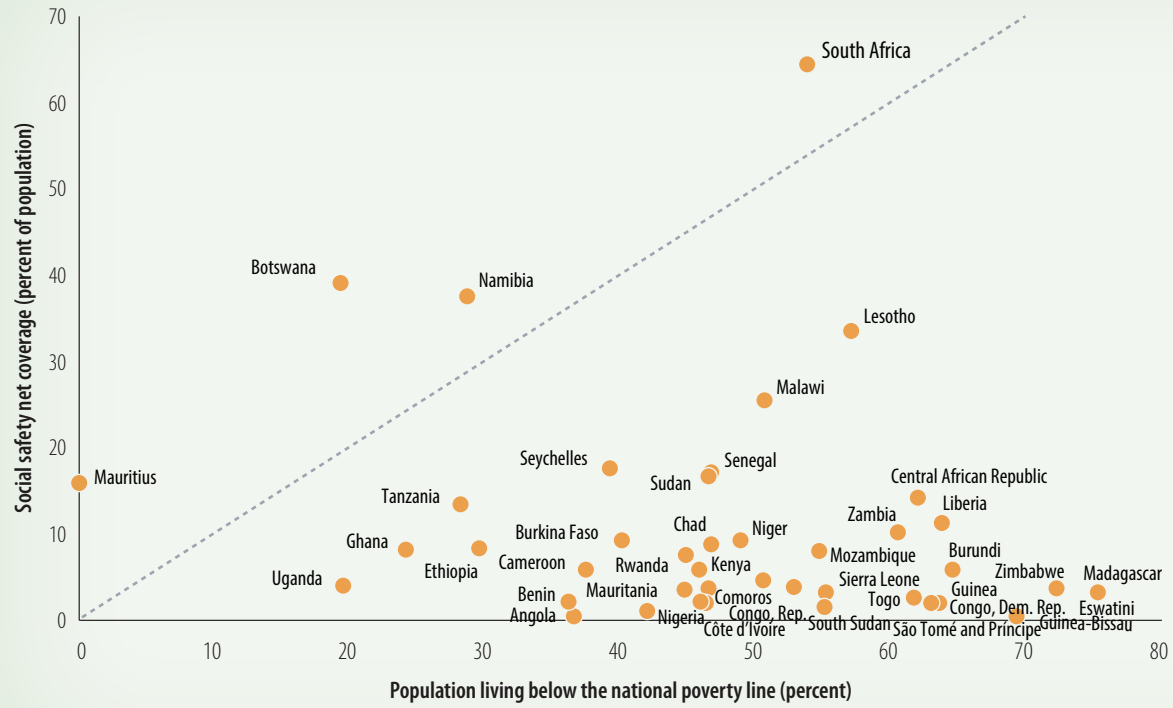
Source: Bossuroy et al. 2021.

...but at a small scale and with significant gaps

Despite the evidence of impact, sizable holes in social safety nets remain across the continent—and they have been laid bare by the pandemic response. Coverage is limited—both because targeted social safety net programs often remain small relative to needs, and because by design social protection systems lack the tools to offer protection to the entire population (figure 2.4). First, most social safety net programs, in their first iterations, have been focused on rural areas where chronic poverty is highest. This rural focus remains even in the notable cases of rapidly expanding programs with significant coverage in countries like Ethiopia, Ghana, Senegal, and Tanzania. With the initial pandemic shock concentrated in urban areas, the rural focus of social safety nets constrained the potential to utilize them for a swift response. Moreover, owing to fiscal and capacity constraints and their genesis from smaller, donor-financed or nongovernmental organization supported initiatives, most social safety net programs have been implemented on a smaller scale. Often, such programs are not part of a coherent "whole-of-government" approach, which translates into fragmented and siloed delivery systems.

FIGURE 2.4: Pre-Pandemic Coverage of Social Safety Nets was Not Proportional to Poverty

Despite progress in expanding social safety nets, there are still gaps in social protection.



Source: ASPIRE (Atlas of Social Protection Indicators of Resilience and Equity) database, World Bank, Washington, DC, http://datatopics.worldbank.org/aspire/, presented in Beegle, Coudouel, and Monsalve 2018.

Although there are several prominent exceptions, delivery systems such as social registries often remain relatively small in scale and digital payments are often limited to project beneficiaries. As the pandemic response would reveal, these small and nascent registries cannot provide the foundation for significant expansions in response to shocks. Meanwhile, few governments have taken significant ownership of the financing of social safety net programs, and these programs remain highly dependent on donor financing. There are a few exceptions (South Africa, Botswana, Namibia, Kenya, and Senegal), and some signs of increased government ownership in countries such as the Republic of Congo and Cameroon, but overall Sub-Saharan African countries remain highly dependent on external assistance to sustain their safety net systems.[23]

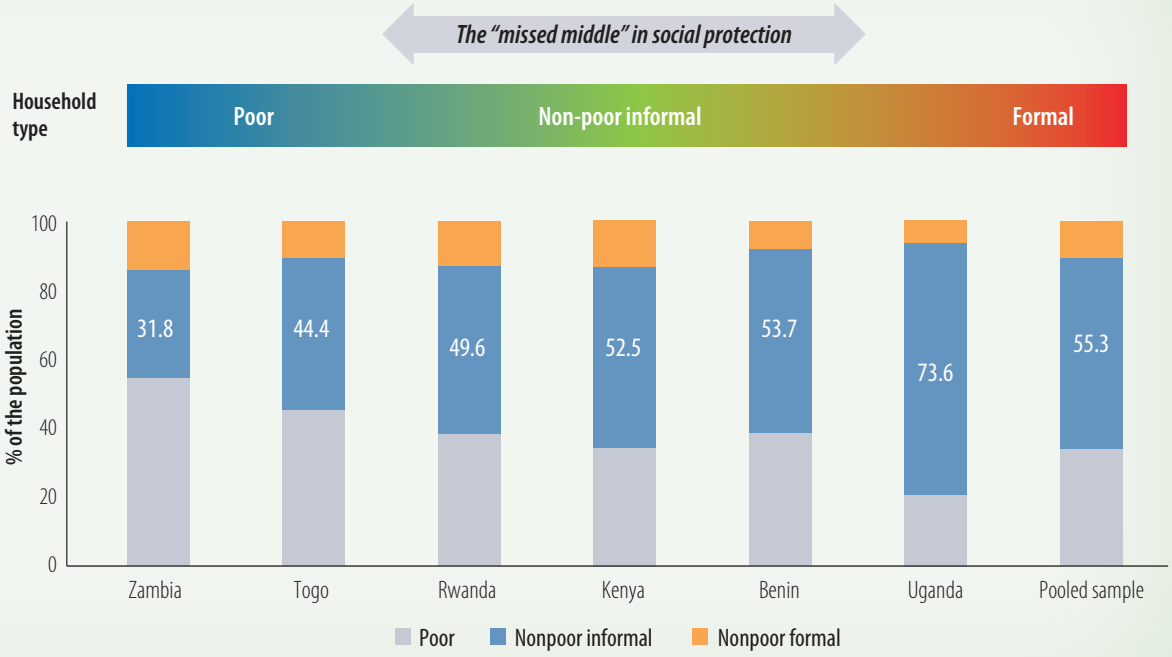
Beyond the small scale of noncontributory social safety net programs for the poor, social protection in Africa often lacks the tools to cover all parts of society systematically. African social protection systems remain relatively focused on social safety nets and, in general, social insurance (pensions) programs reach only a small part of the population (those in the formal sector, especially civil servants).[24] Yet, formal pensions typically constitute the largest share of public expenditures on social protection in African countries and potentially crowd out

23 See Beegle, Coudouel, and Monsalve (2018).
24 Guven (2019).

investments in areas that are essential for poverty reduction, such as safety nets, health, and education. Perhaps most importantly, while social safety nets cover some of the extreme poor at the bottom end of the distribution and formal sector workers at the top of the distribution are covered by limited social insurance programs, a large part of the workforce—the middle of the distribution employed in the informal sector, not poor and yet often vulnerable—does not qualify for existing social protection programs ("missed middle") (figure 2.5).

Scaling up social safety net programs in Africa is challenging.

FIGURE 2.5: Typology of Informal Households and the "Missed Middle" in Africa



Source: Guven, Jain, and Joubert 2021.

EMERGING INSIGHTS FROM THE DYNAMIC EXPANSION OF SOCIAL SAFETY NETS IN RESPONSE TO THE COVID-19 PANDEMIC SHOCK

The COVID-19 pandemic triggered a large economic shock across the continent, with short- and long-term impacts on households' income, food security, and poverty. In response to the pandemic, many governments introduced strict lockdowns and social distancing measures, which, alongside the broader economic downturn, caused declines in labor incomes, especially among informal sector workers in urban areas and the "missed middle," which were hit first. The pandemic also reinforced preexisting vulnerabilities related to climate and conflict challenges, which contributed to worsening food security in many places.

At the same time, the COVID-19 shock triggered an unprecedented expansion of social safety net programs across Africa, demonstrating their importance as well as revealing fresh lessons for the next phase of reform. Globally and in Africa, social protection was the policy response tool of choice: when governments needed to reach people quickly and effectively, they turned to social assistance first and foremost, and to social protection more broadly. Three-quarters of all the social protection measures introduced in response to the pandemic were social safety net programs, with the rest covering social insurance and labor market programs. Across the continent, 48 countries adopted social protection response measures in 2020, of which 39 chose horizontal expansions of cash transfer programs to cover additional beneficiaries (for example, Angola, Mauritania, Niger, and São Tomé and Príncipe), 11 countries chose vertical expansions with higher benefits for existing recipients (for example, Ethiopia and Tanzania), and six countries chose both vertical and horizontal expansions[25] (Sierra Leone, Nigeria, South Africa, Lesotho, Malawi, and Rwanda). Some countries, like the Democratic Republic of Congo, Mali, Rwanda, and Togo, introduced completely new, temporary emergency programs. Chad introduced a new emergency program for Cameroonian refugees. Sierra Leone introduced an emergency cash transfer whose delivery could build on existing systems and prior experience (box 2.2). Among the programs, 24 focused on urban or peri-urban populations and 13 on both urban and rural populations. Despite the expansions, the pandemic social protection response covered 10 percent of the population, which was lower in Africa relative to all other regions.[26] Box 2.3 presents some of the fiscal policy responses undertaken in support of firms and workers.

25 Vertical expansions of social safety net programs feature increased cash transfer amounts for existing beneficiaries, while horizontal expansions extend cash transfer coverage to additional beneficiaries.

26 Gentilini et al. (2022).

BOX 2.2: Sierra Leone's Emergency Cash Transfers in Response to COVID-19

In just the past six years, Sierra Leone has been hit by several devastating health, economic, and climatic shocks. The 2015 Ebola outbreak, which ultimately proved to be fatal for over one-third of the people it infected, claimed more than 3,900 lives—more than in any other country.[a] The heavy rains of 2017 that led to a mudslide in the capital city of Freetown left a scar that is still visible to this day. Throughout the past two decades, the country's reliance on commodity exports has caused economic growth to be highly volatile, as shown by the sharp decline in output and job losses following the drop in global iron ore prices in 2015/16.[b]

By the end of March 2020, the President of Sierra Leone declared a state of public emergency in response to yet another crisis, this time due to the global COVID-19 pandemic.[c] The events that unfolded in the subsequent months, however, demonstrated that Sierra Leone was better equipped to deal with this latest crisis. Only two months after the declaration of the emergency, the National Commission for Social Action (NaCSA), with support from the World Bank, started providing an Emergency Cash Transfer (ECT) payment in Freetown and the four regional headquarter towns of Bo, Kenema, Makeni, and Port Loko. The primary objective of the ECT was to protect vulnerable households and workers in the urban informal economy based on early analysis that suggested the pandemic's economic impacts would hit informal sector workers in urban areas first and hardest. By August 2020, the ECT had provided a one-time transfer of Le1,309,000 (approximately US$135)—equivalent to approximately two months of minimum wage earnings in Freetown—to more than 29,000 households with urban informal sector workers.

Two key features enabled the swift rollout of the ECT. First, NaCSA had previous knowledge and experience in responding to crises through cash transfers, which enabled the process of building robust delivery systems over the years and provided a foundation for a crisis response intervention like the ECT. In 2014, the Government of Sierra Leone launched its flagship cash transfer program—called the *Ep Fet Po*. The *Ep Fet Po* is financed by the International Development Association (IDA) through the Social Safety Net Project (SSNP) and provides unconditional cash transfers to extreme poor households. The Government of Sierra Leone had scaled up the cash transfers to new households during the 2015 Ebola outbreak and the flooding and mudslides of 2017.[d] This experience proved to be vital in the design of the targeting strategy for the ECT as it required covering beneficiaries not traditionally included in social safety net programs. Independent spot checks have found that the targeting strategy worked as intended, effectively identifying vulnerable urban informal sector workers and achieving the desired female-to-male ratio of 70:30 among the ECT beneficiaries. Second, with crises such as the mudslide and Ebola in recent memory, NaCSA took the unusual but prescient step of holding a small amount of IDA financing from the SSNP's Second Additional Financing in a "contingency fund." The US$4 million was earmarked for emergency cash transfers and ringfenced until an "eligible emergency" occurred. Access to these pre-positioned emergency funds when COVID-19 hit was a decisive factor in the ECT's timeliness, ahead of the slower mobilization of other resources. The timeliness of the first ECT led to the European Union providing additional funds to NaCSA to implement a second ECT in 2021 that benefitted an additional 36,000 households with informal sector workers in Freetown. Preliminary analysis suggests that these funds were mostly used to purchase food and helped self-employed households keep their businesses afloat.

a. Sandford et al. (2020).
b. Gonzalez and Gutierrez (2017).
c. https://statehouse.gov.sl/sierra-leones-president-julius-maada-bio-declares-a-state-of-public-emergency-says-there-is-no-lockdown/.
d. World Bank (2017).

The experience of the social protection response to COVID-19 in Africa illustrates the unfinished agenda in building stronger systems to move toward protection for all. Three related insights emerge: (1) the central importance of delivery systems, especially wide-coverage and dynamic social registries that harness good data to expand coverage and reach rapidly (or the potential coverage);[27] (2) the potential for ground-breaking innovations enabled by new technologies for the intake and registration of beneficiaries, assessment of needs and conditions, and provision of benefits; and (3) the importance of expanding and managing the fiscal space for social protection (figure 2.6).

BOX 2.3: COVID-19 Fiscal Policy Responses in Support of Workers and Firms in Africa

Along with the huge expansion of social assistance programs and measures in response to the global pandemic, governments throughout the world used fiscal and labor policies (tax breaks, special tax/labor provisions, temporary wage and non-wage subsidies, expanded social insurance programs, and so forth) to provide temporary support to firms in distress and workers at risk of layoffs. According to World Bank (2022a) analysis of policy responses in 55 low- and middle-income countries, 91 percent of these provided liquidity support to registered firms and 71 percent adjusted their labor regulations in response to the crisis. About 35 percent of the countries adopted wage subsidies, while 33 percent provided longer unemployment benefits, and 29 percent reduced or postponed income taxes.

Several countries relaxed tax provisions and business regulations to support firms and employees. In Burundi, the government reduced business license fees for small and medium-size enterprises (SMEs) by 50 percent, and the presumptive tax for 2020 was also lowered. The possibility of tax breaks such as carryforward losses was introduced, and delays in tax payments were considered on a case-by-case basis. The Government of Eswatini allowed taxpayers projecting losses to file loss provisional returns and no payment was required, and it extended tax returns filing deadlines by three months before penalties would apply. Payment arrangements for taxpayers facing cash flow problems were defined, and waivers of penalties and interest for older tax debts were introduced if the principal was cleared by the end of September 2020. About 0.13 percent of gross domestic product (GDP) in tax refunds was also set aside for SMEs that complied with tax obligations, retained employees, and continued to pay them during the COVID-19 period. In Rwanda, down payments on outstanding tax debts were suspended for amicable settlements, the enforcement of tax arrears collection was softened, and the deadline for filing and paying corporate income taxes was extended. Value-added tax (VAT) refunds to SMEs were fast-tracked, corporate and personal income tax payments were based on current year transactions, and personal income tax exemptions were introduced for private school teachers and tourism and hotel employees earning less than RWF 150,000/month. The Government of Togo introduced measures that allowed for lower tax payments. This included the suspension of all procedures for forced tax collections and ongoing tax prosecutions during the state of emergency, the rescheduling of submission deadlines for businesses that could not submit their tax declarations on time, and the reduction of the standard VAT rate of 18 percent to 10 percent for firms in the hospitality and catering sectors.

27 "Reach" is defined as the ability of social protection to provide support to (reach) households and communities, that is, potential coverage or the ability to expand horizontally in a timely manner, especially during shocks. Reach requires strong delivery systems like wide coverage social registries and robust digital payment systems.

BOX 2.3
Continued

A number of countries used subsidies to help firms and workers weather the storm. The Government of Eswatini, for instance, set up a fund of 0.07 percent of GDP to assist SMEs, and a 0.04 percent of GDP relief fund to aid dismissed workers. In Lesotho, a LSL170 million salary subsidy for textile industry workers was introduced, along with a LSL50 million grant scheme to medium and small enterprises, especially in the tourism sector (including a scheme that provided LSL20,000 matching grants to companies with fewer than 50 employees). In South Africa, the government instituted a new program called the Temporary Employer-Employee Relief Scheme, which used money from the unemployment insurance fund to pay employers who partially or completely shut down operations due to the pandemic to furlough, rather than dismiss, workers. By March 2021, nearly R59 billion had been dispensed to 5.4 million individual workers. Furthermore, funds were made available to assist SMEs under stress, mainly in the tourism and hospitality sectors, including a 1.2 billion rand Tourism Equity Fund. In Rwanda, the government launched the Economic Recovery Fund to support businesses through subsidized loans from commercial banks and credit guarantees. The program targeted SMEs and hard-hit sectors such as the hospitality industry.

The evaluation of the measures introduced above is not yet available, possibly due to their relative recentness. That said, and although some of these policy tools (e.g. subsidies) would not have been advisable during "normal times," it is possible that the combination of expanded use of social assistance programs with temporary tax breaks and subsidies may have prevented further job losses in many countries while preventing many firms from closing permanently or losing employees following a temporary shock.

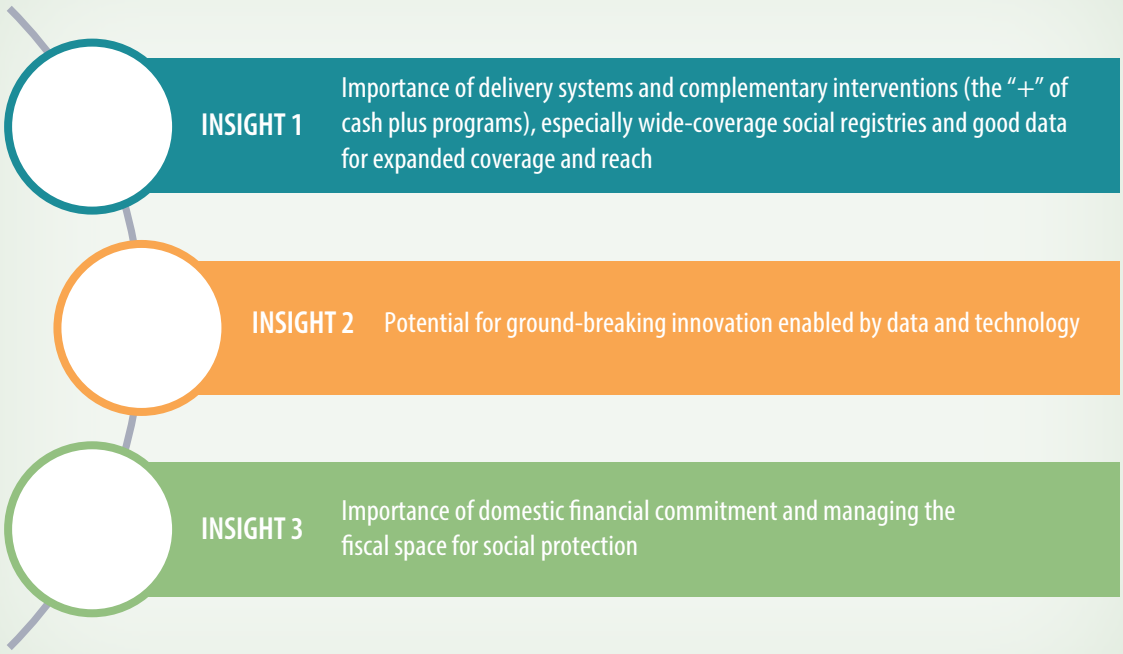
Sources: IMF Policy Responses to COVID-19, https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19; World Bank 2022b.

Insight 1: Importance of Robust Delivery Systems and Prior Programs

While the nature and extent of the pandemic shock response have varied across Africa, existing social safety net programs and their delivery systems often served as a platform on which to build. Many countries expanded existing cash transfer programs or introduced emergency programs that could build on earlier foundations. When complementary interventions (the "plus") to economic inclusion and livelihood development were in place, they, too, were often leveraged for extended crisis recovery support. Some countries with significant expansions of emergency cash transfers to the most impacted populations were able to leverage their existing social registries. For example, Cameroon, Ethiopia, Mauritania, and the Republic of Congo drew on medium to large social registries to reach a significant share of the population. Other countries with limited social registries generated new data on potential beneficiaries (for example, Togo and the Democratic Republic of Congo) or interlinked different information management systems with existing administrative data (for example, Burkina Faso and Chad) for their response. Where social safety net programs were focused on rural chronic poverty and dependent population subgroups, such as the elderly, the narrow focus became a limitation when governments struggled to expand cash transfer programs to the urban informal sector

workers who were most impacted by the initial COVID-19 shock due to income losses in the wake of lockdowns. Despite this diversity in the pandemic shock response, the experience points to the need to build robust systems—social registries with appropriate coverage, foundational identification systems, digital payment mechanisms, and early warning systems—to be prepared for responding to future shocks swiftly and at scale.

FIGURE 2.6: Three Emerging Insights from the Social Protection Pandemic Response in Africa



Source: World Bank.

Insight 2: Potential for Innovation Enabled by Data and Disruptive Technology

Faced with the challenge of quickly expanding the coverage of cash transfer programs to previously uncovered populations, African policy makers have experimented with novel ways to identify, assess, enroll, and transfer money to people quickly, even where prior systems were limited and social registries were small. Some countries, like the Democratic Republic of Congo (box 2.4), Nigeria, and Togo (box 2.5), selected a mix of geographic and household indicators to prioritize beneficiaries, sometimes relying on novel data sources such as satellite imagery and machine learning for geographical prioritization and mobile phone call detail records to proxy for poverty. Meanwhile, where social registries were lacking, policy makers and administrators resorted to administrative data (for example, school administrative data on students and their families) or on-demand intake and registration using mobile phone technology (for example, Zambia), or online platforms (South Africa). The need for (contactless) digital payments

triggered significant regulatory reforms in the financial and information technology (IT) ecosystem that promoted financial inclusion, for example, approval of a simplified customer due diligence framework in the Democratic Republic of Congo. Although evidence on the effectiveness of novel techniques is only beginning to emerge, it is undeniable that the pandemic has spurred innovation.

BOX 2.4: Targeting Urban Cash Transfers with Satellite Imagery and Phone Data: The Case of the Democratic Republic of Congo

Kinshasa is among the largest cities in Africa, with an estimated 15 million residents, two-thirds of whom were poor pre-pandemic (World Bank DataBank). As the COVID-19 pandemic was unfolding worldwide, the Government of the Democratic Republic of Congo quickly began designing a large-scale, emergency social safety net program that would provide support to Kinshasa's poor—especially informal workers—who bore the main burden of the pandemic's socioeconomic impacts. The program *Solidarité par Transferts* Économiques *contre la Pauvreté à Kinshasa* (STEP-KIN) was launched in March 2021 and within three months it registered and paid more than 100,000 beneficiaries, becoming the largest cash-based operation in Kinshasa.[a]

However, the design and materialization of STEP-KIN faced three significant challenges that called for innovative and tailored solutions: (1) the absence of poverty mapping, social registries, or administrative data to identify poor people; (2) no preexisting social protection programs that could be expanded; and (3) a constrained ecosystem for digital financial services with very weak financial inclusion. The STEP-KIN approach to solve these challenges consisted of (1) the use of satellite imagery and geospatial analysis to identify COVID-19 hotspots across the city; (2) innovative partnerships with telecom operators to obtain anonymized subscriber phone numbers mapped to these hotspots; (3) extra filtering of subscribers based on cell use patterns to minimize inclusion risks (for example, excluding subscribers with a data plan or large monthly spending); (4) mass registration through a cell phone communication protocol, Unstructured Supplementary Service Data, platform complemented by bulk Short Message Service/robocalls/field ambassadors to seek informed consent of beneficiaries and basic identification information; and (5) opening of mobile money accounts with a simplified regulatory framework.

The STEP-KIN innovation has two major strengths: it can identify people rapidly (speed), and it can reach hundreds of thousands of people (scale). This approach is promising for crisis response, especially for large-scale emergencies, such as COVID-19 or a natural disaster, or capacity-constrained/conflict-affected settings. However, it is less suitable for programs targeting the extreme poor (for instance, it excludes people without telephones). The use of technology may also increase the risk of exclusion of vulnerable groups, such women, the elderly, or illiterate individuals, and mitigation alternatives should be envisioned, for example with targeted communication and assistance.

a. Bance, Bermeo, and Kabemba (2021).

Insight 3: Importance of Managing Fiscal Space and Enhancing Government Ownership

Although the social protection response to COVID-19 relied heavily on external financing, governments in several countries stepped up their domestic commitments. Before the COVID-19 crisis, many African countries relied to a significant extent on external resources to finance their poverty-targeted social safety net programs.[28] While this funding structure persisted during the pandemic—with the majority of countries relying on external financing for COVID-19-related social safety net expansions—several countries boosted their commitments (for example, Nigeria and South Africa reallocated domestic spending, and Mauritania created a special fund with domestic seed financing[29]). The pandemic response thus highlighted both the need and potential for greater government ownership. Sustainable financing strategies should enable a mixed approach between external financing and better managed domestic fiscal space. This includes more established use of contingency financing instruments to pay for sudden surges in financing needs when safety nets are used to respond to shocks.

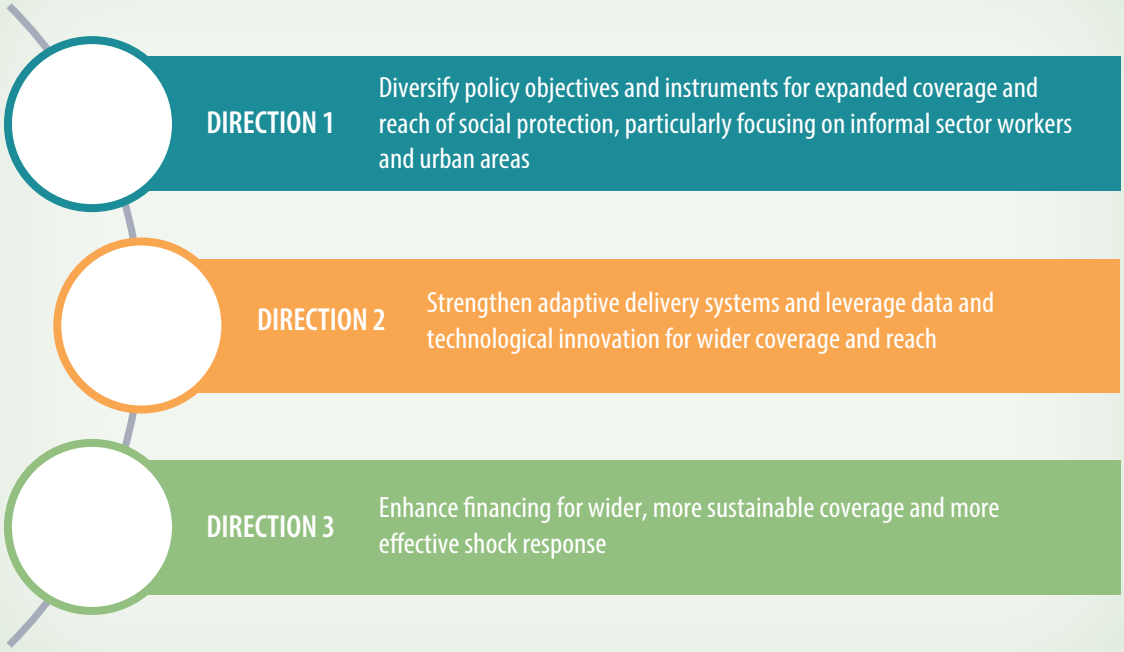
LOOKING AHEAD: EMERGING DIRECTIONS FOR STRENGTHENING SOCIAL PROTECTION IN AFRICA

The COVID-19 crisis is an inflection point in the development of social protection in Africa, providing lessons and directions for the road ahead. The crisis led to an expansion of social protection, raised its visibility in the policy debate, and allowed the experimentation of several innovations to scale up coverage quickly during the COVID-19-induced lockdowns. Moving forward, the challenge is to leverage this unique experience and consolidate progress toward more inclusive, effective, dynamic, transparent, and equitable social protection systems. The COVID-19 experience reinforces the urgency of building on the existing social protection platforms toward achieving greater resilience, more opportunities, and broader equity. An unfinished agenda has emerged around three questions (figure 2.7) of how to: (1) diversify objectives and instruments for expanded coverage and reach, (2) strengthen adaptive social protection delivery systems and leverage data and new technologies, and (3) enhance financing for social protection for greater domestic commitments and spending efficiency.

28 Beegle, Coudouel, and Monsalve (2018).

29 Almenfi et al. (2020).

FIGURE 2.7: Three Emerging Directions for Strengthening Social Protection in Africa



Direction 1: Diversifying Policy Objectives and Instruments to Expand Coverage and Reach

In view of the pressing challenges posed by rapidly increasing urbanization and informality and increasing vulnerability to shocks, social protection systems in Africa can diversify the objectives and instruments to enhance protection for all. Countries in Africa can build on their emerging noncontributory rural poverty-focused social safety net schemes to promote resilience to climate and other shocks, build human capital, promote more productive and shock resilient livelihoods, and advance women's empowerment. This means building contributory instruments to help nonpoor, but vulnerable, urban informal sector workers better manage risks and become more resilient to shocks.

Toward Greater Adaptation and Response to Shocks

Social protection systems in Sub-Saharan Africa need to become more adaptive for enhanced resilience and wider coverage in times of shock and crisis. Reach can be understood conceptually as the potential coverage in times of shock. It can come through noncontributory cash transfers or contributory savings instruments for informal workers. Reach depends on the robustness of social protection delivery systems (size and quality of the social registry, foundational and government-recognized ID, and payment systems), relevant instruments (cash transfers and savings schemes), and available financing. Building back better from the COVID-19 shock involves, first, reinforcing resilience-building measures through productive/economic inclusion programs targeted to the extreme poor, including by deliberately engaging women for their empowerment and for boosting their role as drivers of household resilience. Second,

it means expanding the reach of shock response through cash transfers, that is, the ability of social protection systems to flex and reach people impacted by shocks where and when they need protection.

The design and delivery of cash transfer plus programs can be more reflective of countries' enhanced vulnerability to climate change and pandemics and adapted to contexts of fragility and conflict. Adaptive social protection is a key instrument in the arsenal of pandemic preparedness. In the face of increasing fragility, cash transfer plus programs can be leveraged to assist forcibly displaced populations and help them adapt to contexts of heightened insecurity. The agenda of building adaptive national systems is also redefining the role of humanitarian actors and their relationship with development and national actors, with a greater emphasis on delivering humanitarian emergency response in such a way that it supports, as opposed to bypasses, the building of national adaptive social protection systems. Generally, the adaptive approach to social protection allows for a constructive alignment between humanitarian and disaster relief aid and national social protection.

Toward More Impactful Human Capital Programs

African social protection systems can also reinforce the effectiveness of social safety nets in promoting resilient human capital. A growing risk of shocks means a growing risk to human capital formation, as the COVID-19 pandemic, conflict, and climate shocks risk impacting maternal and child nutrition and decisions to keep children (especially girls) in school or not. Conversely, investments in human capital increase households' capacity to weather shocks and break the intergenerational poverty cycle. This raises the question of how to maximize the use of the existing social protection "platforms" for human capital, women and girls' empowerment, and other valuable investments. While there is evidence that human capital–focused services that accompany cash transfers can contribute to better parenting practices, evidence of the impacts on final outcomes, such as reducing malnutrition and stunting, are less strong. An important agenda remains that of strengthening the linkages of programs with education and health and other basic services.

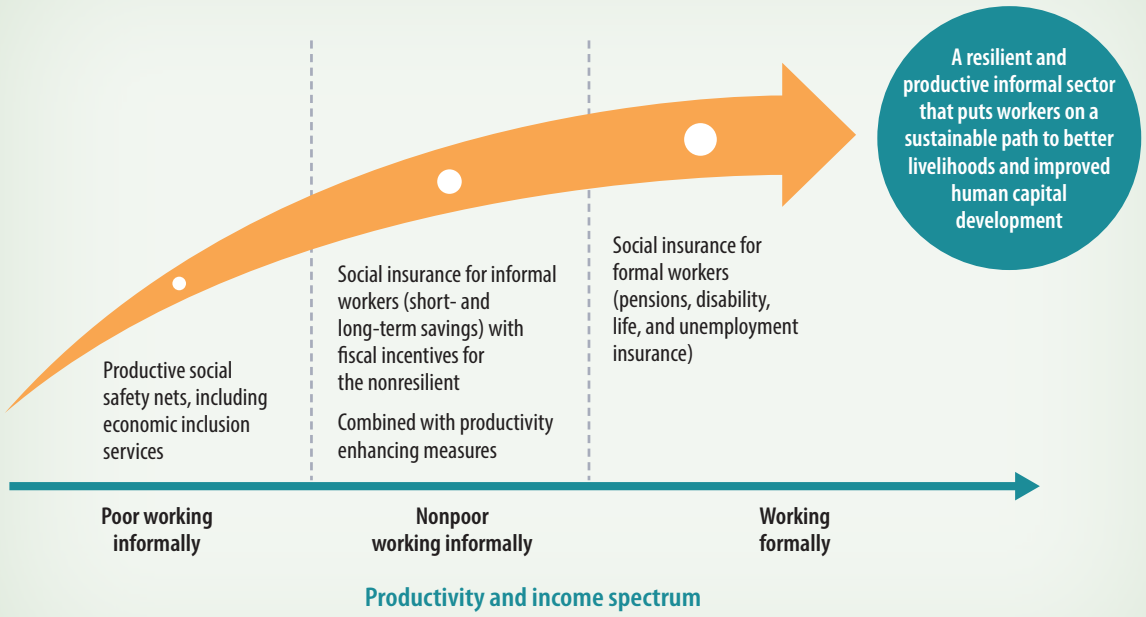
Several countries in Africa also need to overcome the fragmentation in the design and prioritization of subsidy programs across different sectors. For example, school bursaries or health insurance coverage, energy or water tariff subsidies, and/or agricultural subsidies are typically granted according to completely different criteria and to completely different beneficiaries relative to social assistance programs. Going forward, leveraging emerging social protection delivery systems (such as foundational ID and social registries) to identify and assess poor and vulnerable households across and beyond social protection could contribute toward reducing such fragmentation.

Toward a Greater Focus on Urban Areas and Supporting Labor Mobility

Enhancing protection of the population implies a wider policy objective—from the traditional tackling chronic poverty in mostly rural settings toward also addressing increased shock vulnerability and income smoothing in urban settings, especially informal sector workers, and advancing economic transformation. Coverage expansion requires a diversification of instruments, including by mixing traditional social assistance with social insurance programs,

reinforcing economic inclusion programs, and expanding innovative social insurance and savings schemes for informal sector workers (figure 2.8). Beyond the immediate COVID-19 crisis, a mix of cash and economic inclusion services like financial literacy, micro business development, life skills training, and coaching (all supported by a strong case management system) can support households and workers in the return to livelihood activities and jobs and thereby accelerate the wider economic recovery. Put differently, economic inclusion programs are a central element of the jobs and economic transformation agenda in Africa. Meanwhile, wider access to social protection for informal sector workers would come through innovative social insurance and savings programs and deliberate efforts in linking social assistance and social insurance. Such programs could be designed to allow for flexible contributions and short-term access to some portion of the savings in case of liquidity needs. They can involve fiscal incentives (for example, matching contributions) and can be bundled with other products and services (for example, health insurance, life insurance, and priority access to credit) to promote savings.[30] The scheme should be operated on a specialized digital platform linked to the ID system and interoperable with social registries and payment systems to provide a continuum of social protection.

FIGURE 2.8: Diversified Instruments Are Needed to Provide a Continuum of Coverage across the Income Spectrum



Source: Based on Guven and Karlen, December 2020.

Social insurance programs could be designed as regional programs to support migrant workers across borders in Africa. Migrants constitute a large population across the region. Social insurance programs could enhance labor mobility, with portability of benefits, including across borders, if they are built on regional foundational ID systems such as the ones supported by the West Africa Unique Identification for Regional Integration and Inclusion Program. Regionally

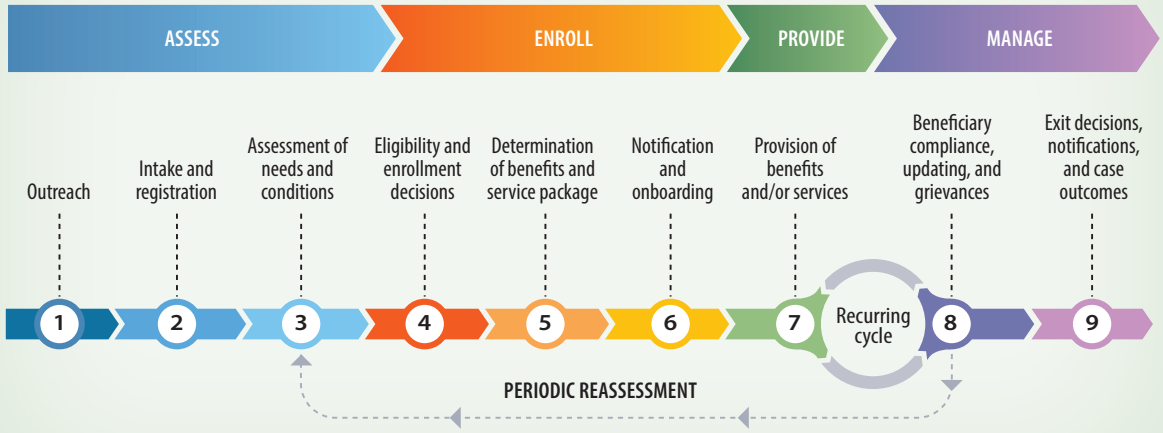
30 For example, Ghana's People's Pension Trust provides an insightful example of a tool that combines behavioral nudges with fintech (mobile phones/accounts) to develop a social insurance scheme for informal workers. It currently covers 50,000 people in Ghana and is expanding rapidly. https://www.cgap.org/sites/default/files/publications/2019_05_Case_Study_Fintech_and_Financial_Inclusion_0.pdf.

integrated and recognized IDs are particularly important for including migrant workers and those forcibly displaced in social insurance programs for the informal sector.

Direction 2: Strengthening Adaptive Social Protection Delivery Systems and Leveraging Data and Digital Technology

Initial evidence from the COVID-19 experience points to the critical importance of reinforcing social protection delivery systems to enable expanded coverage and shock response, building on rapidly evolving insights on how to leverage technological innovations for greater impact. The pandemic response has exposed the weaknesses of delivery systems when they are fragmented, static, and not inclusive. At the same time, the COVID-19 response across Africa has served as a real-world laboratory on wide-ranging innovations that can inform the next generation of investments in delivery systems. Social protection delivery systems need strengthening at every step along the end-to-end digital social protection delivery chain (figure 2.9). This entails efforts to: (1) build foundational identification systems such as those currently being rolled out across the Economic Community of West African States, (2) develop more "adaptive" social registries that can be built and updated dynamically using novel data sources and technologies and respond to changing shocks, (3) systematically roll out digital government-to-person payment systems leveraging large-scale purchases to drive down costs, and (4) reinforce linkage to climate early warning systems. It also creates new challenges and risks, such as personal data privacy, which must be tackled and mitigated. As such, developing social protection delivery systems that are fit for purpose for the future involves three complementary transitions.

FIGURE 2.9: Social Protection Delivery Chain



Source: Lindert et al. 2020.

From Fragmented Delivery Systems toward Whole-of-Government and Interoperable Platforms

Social protection institutions and programs across many countries in Africa are fragmented, calling for whole-of-government delivery systems that consolidate key functions along the delivery chain. Siloed delivery systems, such as single-program registries or ad hoc payment systems, have come from the emergence of pilot cash transfer programs that expand over time. Yet, when diversification of policy objectives translates into new and complementary programs with new delivery platforms, the result is increased complexity and fragmentation. To promote coordination instead, whole-of-government platforms create efficiency gains by consolidating and standardizing functions across multiple programs, such as uniquely identifying individuals through foundational IDs, conducting the intake and registration of households and assessing their needs and conditions through social registries using common questionnaires, or providing cash transfers through shared payment platforms to reduce costs. Interoperability by design is necessary to articulate the functions of such platforms and streamline their processes along the delivery chain. A shared unique identifier, data exchange protocols, and robust data protection safeguards are key enablers of interoperable delivery systems under a whole-of-government approach.

From Exclusive toward Inclusive Delivery Systems with Multiple Points of Entry

Poor and vulnerable households often face barriers when interacting with the social protection delivery system, but those can be addressed through a "first mile" approach. Not having a government-recognized form of identification, living in hard-to-reach areas with no connectivity, and lack of literacy are some of the barriers that marginalized groups often face when treated as "last mile" users of social protection delivery systems. Adopting human-centered design principles[31] implies putting people at the center of the system design process, empathizing with them to understand their needs, identifying pain points throughout their journeys when interacting with their governments, and making sure their needs can be met. Practical examples include building foundational ID systems that are truly universal instead of relying solely on nationality-based civil registration systems, which can be exclusionary to stateless populations. For social registries, it can mean having multiple intake modalities to accommodate households with and without connectivity, paired with an all doors open policy that is more conducive to on-demand self-registration and that seeks to update information whenever it becomes available. For payment systems, it can mean exploiting foundational ID systems and social registry data on eligible beneficiaries to fulfill know-your-customer and customer due diligence requirements[32] or to simplify them by taking a tiered approach that facilitates rapid account opening, such as in the Democratic Republic of Congo. Payment systems can introduce choice-driven features that give more agency to the users when selecting payment service providers with which to transact or whether to cash out the benefits provided by safety nets.[33]

31 Karippacheril (2018).
32 Jenik et al. (2020).
33 Baur-Yazbeck, Chen, and Roest (2019).

From Static toward Dynamic Delivery Systems That Are Updated Periodically

Social registries are most effective when they have high coverage and are updated frequently. However, updating social registries tends to be time-consuming and logistically costly. This is because they are not dynamic by design, while the socioeconomic conditions of the populations they are meant to represent are inherently dynamic. Most welfare indicators show that the conditions of households are a moving target. For instance, 29.7 percent of the population in Sub-Saharan Africa moved in and out of transient poverty over a period of six years.[34] This is exacerbated in shock-prone environments where household welfare can change abruptly. Thus, to make social registries more dynamic, digital service windows can be set up for remote intake and registration—as much as local connectivity conditions permit—such as the approach to Short Message Service (SMS)–based self-registration taken by the STEP-KIN program in Kinshasa in the Democratic Republic of Congo (box 2.4). Remote and on-demand intake modalities based on Unstructured Supplementary Service Data (USSD), SMS, or web-based are likely to be more cost-efficient than the in-person and administrator-driven intake modalities that have traditionally been the default for most social registries in the region. Social registries can also explore exploiting data sources that are generated more dynamically, such as call detail records CDRs[35] or administrative records (passive data), beyond the common self-reported questionnaires (active data). Togo embraced USSD for intake and registration and CDRs targeting the Novissi cash transfer program (see box 2.5), which shares many similarities with STEP-KIN in Kinshasa. Finally, social registries with monolithic data structures stemming from lengthy socioeconomic questionnaires can instead consider using modular data structures that act as "data Lego blocks." By defining the core data structures that should be populated for all households and complementary—yet harmonized—data structures that can be populated as needed depending on the requirements of each program, social registries can increase the efficiency of data management and thus facilitate updating.

BOX 2.5: Novissi's Leapfrogging Delivery Model for Shock-Responsive Social Assistance

On April 8, 2020, the Togolese government launched the Novissi program as a 100 percent digital cash transfer to respond to the COVID-19 pandemic. Novissi initially supported informal workers in urban areas whose incomes were affected by the containment measures and later expanded to vulnerable rural areas. Through several rounds, the program has so far registered around 1.6 million individuals and delivered $22.5 million in assistance to nearly 820,000 beneficiaries, 63 percent of them being women.

Novissi introduced multiple innovations along the social protection delivery chain by exploiting nontraditional data sources and machine learning, dynamically registering individuals, assessing their needs and conditions, and delivering benefits through mobile money. As in many other countries in the region, Togo did not have interoperable, inclusive, and dynamic delivery systems in place before the pandemic. There was no universally available unique ID, nor a whole-of-government and up-to-date social registry to locate vulnerable population groups. However, a key enabling factor was that nearly 85 percent of individuals in Togo were members of households with access to a mobile phone. In this relative delivery systems vacuum, Novissi leapfrogged previous delivery models and reached

34 Dang and Dabalen (2017).

35 CDRs are metadata on phone use, including date, time, and duration of calls; type of call (national, international); call cost; and volume of mobile data usage and mobile money transactions, among others.

BOX 2.5
Continued

scale in record time to serve those most in need during the crisis.

The Togolese government used different methods to deploy Novissi in urban and rural settings. The expansion to rural areas, supported by key stakeholders, is summarized as follows:

1. Intake and registration. Individuals self-register by dialing *855# from a mobile phone and inputting basic information through an Unstructured Supplementary Service Data (USSD) form.
2. Assessment. A two-step approach is used to assess needs and conditions:
    i. Geospatial prioritization: high-resolution satellite imagery layered with other data sources such as connectivity, population density, and consumption surveys are processed by machine learning algorithms to generate micro-estimates of relative wealth for 2.4–square kilometer grid cells (Relative Wealth Index). These estimates are used to rank the regions of the country (Admin-3 level) and select the poorest 200 "cantons."
    ii. Individual prioritization: a supervised machine learning model estimated the daily consumption of 5.8 million mobile phone subscribers by leveraging call detail records and ground-truth phone surveys as training data. An acceptance shortlist was created that included 750,000 mobile phone subscribers with an estimated daily consumption of $1.25 or less.
3. Eligibility determination, enrollment, and notification. Adults who live in the poorest cantons and have an estimated daily consumption of $1.25 or less are enrolled and notified through a USSD message upon completing self-registration.
4. Payment. Beneficiaries receive their first payment ($13.8 for women, $11.8 for men) immediately after notification through existing mobile money accounts or newly created ones based on the information received during self-registration.
5. Management. A toll-free number set up to handle complaints, as well as external audits and real-time monitoring facilitates the management of the program and its beneficiaries.

The Novissi delivery model brings significant efficiency gains in the delivery of social assistance programs, yet these need to be balanced against new concerns. Because of its heavy dependence on digital technologies, this approach can potentially exacerbate exclusion risks for households without access to a mobile phone and connectivity. Earlier investments in digital infrastructure and literacy were not necessarily distributed uniformly or progressively. Data privacy is another concern that is potentially heightened since mobile subscribers do not necessarily intend for their phone usage to be a proxy of their socioeconomic status. New opt-in and opt-out mechanisms should be considered as these innovations mature and inform other initiatives.

Sources: Aiken et al. (2021); World Bank (forthcoming c).

Growing Importance of Data and Digital Technology as Fundamental Inputs to Social Protection Delivery Systems

Data are becoming more ubiquitous, yet there are trade-offs to consider. The response to the COVID-19 pandemic has served as a catalyst to explore nontraditional data sources and novel methodologies to increase the coverage of social protection programs in response to shocks. Examples include layering satellite imagery with connectivity data and face-to-face surveys,

such as the recently generated Relative Wealth Index.[36] Likewise, the use of machine learning algorithms to estimate consumption based on CDR data can provide a rapid assessment of needs and conditions to deploy emergency cash transfers, such as Novissi in Togo.[37]

However, when determining which data to exploit and how, policy makers and development practitioners should carefully contemplate multiple trade-offs and constraints. Collecting rich socioeconomic data through harmonized questionnaires can potentially lead to more accurate welfare assessments with lower inclusion and exclusion errors. Yet, on the one hand, actively producing such data is costly, slow, and hard to update—particularly when done through door-to-door sweeps—and thus not best suited to respond to a rapid-onset shock such as a flood or a pandemic. On the other hand, passively generated data, such as CDRs, may bring important cost-efficiency gains and can be updated much more dynamically but may lead to less accurate or potentially exclusionary welfare assessments for those without access to a mobile phone. Finally, beyond richness and cost-efficiency, data protection is another critical factor to consider. Safely exchanging, storing, and processing large quantities of data containing personally identifiable information requires putting into place effective and proportionate data protection safeguards to prevent and deter inappropriate uses such as unauthorized disclosures, commercialization, or illegitimate surveillance, among others. This will not only be critical to protect individuals' privacy but also toward strengthening citizens' trust in expanding social protection systems, thereby fostering the development of the social registry.

Leapfrogging with technology is possible, but local constraints and new concerns need to be factored into policy choices. Leapfrogging can be understood as the implementation of a new technology in an area in which the previous version of that technology has not been fully deployed yet. As such, the rapid adoption of mobile communications and mobile money are two relevant examples of leapfrogging technologies on the African continent that can be leveraged to increase the reach of social protection delivery systems. However, to reap the benefits of these two digital megatrends, previous investments in mobile network infrastructure, mobile phone penetration, payment ecosystems, and literacy are paramount to enable digitally ready social protection programs. Yet, digital readiness is not uniformly distributed among or within countries, with stark differences between densely populated urban and sparse rural settings. For instance, 38.1 percent of individuals in West Africa Economic and Monetary Union countries living in urban areas are connected to mobile broadband, relative to only 7.1 percent in rural areas (figure 2.10).[38] Thus, having a clear understanding of the relevant barriers to mobile internet adoption, such as low household consumption levels or high prices of mobile services, is necessary to incorporate local constraints into the design choices of adaptive social protection delivery systems. Not considering these constraints can exacerbate the digital divide and create new sources of exclusion errors that are particularly regressive and hence counterproductive to the social protection objectives. The provision of mobile phones or SIM cards to poor and vulnerable groups as part of the rollout of safety nets can improve the digital readiness of these populations and may be explored further.

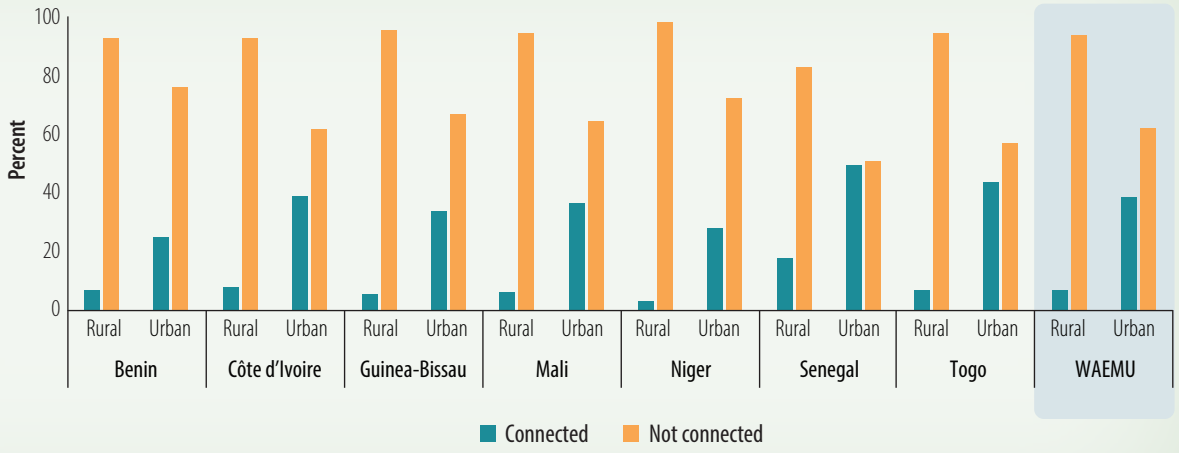
36 https://data.humdata.org/dataset/relative-wealth-index.

37 Aiken et al. (2021).

38 Rodriguez-Castelan et al. (2021).

While digital readiness is improving, uneven access, especially between urban and rural areas, remains an issue.

FIGURE 2.10: Share of Connected and Nonconnected Individuals, by Urban and Rural Location



Source: Rodriguez-Castelan et al. 2021.
Note: WAEMU = West African Economic and Monetary Union.

A hybrid approach can combine the strengths of new and old methods to build the next generation of social protection delivery systems in Africa and the developing world. A combination of methods is most likely to increase the reach of adaptive social protection programs by designing delivery systems that are better integrated, more inclusive, and more dynamic. For instance, articulating the development and rollout of foundational ID and social registry platforms shows great promise, which is currently being explored in Togo. This would imply conducting a joint registration campaign that simultaneously provides a unique identifier to all individuals in the territory through the foundational ID, while also capturing minimal and self-reported household socioeconomic attributes to populate the core data structures of the social registry needed to establish a baseline welfare assessment. Periodically updating the baseline welfare assessment would be done through multiple channels, including remote (when viable) and in-person (when not) on-demand intake modalities. Furthermore, nontraditional and passively generated data, such as CDRs or other available transactional data, could potentially be used to complement the self-reported socioeconomic attributes and obtain more robust and dynamic welfare estimates. Combining true and tested approaches with novel ones requires designing forward-thinking delivery systems that are grounded in today's constraints while keeping track of the potential of new technologies in a responsible manner. As such, investing in social protection delivery systems pays off as they provide a platform that can be harnessed by multiple interventions across sectors.

Direction 3: Enhancing Financing for Wider Coverage and Greater Shock Responsiveness

Despite tight fiscal space in many parts of Sub-Saharan Africa, there is scope for enhanced investment in stronger social protection systems. Ballooning debt (historic and pandemic-induced) has increased fiscal pressures across the region (IMF 2021). Between 2014 and 2019, debt as a share of gross domestic product (GDP) increased by 20 percentage points in Sub-Saharan Africa, but in 2020 alone, it increased by 7.5 percentage points to 63.1 percent. Coupled

with the fact that many African governments borrow at relatively high rates and relatively short maturity, this is an important consideration as debt service costs reduce fiscal space. At the same time, due to this, there is a greater need to prioritize fiscal spending in areas that can have a multiplicative impact on the economy.

Not only is there strong evidence on the positive impacts and cost-effectiveness of social protection for poverty reduction, job creation, resilience building, and female empowerment, but also the recent pandemic experience has demonstrated the critical role social protection schemes play in responding to covariate shocks, such as those resulting from epidemics, natural disasters, or conflict. Increasing domestic financing for regular social protection programs to ensure sustainable impacts will require changes in tax policies to increase tax revenues and achieve a broader tax base through enhanced taxpayer identification technology and better tax administration. With the current limited coverage of social safety net programs and enhanced needs for linking these investments to human capital development, there is significant room for raising budgetary allocations to social protection programs through both prioritization and, where needed, reallocations from within the social protection sector budget (for example, formal contributory pensions currently subsidized by the fiscus) and from outside it (for example, reforms in general subsidies). Finally, effective financing for adaptive programs that respond to shocks will require prearranged financing in advance to mobilize support to the households that are most in need and using a variety of disaster risk financing instruments, such as disaster response funds and sovereign insurance, integrated by a coordinated risk-layering approach.

The Case for Sustainably Increasing Financing for Social Protection Programs

Despite the needs and strong evidence across many Sub-Saharan African countries, spending on pro-poor social safety net programs remains by far the lowest in the world. Public spending on social safety nets in Sub-Saharan Africa is, on average, equivalent to 1.2 percent of GDP, compared to 1.6 percent globally. This is particularly little considering the need—social safety nets in Sub-Saharan Africa cover on average only 10 percent of the population, although on average 41 percent of the population lives in poverty (Beegle, Coudouel, and Monsalve 2018).

Low social safety net spending appears often not to be the result of low income levels and limited fiscal space but of spending priorities. With some notable exceptions,[39] spending on social safety nets is below the 2 percent level across the income spectrum. In contrast, spending on regressive fuel and energy subsidies and humanitarian assistance tends to be higher. This is particularly stark for the Central and East Africa subregions, where spending on energy subsidies and humanitarian assistance is about 10 times and three times as high, respectively, as spending on national social safety net programs. Southern Africa spends substantially more on safety nets than on energy subsidies and humanitarian assistance (Beegle, Coudouel, and Monsalve 2018).

Moreover, most of the spending on social safety nets is externally financed, suggesting a lack of financial sustainability. On average, 55 percent of public safety net spending in Sub-Saharan Africa is financed by donors, with the other 45 percent financed by governments. The share

39 For example, South Sudan, Lesotho, Botswana, Liberia, the Central African Republic, and Burundi have relatively higher levels of social safety net spending despite their low incomes. However, only a fraction of their spending goes toward poverty-targeted programs.

of external financing is higher in low-income and fragile countries, such as the Central African Republic, the Democratic Republic of Congo, Malawi, Niger, and Somalia, where donors pay for close to 100 percent of public safety net expenses (Beegle, Coudouel, and Monsalve 2018). Governments can enhance financial sustainability by developing institutional capacities and systems and gradually assuming responsibility for financing social safety net programs.

Options for Expanding Domestic Financing for Social Protection

Against this background, there is scope for revisiting options for sustainably increasing domestic contributions to social protection. Governments have several complementary policy options: involving revenue and expenditure policies to increase fiscal space, enhancing the effectiveness of social spending, and building greater fiscal capabilities to manage increased vulnerability to shocks.

Taxation is the natural starting point to increase the available fiscal space. Murshed et al. (2017) find a positive relationship between fiscal space (public spending as a share of GDP) and social protection spending in developing countries. When designing tax policies to finance social protection, it is important to consider the nature of the existing tax regime and characteristics of the labor market. Often, in low-income countries such as those in Sub-Saharan Africa, jobs are predominantly in the informal sector. Therefore, increasing taxation would imply increases in indirect taxes, such as consumption tax, and to a lesser extent direct taxes, such as income tax. This has important equity implications as indirect taxes tend to be regressive in nature, unless adjusted (for example, by having lower value-added tax rates for food and other necessary consumption items). Nevertheless, there may also be ways to broaden the tax base without deepening inequalities. For example, the use of digital technologies could play a role in boosting the productivity of informal firms (through access to more customers, reduction of financing costs, and social media) such that over time the benefits of formalization outweigh the cost (Nguimkeu and Okou 2020). Such a formalization process could, in turn, increase the direct tax base of a country.

One way could be to expand cash transfers financed through these increased taxes, in a way that the net increase in taxes is still positive and the negative impacts on the extreme poor are neutralized. For example, Warwick et al. (2022) simulate a broadening of the existing value-added tax in six low- and middle-income countries, including Ethiopia, Ghana, Senegal, and Zambia, and find that when combined with cash transfers, it can lead to an increase in tax revenue and reduction in poverty and inequality. Another important consideration is that in the context of the pandemic slowing the economy, it would be critical to undertake tax reforms without worsening the overall and distributional economic fallout. Here again, an expanded cash transfer could potentially build support for such reforms.

Budget reallocations are another source of funding for social protection (IMF 2020, 2021). Spending on regressive and expensive fuel and energy subsidies tends to be higher than that on pro-poor safety net programs, particularly in oil-producing economies. Reorienting energy subsidies toward social safety net programs could help to ease subsidy reforms. For example, in Morocco, the Tayssir program, a cash transfer for poor families with children aged 6-15 years on the condition that they attend school at least 80 percent of the school year, expanded

from 80,000 beneficiary families in 2009 to 466,000 families in 2014, alongside a reduction in the energy subsidy bill from 6.5 percent of GDP in 2012 to 1.5 percent of GDP in 2015. Similarly, Pakistan's Benazir Income Support Program was launched and scaled up by replacing expenditures on universal energy subsidies with targeted support to the poor and vulnerable families. Agricultural subsidies could also be used to scale up social protection programs. Historically, these were intended for poverty alleviation but have recently been found to be highly regressive. For example, in Zambia, de la Fuente et al. (2017) find that the Farm Input Subsidy Program largely benefits middle-income farmers rather than the poor.

Efficiency gains in public expenditures, including social protection, could also be reallocated to pro-poor programming. Spending on pensions relative to their coverage is extremely high in Sub-Saharan Africa and tends to cover nonpoor individuals employed in the formal sector, including civil servants. Some of this high expenditure is due to nonoptimal pension benefit parameters, such as high commutation (lump sum pension benefits that can be availed at retirement), which increases the fiscal burden and dampens the financial performance of the pension system. Pension reforms could address these inefficiencies in the sector and free up resources for much-needed safety net programs. In Zambia, a recent Public Expenditure Review found that adopting an actuarially fair commutation factor by one of its key public pension funds, the Public Service Pension Fund, would reduce the fiscal cost by 0.3 percent of GDP, which is equivalent to the average budgetary allocation for social safety nets between 2014 and 2021 (World Bank 2021b). The case for improving public expenditures to finance pro-poor programming is relevant even more broadly. Strengthening public investment management systems and enhancing the transparency of fiscal accounts are critical. Technology could be leveraged, wherever capacity exists, in doing so.

These efficiency gains should be put in the perspective of a whole-of-government approach to alleviating poverty and promoting economic development, with social protection and jobs programs playing a critical role in enabling those households that are typically hardest to reach. Social protection programs can effectively smooth consumption, improve resilience, and generate productive value beyond basic consumption, including in the local economy. (Beegle, Coudouel, and Monsalve (2018) show that each US$1 of transfer generated 8 to 84 percent more income in the local economy.) Given the multitude of constraints faced by the extreme poor and vulnerable, however, doing so sustainably will require linking to broader government initiatives in agriculture, banking, the financial sector, and others. Building on existing delivery systems established through social protection programs can reduce costs substantially and enable scale (Andrews et al. 2021). Investments in delivery system and social safety net programs are therefore a critical first step in alleviating poverty sustainably, with jobs and economic inclusion programs providing the necessary "big push" through a multidimensional approach.

Further efficiency gains can often be achieved by optimizing social protection delivery systems via the use of technology and exploiting economies of scale. For example, program management information systems can often be redesigned to integrate more functions in a single system, for example, by unifying beneficiary identification and enrollment, information management, payments, and complaints handling (see previous section). In Mexico, for example, the integration of e-payments led to 97 percent of 2.6 million pensioners being paid through a centralized electronic system that saved an equivalent of about US$900 million annually in

administrative costs (Beegle, Coudouel, and Monsalve 2018). Efficiency gains in delivery systems need not always be in the form of costs but instead may be in the form of time or improved accountability and transparency.

While external donor financing can be problematic due to issues with long-term sustainability and potential conflicting institutional priorities, it can be used as a short-term stopgap source of financing. Donors are on average the source of slightly more than half of the safety net financing in Sub-Saharan Africa. Challenges include, for example, the long-term sustainability of such support, conflicting institutional priorities, donor fragmentation, and the use of different fiduciary systems. Nevertheless, governments could still use these resources to finance social protection, especially in the early years of a program when a powerful coalition of support is yet to be established. Government leadership and priorities can be managed through the policy-making process and innovative resource management mechanisms, such as pooling of resources across donors into a social protection fund for emergency and shock response. For example, in Ethiopia, the Productive Safety Net Program coordinates donor financing and technical assistance through a donor coordination team. Senegal, too, serves as an example of how the national budget has taken over from external sources to finance the social safety net (box 2.6).

BOX 2.6: Growing Domestic Safety Net Commitments: The Case of Senegal

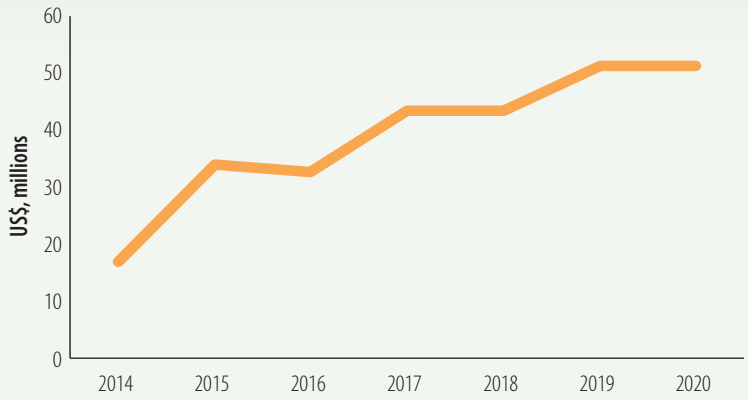
Senegal's national cash transfer program (Programme National de Bourses de Sécurité Familiale, PNBSF) was initiated in 2013 and currently covers 300,000 beneficiary households nationwide. It provides quarterly cash transfers of CFAF 25,000 (US$41 equivalent) to poor households for five years, alongside trainings on health, education, and civil registration. Transfers are delivered in cash by La Poste through its far-reaching network of post offices.

The PNBSF is a flagship initiative of the President of Senegal. Since 2012, it has been embraced as a key pillar of fighting poverty in national development strategies. Government spending on the program has increased significantly since its inception, rising from US$17 million in 2014 to more than US$50 million in 2019 and 2020. From being supported by International Development Association credit in the early years, the program is today entirely government-financed. In 2019, the government established a dedicated budget line of about US$45 million per year to cover the cost of cash transfers (data from the General Delegation for Social Protection and National Solidarity, *Délégation Générale à la Protection Sociale et à la Solidarité Nationale, DGPSN)*.

Growing government ownership can also be seen in program implementation. For example, on-the-ground facilitation of cash transfers and accompanying measures have traditionally been provided by local nongovernmental organizations (NGOs), but the ministry in charge of social

protection is piloting a new approach in which NGOs are being replaced by the ministry's decentralized services. Furthermore, the government is committed to growing the coverage of the national social registry. It covered some 550,000 households in 2020 (figure B2.6.1), and it aims to increase this number to 1 million households, or about half of the Senegalese population, in 2022 (DGPSN).

FIGURE B2.6.1: Government Contributions to the PNBSF (US$)



Source: World Bank staff.

Note: PNBSF = Programme National de Bourses de Sécurité Familiale, Senegal's national cash transfer program.

Growing government ownership of social safety net programs.

LEVERAGING DISASTER RISK FINANCING TO FUND ADAPTIVE SOCIAL SAFETY NETS

Financing for adaptive, shock-responsive social safety nets requires a different approach than for regular social protection programs. Regular social protection programs, such as continuous cash transfer programs, social insurance systems, or labor measures, are longer-term programs in which recipients receive benefits regardless of external systemic risks. The needed expenses are predictable at the beginning of each financial year and can thus be financed via regular budget appropriations. The costs of adaptive social protection interventions that aim to protect households from large covariate shocks are less predictable. As the specific funding needs depend on the occurrence of a shock, they cannot be predicted at the beginning of any financial year (table 2.1).

TABLE 2.1: Financing Requirements for Regular and Adaptive Social Protection Programs

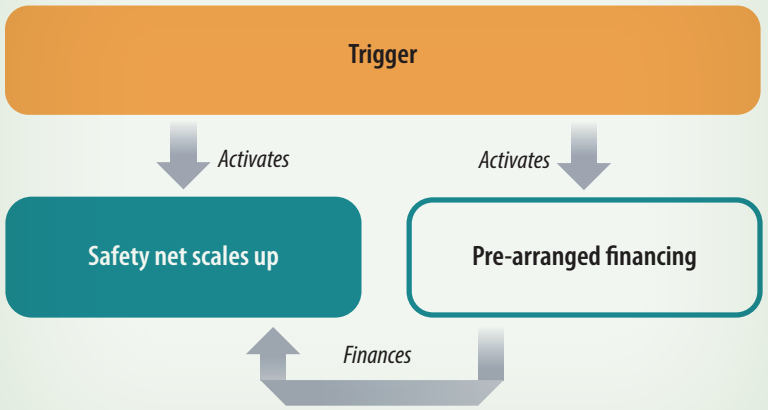
	Regular social protection programs (for example, social safety net programs)	Adaptive social protection
When is it known that resources are needed?	Typically, predictable at the beginning of the fiscal year.	Only upon the occurrence of a shock (or immediately before). Historical data can give a sense of the likelihood and frequency of a shock but cannot predict the exact timing.
When is it known how many resources are needed?	Typically, predictable at the beginning of the year as caseloads are planned in advance / depend on variables such as chronic poverty.	Only upon the occurrence of a shock—needed resources depend on the intensity of shocks. However, historical analysis of shocks, household vulnerability, and exposure can provide upfront estimates.
What is the planning horizon?	Medium to long term.	Short term, usually within the span of a few months.

Source: World Bank.

Most countries in Sub-Saharan Africa mobilize funding ad hoc to respond to shocks, relying on budget reallocations or donor support only after the shock has occurred. Recent global analysis by the Centre for Disaster Protection shows that only 2 to 2.3 percent of shock response funding tends to be prearranged (Crossley et al. 2021; Yang et al. 2020). There are major drawbacks associated with this approach. For one, funding is often slow to arrive as it first needs to be mobilized—for example, in many Sub-Saharan African countries, drought response funds tend to arrive more than six months after the occurrence of a drought shock (Clarke and Hill 2013). Furthermore, it is uncertain whether the amount that is ultimately provided will suffice to cover the response needs—more than 50 percent of humanitarian appeals in Sub-Saharan Africa were left unfunded in 2021 (United Nations Office for the Coordination of Humanitarian Affairs, Financial Tracking Service). Finally, ad hoc funding tends to be relatively expensive, as reallocated resources may be missing in the areas from which they are redirected, and delayed response funds can allow crises such as droughts to escalate into full-blown emergencies.

For shock response measures such as adaptive social safety nets, it is better not to rely on ad hoc measures but to arrange response measures as much as possible in advance, including financing. In the framework of Clarke and Dercon (2016), this includes deciding the following in advance: (1) when the adaptive social protection (ASP) response will be launched (the "trigger")—for example, when an objective threshold is met (a minimum percentage of population in food insecurity or a satellite data threshold indicating the occurrence of a flood) or when an expert committee decides based on predefined criteria; (2) what the ASP response modalities will be—for example, the provision of emergency cash transfers of a certain size to a predefined number of beneficiaries in a particular target area; and (3) how much funding is needed and arranging it to be available on standby. Another way to think about this is that a trigger activates both the standby funding and the response—when the trigger threshold is met, the funding becomes available, and the response is launched (figure 2.11).

FIGURE 2.11: Disaster Risk Financing Framework for Adaptive Social Safety Nets



Source: Adapted from Lung 2020.

Malawi recently adopted this approach. In 2020, the government started developing a mechanism to scale up its Social Cash Transfer Program in response to droughts. Financing for this will rely on a sovereign insurance product that the Government of Malawi is currently

procuring (using funds from the Global Risk Financing Facility), alongside contingent project financing. The mechanism stipulates that when satellite-recorded precipitation levels drop below a certain threshold (the trigger) during the agricultural season, funding is released from the financing mechanism. This funding is then used to provide rapid cash assistance to drought-affected households (World Bank 2019b).

There are various disaster risk financing instruments that can be used to prearrange funds and make them available for shock response when needed. These include, for example, national disaster funds, contingent credit contracts, and sovereign insurance, including the regional African Risk Capacity Group. These instruments differ in many respects, including their data needs, relative cost, and sophistication. However, they all facilitate the smoothing of expenditure over time and ensure that sufficient response funding is available when needed. For example, a government might decide to put aside a fixed amount in its national disaster fund every year or pay an annual fixed insurance premium—although the annual contributions may be relatively small, both instruments will provide a potentially much larger amount of needed response finance upon the occurrence of a shock.

While many low-income economies in Africa have the potential to use disaster risk financing instruments, donor financing will continue to be an important element of the overall financing strategy for adaptive social safety nets. In fiscally constrained environments, governments may be unable to shoulder the full cost in the short to medium term, even if they are aided by disaster risk financing instruments. Donor financing can serve as a stopgap. For example, various donors are supporting the African Risk Capacity, a sovereign drought insurance mechanism that was specifically set up to finance the response efforts of African governments, including through safety nets (Clarke and Hill 2013). Another example pertains to donor-internal contingency funding to help governments scale up their safety nets in case of a shock (for the case of Uganda, see, for example, World Bank 2015). International financial institutions also have special financing windows available, such as the World Bank's Crisis Response Window or the International Monetary Fund's Catastrophe Containment and Relief Trust, to support countries with limited fiscal space during times of shock. Furthermore, ASP financing systems can be set up with the capacity to absorb ad hoc external donor support. In this way, they can also help to improve the speed and efficiency of humanitarian aid spending. For example, the Government of Niger scaled up its safety net in response to drought in 2021/22. The United Nations Children's Fund decided to fund a supplementary response, also using the safety net delivery infrastructure, and thus generating speed and efficiency benefits and, in turn, reinforcing the national adaptive social protection system.

Over the past decade, governments in Africa have started to adopt disaster risk financing instruments to pay for their disaster-related costs. Countries exploring them specifically to finance adaptive social protection include, for example, Kenya (World Bank 2019a), Malawi (World Bank 2019b), Mauritania (World Bank 2020), Niger (World Bank 2018b), Sierra Leone (Rajput and Xu 2020), and Uganda (Maher and Poulter 2018). To derive maximum financial benefits, countries often will not look at a single instrument but at a mix of different ones.

For example, insurance tends to be cost-effective only for extreme events, while contingency funds are more cost-effective for more frequent, lower intensity, and thus less costly shocks. Combining different instruments and using different ones for different types of shocks—known as "risk layering"—can derive significant cost savings. Which instruments will be most appropriate for a given adaptive social safety net and country differs from case to case, depending on varying risk profiles, associated costs, and previously existing response funding arrangements. The most appropriate mix of instruments can be adopted in the form of a disaster risk financing strategy (box 2.7).

BOX 2.7: Layering Risk Financing Instruments for Adaptive Social Protection: The Case of Kenya

The Hunger Safety Net Program (HSNP) provides regular cash transfers of around US$27 per month to more than 100,000 extremely poor households in Northern Kenya. The HSNP also includes a scalability mechanism that provides temporary emergency cash transfers to affected households following weather-related disasters.[a] Since 2014, it has been triggered more than 20 times and disbursed more than US$26 million to more than 275,000 households.

The HSNP scale-ups are triggered using an early warning indicator—the vegetation condition index, which reflects drought conditions on the ground. When the pre-agreed trigger threshold is met, poor households in drought-affected areas receive temporary transfers, up to a maximum of 75 percent of the population in affected areas.[b]

HSNP scale-ups are currently financed through the government`s budget and also supported by the World Bank and the United Kingdom through various operations. In 2020, the government adopted the HSNP financing plan, which is embedded in the country's National Disaster Risk Financing Strategy approved by the government in May 2018.[c] This sets out a financing approach to meet the cost of transfers in 98 percent of drought years via a risk-layering approach: for more frequent, smaller (and thus less costly) droughts, scale-up funding would come from an emergency transfer fund, replenished by annual budget allocations. For the more exceptional and expensive severe droughts, the Government of Kenya is considering the option of funding to come from a sovereign insurance policy. This combined approach aims to protect the government budget against high HSNP payouts and to reduce the volatility of government contributions. The sovereign insurance policy has not yet been purchased, and the government has so far covered the financing needs through budget allocations.[d]

a. World Bank (2018a).
b. Calcutt, Maher, and Fitzgibbon (2021).
c. World Bank (forthcoming a).
d. World Bank (forthcoming b).

SEIZING THE PANDEMIC MOMENT: ADVANCING SOCIAL PROTECTION IN AFRICA

The COVID-19 pandemic has accelerated the dynamism in Africa's emerging social protection systems, underscoring their critical importance for equity, resilience, opportunity, and jobs. First, past investments in laying the foundations for targeted cash transfer programs and their delivery systems have paid off for many countries, as they successfully leveraged these programs to protect people from the impacts of the pandemic shock to the economy. The scale and robustness of cash transfer programs and delivery systems often determined the pace and scale of the pandemic response. Likewise, complementary programs ("plus") focused on productive inclusion play an important role as the focus of the pandemic response is evolving from the immediate shock response toward support for the recovery and relaunch of livelihoods and jobs among the poor. Second, the lessons from the pandemic response point toward a dynamic development agenda for Africa's social protection systems. Chief among them is the need to diversify the objectives and instruments for expanded coverage and reach, to strengthen adaptive social protection delivery systems and leverage new technologies, and to enhance financing for social protection for greater domestic commitments and spending efficiency.

Technological advances enable a much bolder agenda of building more robust systems that can have impact at scale. The COVID-19 pandemic may well turn out to be a turning point in the way social protection is delivered, with a rapid transition toward deployment of digital tools and novel data in the pursuit of offering social protection for all. Several countries in Africa leapfrogged in the design and delivery of their COVID-19 emergency cash transfer programs through adoption of digital tools for intake, registration, and payment and nontraditional data to select beneficiaries. Such tools will be critical for the capacity of social protection systems to expand in response to more frequent and consequential shocks, especially caused by climate change. Digital payments are core for getting cash to beneficiaries on time, while dynamic registries with up-to-date data on poor and vulnerable households as well as unique identification of individuals will enhance the targeting, and impacts, of programs. At the same time, a greater embrace of digital innovation in social protection design and delivery needs to go hand in hand with strengthening data protection, data governance, and cybersecurity.

This is the moment for African governments to embrace recent innovations and modernize their social protection systems. Progress on reform will be enabled and accelerated by enhancing political support for social protection—which ultimately may lead to more financing for the sector being available—and efforts to clarify and strengthen institutions. While external technical and financing support will remain important, building more robust systems requires greater ownership and domestic financial commitments to social protection. Investing in people pays off.

Appendix: Country Classifications

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	Democratic Republic of Congo	Burkina Faso	Ghana	Senegal
Republic of Congo	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: West and Central Africa Country Classification

Resource-rich countries		Non-resource-rich countries	
Oil	**Metals & minerals**		
Chad	Guinea	Benin	Gambia, The
Equatorial Guinea	Liberia	Burkina Faso	Ghana
Gabon	Mauritania	Cabo Verde	Guinea-Bissau
Nigeria	Niger	Cameroon	Mali
Republic of Congo	Sierra Leone	Central African Republic	Senegal
		Côte d'Ivoire	Togo

Note: Since July 2020, for operational purposes, the World Bank Africa Region has been split into two subregions—West and Central Africa and East and Southern Africa. The analysis in this report reflects this setup.

TABLE A.3: East and Southern Africa Country Classification

Resource-rich countries		Non-resource-rich countries	
Oil	**Metals & minerals**		
Angola	Botswana	Burundi	Mozambique
South Sudan	Democratic Republic of Congo	Comoros	Rwanda
	Namibia	Eritrea	São Tomé and Príncipe
	South Africa	Eswatini	Seychelles
	Zambia	Ethiopia	Somalia
		Kenya	Sudan
		Lesotho	Tanzania
		Madagascar	Uganda
		Malawi	Zimbabwe
		Mauritius	

Note: Since July 2020, for operational purposes, the World Bank Africa Region has been split into two subregions—West and Central Africa and East and Southern Africa. The analysis in this report reflects this setup.

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