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Post-corona Africa: downward spiral or resilient recovery?

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Abstract

The Covid-19 pandemic is taking a heavy toll on people's lives and wiping out years of progress in development. This paper examines the impact of the coronavirus on Sub-Saharan Africa. It discusses how the deeply rooted structural weaknesses – high informality, a large youth population with few gainful jobs, and heavy reliance on resource sectors – intertwine with high inequalities and challenging debt dynamics. Illustrating how these weaknesses amplify the negative impact of Covid-19, the paper emphasises how this crisis not only risks leading Africa's economies to a sharp decrease in income growth but also threatens to push the continent into a downward spiral of low growth, high inequalities and high debt vulnerabilities, making a recovery extremely difficult. Governments in Africa need to swiftly implement measures to address long-existing vulnerabilities and improve the quality of public spending, targeting resources to the most needed areas post-corona; the international community needs to provide more support and help fill the financing gaps. Highlighting the cost of inaction, the paper calls for urgent and timely domestic and international interventions to seize the opportunities to save lives and prioritise sustainable financing for crucial investment in relief, restructuring and recovery, improving productivity and generating more and better jobs, and building a greener, more resilient and inclusive economy.

Keywords

Africa, pandemic crisis, inequality, debt vulnerability, structural characteristics

JEL Codes

N17, H12, D63, H63, L16

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1. Introduction

The Covid-19 pandemic is taking a heavy toll on people's lives. Despite a comparatively low number of cases in the initial months of the pandemic, Sub-Saharan Africa (hereafter referred to as Africa) is set to have longer-lasting post-corona crisis impacts. With a projected 2% decline in gross domestic product (GDP) in 2020, the continent has entered the first recession since the past quarter century (World Bank, 2021a).With millions of people pushed into extreme poverty in Africa, not only has five years of progress in poverty reduction been wiped out by the pandemic,[1] but also its pre-crisis multifaceted vulnerabilities imply a significantly slower recovery, without more urgent, more coordinated and more determined intervention.

This paper examines the impact of Covid-19 in Africa, with an emphasis on the need for timely action to prevent the continent from slipping into a sustained, low-development equilibrium with high inequality and high debt vulnerability. It discusses, amid the pandemic, how some of the continent's unique features – high informality with low productivity and a narrow tax base, a large youthful population with few gainful jobs, and resource-based economies with weak management of resource wealth – could push the economy into downward spirals. In the absence of decisive domestic and international intervention, there is a risk that the high levels of inequality will accelerate post-corona and trap the continent in a worrisome dynamics of high debt vulnerability, high informality, low investment and low growth. The paper sheds light on the additional effort needed for relief and resilient recovery, building on the welcome initial crisis response. As the cost of inaction and the risks of downward spiral become ever higher as time passes, it calls for urgent interventions to save lives and seize the opportunity to prioritise financing for crucial investment to upgrade the economic structure, boosting productivity and creating more and better jobs, and to support resilient recovery in the long run.

The rest of the paper is structured as follows: the next section presents some unique features of development in Africa and discusses how the pandemic has deepened its vulnerabilities. Section 3 examines the great inequalities in income and opportunities and analyses how they may worsen amid the crisis and in the long run. Section 4 studies Africa's high debt vulnerabilities and shows how the economies might slip into a downward spiral when the structural weakness and high inequalities intertwine with the difficult debt dynamics in a weak and uncertain global environment. Section 5 discusses the welcome initial response, presents the resources needed and calls for timely and urgent action by governments in Africa, with the support of the international community, to finance the crucial investment for relief, restructuring and recovery.

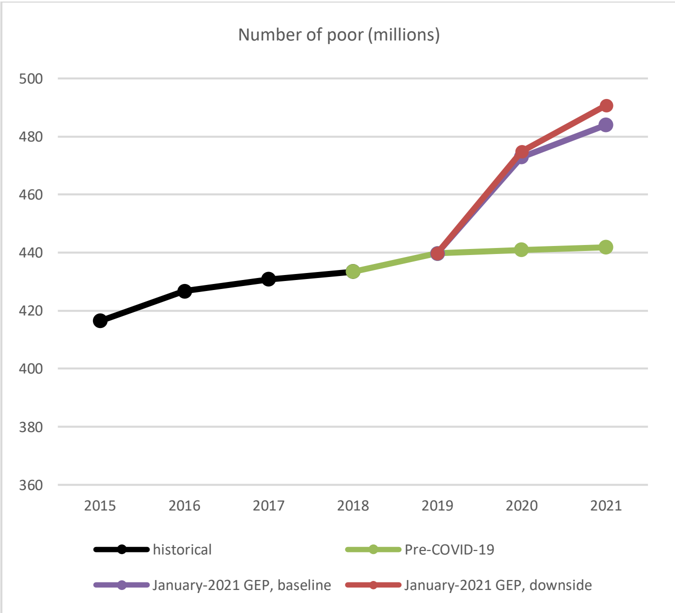
2 Unique features of development in Africa

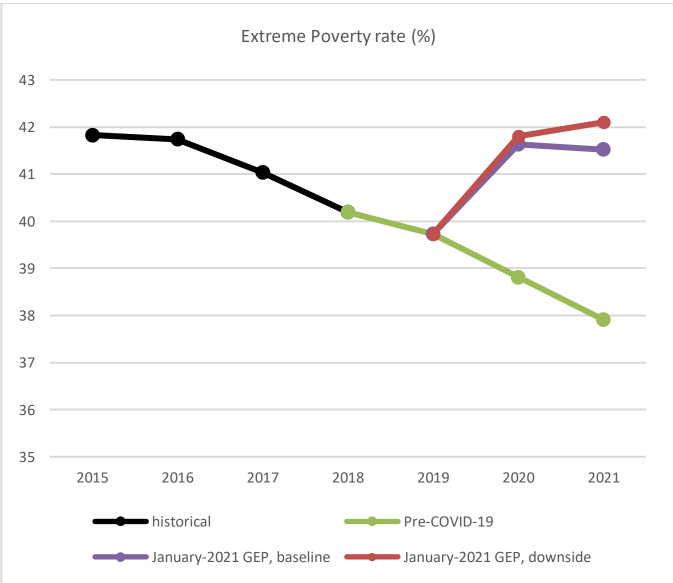
The Covid-19 pandemic hit African economies at a time when they were experiencing a faltering recovery from the worst economic crisis of the past two decades (World Bank,

[1] 'Africa overview' (worldbank.org).

2019a). Before the pandemic, while the number of poor continued to decline globally, it was consistently increasing in Africa, from 416 million in 2015 to 440 million in 2019 (Figure 1). The poverty rate is projected to increase from the already alarmingly high level of 40% in 2019 to 42% in 2021 and the number of poor people in the continent is expected to reach 484 million.

Figure 1: Number of poor in the world and in Sub-Saharan Africa (2015–21)





Source: Nowcast of extreme poverty, 2015–21 | Flourish.

The weak governance in the region hinders the successful implementation of policies and reforms to address the structural issues. Despite progress in past years, many countries in Africa have low Country Policy and Institutional Assessment scores (World Bank, 2020a). The efficient use of public resources across the region has remained impeded by the poor rule of law, accountability and transparency, and the quality of public administration (World Bank, 2019b). The incentives to create opportunities for the disadvantaged to effectively participate in productive activities and the implementation of pro-poor economic programmes to address the structural weakness remain limited.

The mixed growth and poverty performance have, in large measure, accounted for high informality, a large youth population with few productive jobs, and a heavy reliance on resource-based sectors with poor management of resource wealth. While stronger commodity prices have buoyed some economies, low productivity and high levels of informality held back most. These structural weaknesses, particularly low productivity, high un(der)employment, high inequality and limited fiscal space, worsened as the pandemic hit, with no sign of improvement even when some of the economies started to rebound. The economy of the continent is at the tipping point of entering a self-reinforcing vicious cycle, with countries facing unique challenges.

2.1 High informality with low productivity and limited tax base

Economies are largely informal in Africa. Among all emerging market and developing economies, Sub-Saharan Africa has the highest informal output-to-GDP ratio and the highest employment inequality, largely as a result of low human capital and large agricultural sectors (World Bank, 2021b). In some African countries, the informal output-to-GDP ratio reaches more than half of official GDP. Some of the largest business sectors in the continent, such as the retail and construction sector, are dominated by informal firms (Benjamin et al, 2014). About 86% of total employment in Africa is informal; in West Africa it is up to 91% (OECD, 2020a). About 80% of female workers in the non-agricultural sector are informally employed (UN Women, 2016). Indeed, women, youth and other disadvantaged groups are even less likely to be in formal employment but likely to be stuck in precarious jobs with low and unstable income.

A large informal sector is unproductive and renders it difficult for governments to finance sustainable development from broad-based taxation. High levels of informality often mean weaker development outcomes (World Bank, 2021b). Informal firms are often found to be less productive than formal ones, not only as a result of the ways they operate and the economic activities they are in but also because of their participation and positions in supply chains. La Porta and Shleifer (2014), drawing from a sample of developing countries, showed that the value-added of informal firms is only 15% compared to the value-added of formal firms. Kundt (2017) showed that taxing the informal sector may often come at the expense of significant administrative costs and difficulties in monitoring. This limited fiscal revenue severely constrained the capacity of governments to provide public services, invest in development projects and, during the pandemic, implement a forceful response. This in turn limited the improvement of the business environment, slowed down the process of formalisation and lowered the growth potential.

Informal workers are particularly vulnerable to income loss from the pandemic because of the nature of their jobs and the lack of social protection. Most of the region's informal workers are concentrated in some of the hardest-hit sectors, such as wholesale and retail, food and hospitality, tourism and transport (IMF, 2020a). Given their poor working and living conditions, most informal workers, including traders, retailers and manual workers, are unlikely to be able to work from home. With the lockdowns, survival for many informal workers may be threatened not only by Covid-19 but also by an inability to work.

The absence of safety nets worsened the consequences of the pandemic for large segments of the population, particularly the very poor. According to an estimate by the International Labour Organization (ILO, 2017), over 80% of Africans are without social protection. Further, international remittances to the continent, often a vital form of social insurance, have also declined. As a result of the Covid-19 crisis, remittance flows to the region were expected to decline by 23.1%, to US$37 billion, in 2020, while a recovery of 4% was expected in 2021.[2] Lacking the basic protection that formal jobs usually provide, informal workers typically have no income replacement when they stop working. With meagre income and low coping capacity, informal workers are at risk of falling deeper into poverty during the outbreak and recovery phases and of being left further behind.

2.2 Large youth population with few productive jobs

Africa has a large youth population – half a billion residents will be under 25 by 2050.[3] According to a Brookings Institution study, around 12–15 million jobs need to be created each year to keep pace with youth entering the job market (Coulibaly et al, 2020). However, only about three million formal jobs are created annually in the continent. As a result, youth un- and underemployment are persistently high. Young Africans constitute the majority of the poor. On average, nearly three-quarters of young Africans live in extreme poverty.[4]

Its limited human capital improvement and slow demographic transition have long been the major constraints to growth and productivity in Africa. The large resource needs for health care, including maternal and child health care services, and education often remain unmet. Africa's human capital index (HCI) is the lowest across all regions. The continent scored a lowly 0.40 in 2020, which means that GDP per worker is only 40% as high if it reaches the benchmark of complete education and full health (World Bank, 2020c). This is compared to 0.69 in Europe and Central Asia, 0.59 in East Asia and the

[2] The Migration and Development Brief and the latest migration and remittances data are available at www.knomad.org. Interact with migration experts at http://blogs.worldbank.org/peoplemove/.
[3] Africa Overview (worldbank.org). https://www.worldbank.org/en/region/afr/overview
[4] Income Inequality in Africa (afdb.org). https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Revised-Income%20inequality%20in%20Africa_LTS-rev.pdf

Pacific, 0.57 in the Middle East and North Africa, 0.56 in Latin America and 0.48 in South Asia. Out of the 30 countries with the lowest HCI scores in 2020, 28 are in Sub-Saharan Africa; the only two that are not in the continent are Republic of Yemen (the 14th lowest) and Afghanistan (the 27th lowest).[5] Even the countries that have made impressive progress in improving human capital still have extremely low HCI scores. For example, Rwanda, one of the two countries in Sub-Saharan Africa that has achieved all the health Millennium Development Goals, has the 16th lowest HCI score (0.38) in the world and human capital remains one of the key structural bottlenecks to achieving the country's inclusive growth and poverty reduction agenda (World Bank & Government of Rwanda, 2020). The numbers of youth that are not in employment, education or training are stunningly high in many countries: nearly 70% in Niger, 50% in The Gambia, roughly 45% in Zambia and Zimbabwe, and around 30–40% in many others.[6]

The pandemic is having a significant long-lasting impact on young people. Globally, during the pandemic, school closures are estimated to have resulted in a loss of $10 trillion in earnings over time for this generation of students if no remedial action is taken when they start returning to school.[7] In Africa, school closures affected nearly 253 million students.[8] Compared with children in countries with better internet connectivity, most children in Africa suffered more from not being able to learn remotely. The resultant loss of learning and lifelong income scarring has made the challenge for the younger generation even more daunting and risks further productivity constraints in the long run.

While the health impact on older people might be more severe, young people are not unaffected. They too will suffer the challenges of limited capacity to test, protect, treat and cure Covid-19 patients and of the negative spill-over crowding out the scanty resources for other critical health care, including maternal and early childhood care and care for high-burden diseases like AIDS, tuberculosis and malaria (OECD, 2020a).

2.3 Resource-based economy with weak management of resource wealth

Africa has many resource-based economies. Exports remain highly concentrated in resource-intensive products, such as petroleum, minerals, metals and primary goods. For Nigeria and Angola, the largest oil producers in Africa, oil represents more than 90% of export revenues and more than 70% of the national budget (OECD, 2020a).In Zambia, copper mining is a major contributor to GDP but employs less than 2% of the labour force (Seery et al, 2019). The volatile and unpredictable nature of natural

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5 Human Capital Index (HCI) (scale 0–1). Data at worldbank.org.
6 World Bank DDP. See International Labour Organization, ILOSTAT database. Data for Sub-Saharan Africa regional average are not available.
7 'COVID-19 could lead to permanent loss in learning and trillions of dollars in lost earnings'. worldbank.org. https://www.worldbank.org/en/news/press-release/2020/06/18/covid-19-could-lead-to-permanent-loss-in-learning-and-trillions-of-dollars-in-lost-earnings
8 Africa Overview (worldbank.org). https://www.worldbank.org/en/region/afr/overview

resource prices and the exhaustibility of these resources raise complex economic and political issues (IMF, 2013). The lack of institutional and administrative capacity to manage natural resource wealth and public finance have limited the transformation of natural resource wealth into productive human, physical and financial assets for long-term development. The lack of diversification limits the inclusiveness of job creation, trapping the economy in high informality and high underemployment.

Heavy reliance on resource-intensive sectors, a lack of diversification and a lack of proper management of resource wealth have resulted in weak fiscal situations and high vulnerability to shocks. After the oil price shock in 2014, oil exporters in the continent saw their debt-to-GDP ratio doubled, with the average annual government revenue shrinking by four percentage points of GDP in 2013–16 relative to the average of 2008–12 (IMF, 2019). Before the Covid-19 crisis, many resource-dependent countries were already grappling with high levels of debt. For oil exporters, the interest-payments-to-revenue ratio increased fourfold during 2010–18, with a growing number of countries spending more than 15% of their public revenues on interest payments.

After the onset of the pandemic, with the sharp decline in commodity prices and the 'twin supply–demand shock' of mass production shutdowns and supply-chain disruptions, government revenue plunged and indebtedness skyrocketed in many African countries. For oil exporters the challenges were often bigger, as oil contributed to the majority of their exports and government revenues. According to an estimate by the International Energy Agency (IEA, 2020), key oil-producing countries such as Nigeria and Angola, with a drop in their net revenue for 2020 of 50–85% compared with 2019, may see the lowest revenue received from the sectors in two decades. Thanks to their dependence on the external flows that emanate from countries hit hard by the pandemic, including trade in oil and other commodities, foreign direct investment (FDI), remittances and tourism, the economies of the continent have lost heavily. Low-income countries will be most affected by declines in commodity prices and remittances (Goldberg & Reed, 2020). The sharp decline in commodity prices and external financial inflows could push some countries towards a tipping point of macro-fiscal crisis, and social and political unrest (OECD, 2020b).

3 High inequalities

Africa is the second-most inequitable region in the world after Latin America. Measured by the Gini coefficient, Africa has higher mean and median levels of inequality (0.43 and 0.41) compared with economies in the rest of the developing world (0.39 and 0.38) (Bhorat, 2015). While the Gini coefficients of some ten countries are no higher than 0.35, according to the latest data from PovCalNet, eight of the ten most unequal countries are in Africa (Zeufack, 2019). The gap between the rich and poor remains widespread and entrenched as this high inequality has persisted with no visible indication of decline (Bigsten, 2014).

Economies with an unequal distribution of income and uneven access to opportunities before the onset of the pandemic often experienced a severe decline in their GDP.

Major epidemics have worsened inequalities. Hit by the negative shocks, besides output loss, the impact on employment prospects is disproportionately high for the less skilled and vulnerable, including women and youth. The recent IMF World Economic Outlook (IMF, 2020a) showed that the negative effect from Covid-19 on income distribution is much larger than that of past pandemics. It is estimated that the average Gini coefficient for emerging markets and developing economies will rise by 2.6 percentage points to 42.7 in 2020, which suggests the gains in lowering inequality achieved since the global financial crisis could have been reversed. A recent World Bank study showed that, if the Gini index increases by 2%, the number of poor people in Africa will increase by a third in 2020, from 32 million to 42 million (with the former estimated with constant inequality) (Yonzan et al, 2021). A combination of forces – the scale and distribution of the short-term impact on income and the lasting impact in the long term on human capital and productivity – is likely to further widen inequalities and push the economy into a downward spiral of high inequalities and low growth.

3.1 Inequalities of income and inequalities of opportunity

Income inequalities may rise at the global level as the pandemic spreads, since poor countries face more severe structural, social and political vulnerabilities to start with, and their governments have fewer resources to cushion the impact. A combination of factors, including poor health systems, existing armed conflicts, large displaced populations in refugee camps, and low government transparency and trust in public institutions could magnify the negative effects of the crisis in the medium and long term (Africa Center for Strategic Studies, 2020). In many African countries, the government's corrective intervention role, particularly in the maintenance of peace and security, has been limited by a lack of good governance (Mbaku, 2020).

Countries in Africa affected by conflict and violence are most vulnerable to the effects of the crisis (OECD, 2020a). In 2019, more than 1,000 violent incidents occurred in the Sahel (stretching from Mauritania to Chad and crossing Mali, Niger and Burkina Faso) alone, claimed 8,000 lives, and forced 1.5 million people to be displaced (Diagana, 2020). As a result of the conflicts and violence in the affected countries, the staggering number of displaced persons is 18 million.[9] Countries in the Horn of Africa have for a long time suffered from the significant social, economic and environmental impacts of a protracted refugee presence. In addition to the devastating pandemic, locust swarms, regional insecurity and conflict, climate-change-related droughts and flooding have destroyed crops and the livelihoods of millions of smallholder farmers in the Horn and added to the challenges of food security (Blanke, 2020).

The pandemic will push an additional 18–29 million people in fragile and conflict-affected settings into extreme poverty in 2020.[10] Of these, 1.3 million in the Sahel alone will experience extreme poverty as a result of the myriad and complex vulnerabilities

[9] On forced displacement, we can learn from Africa. See Africa Renewal (un.org).
[10] Supporting the Most Vulnerable: Scaling Up Support to Address Fragility, Conflict, and Violence (worldbank.org). https://www.worldbank.org/en/results/2020/11/16/supporting-the-most-vulnerable-scaling-up-support-to-address-fragility-conflict-and-violence

they face.[11] By 2030 up to two-thirds of the world's extreme poor could live in fragile and conflict-affected settings, many of which are in Africa.[12]

Income inequalities may also rise within countries as negative shocks hit the vulnerable disproportionately, leaving permanent scars on income distribution between the poor and non-poor. On the one hand, the shocks are larger in relative terms for the poor, as they have lower income and, on the other hand, the poor are more likely to suffer a loss of productive capital and become trapped in a low equilibrium in the long run. People with precarious jobs are less likely to be able to work remotely and poor households are more likely to live in areas where social distancing is more difficult and access to health care less adequate. Closures of public schools have disproportionately affected disadvantaged children, not only because of their lack of access to the internet and distance learning opportunities but also because of the disruption of the school lunch and other nutrition programmes. The reduced economic activity and resultant unemployment will increase income inequality within countries, since these tend to affect those with lower incomes disproportionately. Reduced financial flows, including remittances from family members, who often work at the lower end of the spectrum in their receiving countries, will worsen the impacts.

Similarly, inequalities of opportunity may also rise in the medium and long run as Covid-19 has resulted in significant health risks, severe learning disruptions, and sweeping job losses, particularly for the most vulnerable. The unequal access to basic public services will have a disproportionate impact on the poor.

Health

The gaps between rich and poor in access to basic services remains striking in most African countries, despite the progress made in recent decades. Countries with limited resources have low levels of health spending and widespread shortages of health professionals and hospital beds. For example, currently, in the Democratic Republic of Congo, the total health expenditures stand at only 2.6% of GDP (Schneider et al, 2020).One in three countries in Africa have Diphtheria tetanus toxoid and pertussis (DTP3) coverage gaps greater than 20 percentage points between poor and rich children.[13] Countries with the highest inequality in health care coverage suffer from the lowest average life expectancy (IMF, 2017).

Health disparities hinder the capacity of African countries to effectively address Covid-19. Testing capacity, surveillance infrastructure, isolation facilities and intensive care

[11] 'The World Bank Boosts Support to the Sahel for a Resilient Recovery from the Security and Economic Crisis'. https://www.worldbank.org/en/news/press-release/2020/12/15/the-world-bank-boosts-support-to-the-sahel-for-a-resilient-recovery-from-the-security-and-economic-crisis
[12] Fragility, Conflict and Violence Overview (worldbank.org). https://www.worldbank.org/en/topic/fragilityconflictviolence/overview
[13] WHO | State of inequality: Reproductive, maternal, newborn and child health. https://www.who.int/home/cms-decommissioning

services have all been limited (Gilbert et al, 2020). There are about five intensive care unit (ICU) beds per million people in Africa, compared to nearly 4,000 per million people in Europe.[14] Hundreds of millions lack access to clean water for frequent handwashing and cleaning (Howard, 2020).[15] In countries such as Angola, Chad, Liberia, Rwanda, Senegal, Sierra Leone, Togo and Zambia, more than half the population lack handwashing facilities (Okoi & Bwawa, 2020). This makes frequent handwashing, a key preventive measure in limiting the spread of the virus, almost impossible for the vulnerable.

After the onset of Covid-19, the limited increase in public spending on health could result in even more significant unmet demand. According to the IMF's near-real-time fiscal response tracker, low-income countries are spending only 0.2% of additional GDP on health (compared to 0.9% for advanced economies), which might not even cover the additional resources required to fight the pandemic (Gheorghe et al, 2020). These limited fiscal resources, and therefore public health spending, could lead to the vicious cycles of 'panic and neglect' (World Bank, 2017a), while the high out-of-pocket health expenditure may trap the vulnerable deeper in poverty. The sharp increase in Covid-19 patients might also lead to overcrowding of health facilities, not only leading to inadequate care for Covid-19 patients and further community spread but also limiting the already scant medical resources for patients with high-burden diseases. The weakening of public services systems is likely to have severe consequences, particularly in areas where poor people reside.

Education

Inefficiencies and inequalities in the education sector remain widespread in Africa, despite the increase in primary and lower secondary school enrolment in recent years. Some 50 million children are not in school (Bashir et al, 2018). Most children who attend school lack the foundational skills to succeed later in life. According to a recent World Bank study, 87% of children in the continent are learning-poor.[16] This means that nearly nine out of ten 10-year-old children in Africa cannot read and understand a simple text (Azevedo & Goldemberg, 2020). Only four out of every hundred children are expected to enter a graduate or postgraduate institution.[17] Globally, Africa ranks last in equal access to education (Gandhi, 2017). Decisions to educate children are

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[14] COVID-19 pandemic expands reach in Africa | WHO | Regional Office for Africa; Europe has 4,000 ICU beds for every million people. Parts of Africa have 5, health officials say. (cnn.com).

[15] This study draws from the Afrobarometer data of more than 45,800 respondents across 34 African countries over 2016–18.

[16] 'Countries Commit to Tackling "Learning Poverty" and Accelerating Learning in Middle East and Africa' (worldbank.org). https://www.worldbank.org/en/news/press-release/2020/02/17/countries-commit-to-tackling-learning-poverty-and-accelerating-learning-in-middle-east-and-africa

[17] Africa Grapples with Huge Disparities in Education | Africa Renewal (un.org).

made within the context of discriminatory social institutions and cultural norms, which are often at the expense of girls. For example, in Kenya, a boy from a rich family has a one-in-three chance of continuing his studies beyond secondary school, while this is only one in 250 for a girl from a poor family (Seery et al, 2019).

Covid-19 is likely to deepen learning disparities and aggravate the pre-existing education crisis in Africa. The digital divide is perpetuating inequalities between countries, as nine out of ten school-age children in Sub-Saharan Africa do not have an internet connection at home, compared with one in three in East Asia and the Pacific (Unicef, 2020). With the worst learning poverty in the world before the pandemic, Africa will suffer three times the increase in the depth of learning deprivation compared with the global average (Azevedo, 2020). Recent World Bank studies suggest an inequality catastrophe is in the making, as children from poor households are vastly less likely to learn as the pandemic hits because of the lack of access to the internet, lack of connection with teachers and lack of resources available at home (Azevedo & Goldemberg, 2020). Without effectively deploying practical remote learning solutions during the pandemic and later rebuilding an educational system that is flexible in meeting student needs, the most vulnerable, including those who dropped out from school during the pandemic, are likely to suffer irreversible long-term scars.[18]

Infrastructure

Gaps in traditional as well as digital infrastructure remain wide in Africa, despite the improvements of the past decades.

- Africa has the lowest road density within the developing world, and significant gaps in electricity and water supply. Nearly 600 million people in the continent lack access to grid electricity.[19] Closing the infrastructure gaps in quantity and quality relative to the best performers in the world could increase GDP growth per capita by 2.6% per year, with the largest potential growth benefits coming from closing the gap in electricity-generating capacity (World Bank, 2017b). However, closing the infrastructure gap alone would have needed $93 billion annually from 2009 to 2020 (Foster & Briceno-Garmendia, 2010).
- Internet penetration averages only 40% in Africa compared to over 60% in the rest of the world (Ghanem, 2020). About a third of the population remains out of reach of a mobile broadband signal (Fukui et al, 2019). Mobile download speeds are more than three times slower in Africa than in the rest of the world, while the cost of accessing digital technologies is higher relative to incomes.[20] Reaching universal and affordable internet coverage will increase GDP growth in Africa by two

[18] COVID-19: UNICEF warns of continued damage to learning and well-being as number of children affected by school closures soars again. [https://www.unicef.org/press-releases/covid-19-unicef-warns-continued-damage-learning-and-well-being-number-children]
[19] Solving Africa's Infrastructure Paradox | McKinsey. https://www.mckinsey.com/business-functions/operations/our-insights/solving-africas-infrastructure-paradox
[20] Digitalizing Sub-Saharan Africa: Hopes and Hurdles (imf.org).

percentage points per year (World Bank, 2019a). However, achieving universal, affordable, broadband internet access by 2030 will require an investment of $100 billion.[21]

The wide infrastructure divide dragged Africa further behind when the pandemic hit. While 80% of countries across the world were able to switch to telework to continue business, the ratio was only 70% of countries in Africa because of the region's less reliable internet connectivity and electricity supply.[22] With fast internet, the probability of employment for individuals – including for the less educated – will increase by 6.9% to 13.2% (Hjort & Poulsen, 2019).[23] Without reliable infrastructure, the monitoring and tracking of the spread of the virus and the distribution of vaccines will be more challenging, which is likely to result in a more protracted recovery. Compounding the problem of investment, the costs for infrastructure maintenance in the region are several multiples higher than in other developing regions. Thanks to the lack of fiscal capacity, a large demand for infrastructure investment and maintenance will be left unmet, constraining productivity growth.

3.2 Risks of downward spirals post-pandemic

High levels of inequalities of income and opportunity reinforce each other and result in low growth (Okun, 1975; Rodrik, 2014; World Bank, 2005). Poverty is multidimensional. On the one hand, inequalities in income may further translate into inequalities in access to basic services and lower the opportunities for the vulnerable to get out of the poverty trap (UNDP & OPHI, 2020). An increase in income inequality has persistent effects, hindering human capital accumulation and retarding future growth disproportionately (Aiyar & Ebeke, 2019). African countries have the highest percentage of people who are multi-dimensionally poor and deprived of years of schooling and school attendance (UNDP & OPHI, 2020). On the other hand, inequalities of opportunity may aggravate inequalities of assets. Inequalities of opportunity, on average, contribute to over 30% of the overall inequality of assets in Africa, and these high levels of inequality of assets impede social and economic mobility in most parts of the continent, further resulting in the persistence of high inequality (Shimeles & Nabassaga, 2018). Income mobility in Africa tends to be low compared with other regions, as parental background matters for children's prospects (World Bank, 2018). High levels of inequality may contribute to a growth pattern that produces even higher inequality and may reduce income growth for the poor (van der Weide & Milanovic, 2014). Some studies suggest that, for some African countries, no amount of growth in per capita GDP alone would be adequate to reduce extreme poverty without a corresponding decline in inequality (Fosu, 2015).

Inequality is likely to further increase and persist as a result of the pattern of job losses generated by the crisis, with the most devastating effects on many vulnerable

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[21] Achieving Broadband Access for All in Africa Comes With a $100 Billion Price Tag (worldbank.org).
[22] Digitalizing Sub-Saharan Africa: Hopes and Hurdles (imf.org).
[23] This article draws data from a study of 12 countries in Africa with a combined population of roughly half a billion people.

population groups and sectors. Globally, 114 million jobs were lost in 2020 compared with 2019 (ILO, 2021) (Box 1). The disadvantaged groups suffered more: in relative terms, employment losses were higher for women (5%) than for men, while for young workers (8.7%) they were higher than for older workers. As the negative employment growth decelerated in the second half of 2020, employment both in information and communications and in financial and insurance activities started to increase, but the hardest-hit sector – accommodation and food services – where most of the poor were employed, was still badly affected and job destruction continued in construction, retail and manufacturing, albeit at a lower rate. Such an uneven ‘K-shaped recovery’ raises serious concerns of deepening inequality, as the most vulnerable will benefit less, even when the economic conditions start improving post-corona.

Box 1. The vulnerable suffered disproportionately from employment loss

The recent ILO Monitor report (ILO, 2021) shows significant employment loss during the pandemic, some four times greater than during the global financial crisis in 2009. Global labour income (before taking into account income support measures) in 2020 is estimated to have declined by 8.3%, which amounts to $3.7 trillion, or 4.4% of GDP.

The lockdowns may have had a differential impact on economic activity and jobs, exacerbating inequality. The labour market burden of Covid-19 is larger in poor countries and for vulnerable groups. Garrote Sanchez et al (2020) found that one in every five jobs can be done remotely worldwide, ranging from one in every three in high-income countries to only one in every 26 in low-income countries. Drawing on data from 35 advanced and emerging economies, Brussevich et al (2020) showed that differential access to and use of technology, sectoral mix and labour market selection determine the ability to work from home. Vulnerable groups – including youth; individuals without a college education, working on non-standard contracts or employed in smaller firms; and workers with low earnings – are less likely to be able to work remotely.

Job destruction has disproportionately affected low-paid and low-skilled work; recovery in this area is the slowest. A large share of the job losses translates into rising inactivity rather than unemployment. Women and youth, as well as other low-skilled workers, who are disproportionately represented in the informal labour force or are self-employed, experienced a larger decline in post-support labour income (which includes the income support received by workers) than did the overall population. In countries with limited fiscal space and capacity to implement income-support measures, such as job retention schemes, workers suffered even more. The latest projections indicate a persistent work deficit in 2021.

Sources: Brussevichet al (2020); Garrote Sanchez et al (2020); ILO (2021).

The vicious cycle of high inequality and low growth may get worse as a result of the pandemic. Wealth serves as an important buffer to reduce vulnerability to shocks such as unemployment, ill health and natural disasters. As indicated in the 2020 Credit Suisse report (Credit Suisse, 2020), it is difficult to overestimate the importance of household wealth, particularly at the time of the pandemic, when vast numbers of individuals are simultaneously subjected to an adverse shock. During the pandemic, while the rich fare better than the poor in the developed world, with rising wealth for some billionaires (Galloway, 2020), the poor in Africa, where social insurance remains rudimentary, access to finance constrained and public health care limited, suffer most.

4. Debt vulnerabilities

High debt vulnerability can have a significant negative effect on economic growth, deterring investment and innovation and creating uncertainty (Reinhart & Rogoff, 2010; Reinhart et al, 2012). While the debt-financed public spending of the past decade may have helped build capital and productive capacity in several countries, an overly rapid pace of borrowing, particularly in non-concessional terms, may lead to soaring debt service in the continent, crowding out resources for subsequent social and developmental priorities.

In many instances, debt-financed public spending has failed to yield high returns or stimulate productivity increases that would repay the investment. Some research has shown, *ceteris paribus*, that debt-financed public investment can have a positive impact on growth by affecting economic activity and through spill-over effects on private investment (Buffie et al, 2012). However, the favourable interest rate–growth differential was one main driver of the overall moderate public debt dynamics in Africa during 2005–14 (Ncube & Brixiová, 2015). When the spending does not yield sufficient return to generate a surplus in the fiscal accounts to offset the prior increased expenditures and restore debt sustainability, it will lead to an increase in debt vulnerabilities. In a more challenging global environment post-corona, the binding constraints on productivity growth and long-lasting low efficiency of debt-financed public spending in many countries in Africa will adversely affect the growth impact of public investment and add to its debt burden. The rise in interest burdens as a result of such borrowing constrains fiscal space and limits the scope for counter-cyclical fiscal policy to support recovery, feeding through to lower investment and growth in the long run.

4.1 Pre-existing debt vulnerabilities

Debt vulnerabilities in Africa are characterised by a high debt-to-GDP ratio, high fiscal deficits, high borrowing costs and currency depreciation.[24]

[24] External Debt Complicates Africa's COVID-19 Recovery, debt relief needed | Africa Renewal (un.org).

High debt-to-GDP ratios

Twenty-two African countries had debt-to-GDP ratios above 60% in 2019, far exceeding the prudential upper bound threshold for developing countries (Madden, 2020). Five of these, Cabo Verde, Eritrea, Mozambique, the Republic of Congo and The Gambia, had debt-to-GDP ratios over 100%. Fragile states and less developed countries often had the highest average public debt burdens (Ncube & Brixiová, 2015). Such high debt-to-GDP ratios may cause macroeconomic instability, limit growth and render debt unsustainable.

High fiscal deficits

More than half Africa's countries recorded fiscal deficits above 3% in 2019 (Madden, 2020). Countries have low fiscal revenue but high demand for spending. The tax-to-GDP ratio in Africa declined from 16.1% in 2013 to 13.4% in 2018 (UNECA, 2020). As a result, before the onset of Covid-19, Africa had the lowest tax-to-GDP ratio. While research shows that many African countries were already attempting to reap higher tax revenues than countries at similar income levels in other regions (Long & Miller, 2017) – with the distance between tax potential and observed tax ratio of 3–5% of GDP – the region has limited capacity to collect tax revenue from the already extremely low tax base resulting from its low development level and high inequality. The rise in interest payments has added to the burden. High fiscal deficits may force countries to borrow to finance development projects and thus further increase their debt burden.

High cost of borrowing

The costs of borrowing are extremely high for African countries. In the past decade, the composition of financing has been shifting towards the more expensive options, including commercial sources with higher interest rates and shorter maturity periods. Borrowing to support fiscal deficits since 2009, including through domestic markets and Eurobond issuance, has driven a net increase in public debt for most countries in the continent (Battaille et al, 2016). While a sizeable amount of concessional loans came from traditional development partners, commercial borrowing, including domestic debt and Eurobonds, accounted for nearly 70% of the nominal debt stock increase between 2010 and 2018 (about 55% and 15%, respectively) (IMF, 2019). In 2018 alone, total Eurobond issuance amounted to more than $17 billion, almost double the amount raised in 2017. Interest payment is now a fast-growing expenditure portion of government budgets, with interest rates of between 5% and 16% on 10-year government bonds. Several major African countries, including Kenya, Nigeria and South Africa, have yields over 10% on 10-year sovereign bonds, compared to 3% for Vietnam and 6% for India (Madden, 2020). The high costs of borrowing may further squeeze the already limited fiscal space.

Currency depreciation

Currency volatility and depreciation have made issuing and servicing debt even more expensive. While allowing countries to borrow large volumes in a short time span and diversify their investor base, sovereign bonds exposed African countries to exchange and interest rate risks (Tyson, 2015). In addition, bullet payments involved in international sovereign bonds may create significant refinancing risks. Such risks are most severe at a time when global financial flows are uncertain, credit markets are tightened and spreads are high (Kharas, 2020). The South African rand has lost about 8% of its value against the US dollar and the euro since the outbreak of the pandemic.[25] The sharp depreciation of many major African currencies may add to the debt service burden for foreign-currency-denominated loans, and may trigger inflation and lower households' purchasing power.

The composition of debt in the continent has shifted significantly in the past decade. There has been an increase in the diversification of external creditors, to allow for the rising importance of non-Paris Club official lenders and private creditors. Collateralised debt, particularly for commodity producers, can help finance projects that might not otherwise be possible but can reduce budget flexibility and increase debt vulnerability, if used on a large scale or on onerous terms (IMF, 2020a). This raises new challenges beyond the traditional coordination between Paris Club creditors.

Challenges are particularly daunting for many small states, as they suffer sizeable public debt as a result of their narrow and volatile revenue base. Thanks to the pre-existing structural challenges, such as weak capacity, limited economies of scale and the high cost of public services, the pandemic's impact of low growth and expenditure shocks is highly damaging. The external debt risk for Guinea-Bissau had deteriorated from moderate to high as of January 2021, and several other small states, such as Cabo Verde, The Gambia and São Tomé and Príncipe, were at high risk of external debt distress or already in distress before the pandemic.

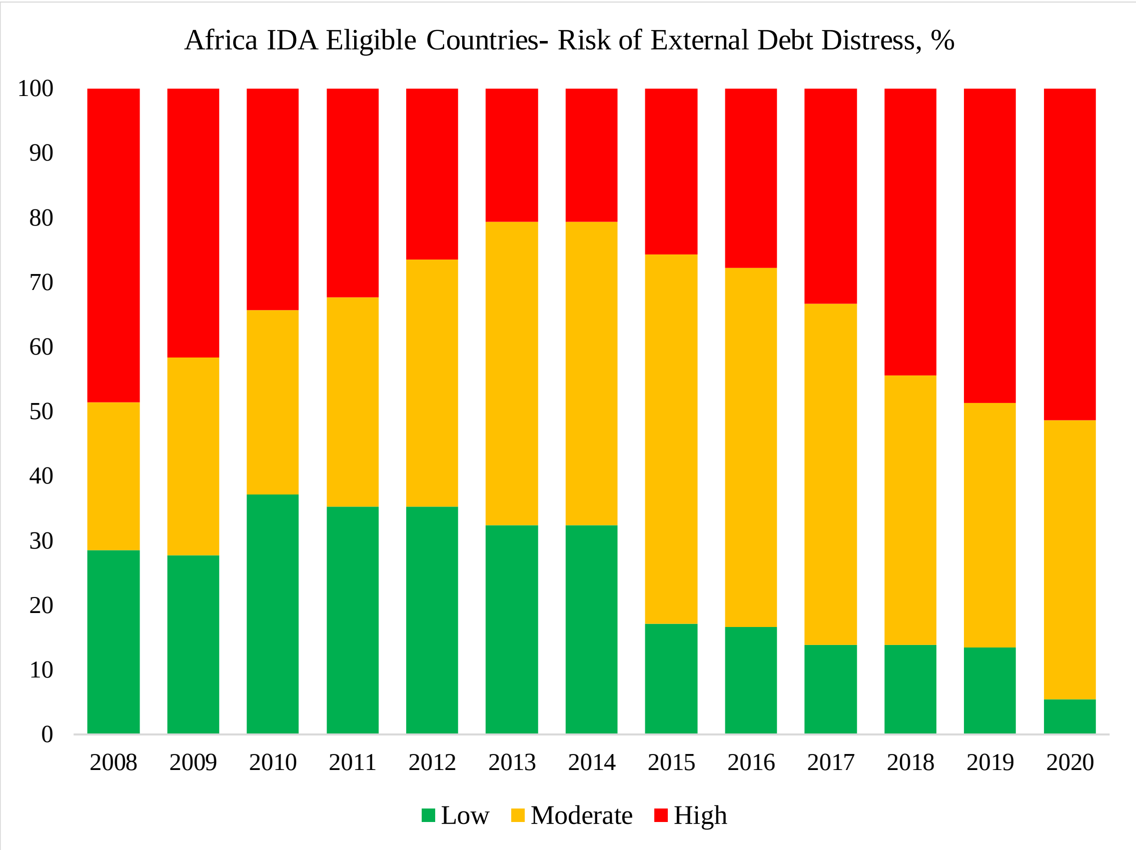
On average, compared with other regions, debt service burdens are highest in Sub-Saharan African countries (IMF, 2020b). With larger amounts of borrowing, often via private creditors, on more stringent terms, including shorter maturities and higher interest rates, debt service payments have significantly risen. In 2018, Africa paid $35.8 billion in total debt service.[26] On average, the interest payments-to-revenue ratio doubled from about 5% in 2010 to 10% in 2018. For oil exporters, this ratio increased fourfold. Angola, Ghana and Nigeria spend close to half their government revenues on interest payments (Kraemer, 2020). A growing number of countries spend a large share of their public revenues on interest payments compared to their meagre spending on education, health and infrastructure. This is concerning, because most low-income African countries predominantly rely on public financing to mobilise resources for structural upgrades, yet their shallow domestic financing and banking systems leave them limited options with which to refinance debt obligations in the international financial markets at a time of heightened uncertainty.

[25] External Debt Complicates Africa's COVID-19 Recovery, Debt Relief Needed | Africa Renewal (un.org).
[26] World Bank's Response to COVID-19 (Coronavirus) in Africa.

4.2 Deterioration post-pandemic

Debt vulnerabilities deteriorated as growth slumped and countries with limited fiscal space failed to implement policies to address the immediate pandemic shock and support the recovery in the medium and long term. Weak structural and policy conditions, limited debt management capacity and the high debt burden created significant challenges of debt sustainability in Africa. Debt vulnerabilities started worsening from 2015 and rapidly deteriorated after the pandemic hit. Out of the 37 African countries that use the Debt Sustainability Framework for Low-Income Countries, 18 (or around 49%) were assessed as at 'high risk of external debt distress' or 'in external debt distress' by the end of 2019 and before the pandemic; the number was up to 19 (or 51%) by the end of 2020 (Figure 2). With debt distress risk ratings downgraded from low to moderate for three countries (Kenya, Madagascar, Rwanda), the number of countries assessed as at 'low risk of external debt distress' declined from five (or 14%) to only two (5%).

Figure 2: Worsening debt vulnerabilities in Africa



Source: Debt Sustainability Analysis (worldbank.org).

Government revenue could decline, however, to an even greater degree than would be proportional with respect to the contraction in GDP – at a time when the need for spending in response to the pandemic has surged. On the one hand, the tax-to-GDP ratio often declines when the economy contracts, as governments reduce tax rates to stimulate economic recovery. On the other hand, in a time of crisis, short-run tax buoyancy tends to be greater than the proportion of GDP decline in low-income countries (Dudine & Jalles, 2017). Fiscal deficit averaged 7.6% of GDP for the region as a whole, reaching double digits in some cases (Cabo Verde, Ghana, Mauritius, Seychelles and South Africa), even when accounting for donor grants (IMF, 2020b).[27]

The hard trade-offs faced by governments in Africa in public spending will not only hurt the short-term recovery but also negatively affect long-term growth. As they started from an already weak fiscal position with a heavy reliance on commodity-driven growth, in a complex global environment with lower trade and FDI, many African countries have limited capacity to fix their strained health care systems to save lives. While Covid spending has often come at the expense of current and/or capital spending in other areas (for example, in Burundi, Cameroon, Guinea, Nigeria and Uganda), as of October 2020, the Covid-19-related fiscal packages in the region have averaged only 3% of GDP – only 0.75% for added health needs, with the remainder for crisis-related transfers and spending, markedly less than the amounts spent in other regions (IMF, 2020b). The weak growth dynamics have made the rapid replacement of new business even less likely after the closure of the old ones, resulting in the prevalent loss of employment and low equilibrium in the long term.[28] Macro-financial policy responses to the pandemic – such as expansionary fiscal policies or financial sector forbearance – have been unsustainable and created new risks in liquidity and solvency.

In the absence of additional concessional resources, many African countries may have to carry out fiscal consolidation or face aggravated risks of debt distress. Fiscal retrenchment at the time of the pandemic will be extremely painful. Slow growth in the short term could increase social tensions and trigger conflicts and violence. The increase in uncertainty could increase risk premiums and borrowing costs, which would further increase the debt burden. With limited scope for reforms and weak capacity to implement stimulus polices, medium- and long-term growth will suffer. The region risks entering a recurring recession, and the potential new debt crisis is likely to be even more devastating post-corona.

5 Urgent need for support

The Covid-19 crisis is having a devastating impact on Africa that is going to be long-lasting. Despite the welcome initial responses of its governments, supported by the international community, the pandemic has triggered the sharpest decline in growth in the past four decades and generated massive unemployment, with millions of job losses. With the disruptions to supply chains at both the global and regional levels and changes in trade patterns, the path to recovery, including restoring economic activities and productive job creation, is extremely challenging, particularly for countries with large unskilled labour that rely on commodity exports. The lack of economic

[27] Sub-Saharan Africa: A Difficult Road to Recovery (imf.org)
[28] World Bank, EFI Macro-Financial Review

alternatives may facilitate recruitment by violent groups, adding to the social conflicts in already highly fragile systems.

The continent is standing at a crossroads. If urgent and decisive interventions are absent, countries in Africa may slip into a downward spiral of high debt, high inequality and low growth. If governments in Africa and the international community seize the opportunity to implement reforms – upgrading the economic structure to diversify the economy, creating more and better jobs, and making the long overdue critical investments in infrastructure and human capital – their economies could come out stronger, with an improved business environment, enhanced productivity and a more resilient recovery. The cost of inaction is high. More ambitious intervention is needed. Additional concessional resources are required. Africa must take a long-term view to make the right investments and address its structural challenges in order to avoid a downward spiral and support a resilient recovery.

5.1 Initial responses

Interventions by governments in Africa

Many countries in Africa implemented prevention and relief measures at the outset of the pandemic:

- Drawing on lessons learned during the 2014 Ebola outbreak, many countries implemented containment measures, with surveillance and screening, to limit the spread of the virus early on. In February 2020, Nigeria started the Emergency Operations Centre immediately after the first suspected case; Senegal began training technicians in the Louis Pasteur Institute to test for Covid-19.[29] An emergency two-day meeting of health ministers was convened in Addis Ababa to coordinate responses before the first confirmed case in the continent (Pilling, 2020).

- Tailoring themselves to the local context, countries developed innovative measures to combat the disease and protect the vulnerable. Uganda developed quick and low-cost Covid-19 test kits.[30] Rwanda adopted mathematical modelling to implement a pool-testing method to reduce the number of tests required for an accurate infection count, and employed robots to screen and monitor Covid-19 patients (Travaly & Mare, 2020). Ghana provided free water and free or subsidised electricity services to public utilities' customers for several months and implemented labour-intensive public work programmes with a reduced work schedule, to allow women to attend to their children while continuing to earn full daily wages (Dadzie & Arju, 2020).

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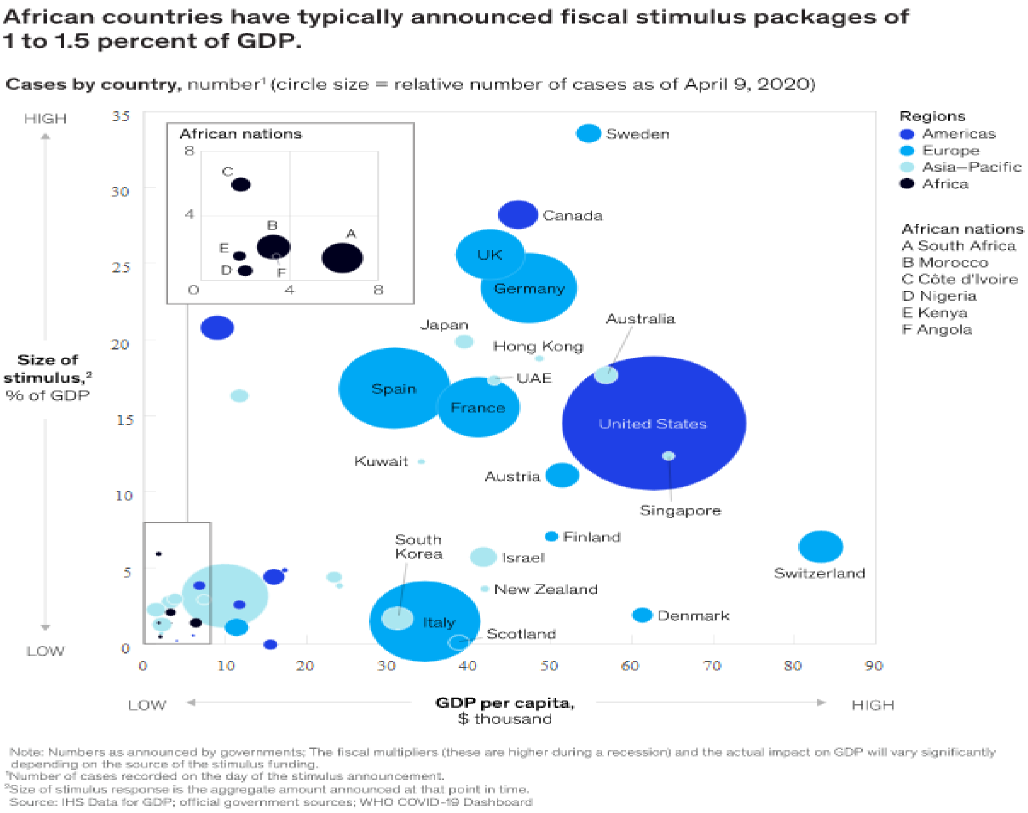
[29] In the Face of Coronavirus, African Countries Apply Lessons from Ebola Response (worldbank.org).
[30] Ugandan Scientists Develop Quick, Low-cost COVID-19 Test Kits - Alliance for Science (cornell.edu).

- Building on their social media platforms, countries developed new tools to provide information on the coronavirus outbreak. The National Department of Health in South Africa partnered with Praekelt.org, a nonprofit organisation, used machine learning technology and launched an interactive WhatsApp Chatbot to deliver free automated responses with information on coronavirus, including travel advice, latest numbers and symptoms, and to dismiss myths and misconceptions. In March 2020, the tool was adopted by the World Health Organization to reach at least 50 million people worldwide.[31]

Governments also devised policy instruments to support the restructuring of their economies. Several countries have launched e-learning platforms to provide online resources to students. Kenya converted existing factories into mask production units to meet the urgent demand for personal protective equipment and create manufacturing jobs (Travaly & Mare, 2020). Ghana provided soft loans to qualified micro, small and medium-sized enterprises (Dadzie & Arju, 2020). Rwanda waived transaction fees on mobile payment to support cashless payment, so as to reinforce distancing measures for virus spread containment, as well as to support the development of e-commerce and the digital economy (Travaly & Mare, 2020). Several governments announced fiscal stimulus packages soon after the start of the crisis. However, as of April 2020, most of the packages were only at 1% to 1.5% of GDP, given the limited fiscal spaces compared to the much higher ratios in the advanced economies (Figure 3).[32]

[31] Coronavirus: WHO adopts South African WhatsApp health alert - Quartz Africa (qz.com).
[32] COVID-19 in Africa: Save Lives and Livelihoods | McKinsey.

Figure 3: African countries had smaller fiscal stimulus packages



Source: [COVID-19 in Africa: Save lives and livelihoods | McKinsey.]

Severe gaps remain, particularly in the most fragile and conflict-affected countries in the continent. These countries are expected to experience a strong decline in growth as Covid-19 exacerbates the drivers of fragility. In the absence of additional support, inadequate economic and political action will result in greater instability and conflicts in the medium and long term.[33]

Support from the international community

The international community has stepped up to support Africa. Multilateral effort has provided a breathing space for the hard-hit countries.

- *Swift response*: Shortly after the onset of the pandemic, on 25 March 2020, the World Bank and the IMF called on bilateral creditors to suspend debt service payments from the poorest countries; on 15 April, the G-20 agreed to suspend repayment of official bilateral credit from the poorest countries, starting on 1 May 2020 (currently until the end of June 2021). In April, the African Development Bank (AfDB) announced that it would target $10 billion in lending in 2020 in

[33] Weakest, Most Fragile States Will Be Those Worst Affected by COVID-19 in Medium, Long Term, Humanitarian Chief Tells Security Council | Meetings Coverage and Press Releases.

response to COVID-19.[34] By mid-May 2020, the World Bank had established emergency response operations in 100 countries, of which 39 were in Africa, with mechanisms that allowed other donors to rapidly expand the programmes.[35] As of 15 October 2020, the World Bank had launched the first set of emergency health projects in 34 African countries (amounting to a total of $757 million), with a focus on saving lives.[36] The IMF also acted swiftly and temporarily doubled the access to its emergency facilities – the Rapid Credit Facility and Rapid Financing Instrument – allowing it to meet increased demand for financial assistance from member counties during the crisis. It also extended debt service relief through the Catastrophe Containment and Relief Trust to 29 of its poorest and most vulnerable member countries, many of them in Africa.[37]

- *Sizeable support*: Up to mid-October 2020, the World Bank had made available nearly $12 billion across Africa to help countries respond to the Covid-19 crisis.[38] Responses included a series of new operations in health, social protection, economic stimulus and other sectors, as well as redeployment of existing resources. The World Bank Group has been deploying $50 billion in financial support over a period of 15 months between April 2020 and June 2021 to help African countries protect poor and vulnerable people, support businesses and bolster economic recovery.[39] The Bank's International Development Association (IDA) supports countries with access to 'positive net flows' of robust and sustainable levels of financial support on highly concessional or grant terms, with every dollar in low-cost IDA loans repaid on average offset by $11 in new low-cost IDA financing flowing to the poorest countries.[40] In 2020, the IMF provided $16 billion of financing to 33 countries and immediate debt service relief to 22 of the poorest, most vulnerable Sub-Saharan African countries (Selassie, 2020). The G-20's Debt Service Suspension Initiative (DSSI) provided over $5.7 billion (including participation by a national development bank participating as a private creditor) in debt service suspension for 43 countries in 2020, and a six-month DSSI extension through June 2021 could provide up to $7.3 billion of additional debt service suspension (from the same group of creditors) for the 45 countries that were DSSI participants as of mid-February 2021 (World Bank Group & IMF, 2021).

[34] Scaling up multilateral bank finance for the Covid-19 recovery | Overseas Development Institute (ODI)
[35] World Bank Group: 100 Countries Get Support in Response to COVID-19 (Coronavirus)
[36] World Bank's Response to COVID-19 (Coronavirus) in Africa.
[37] Questions and Answers: The IMF's Response to COVID-19.
[38] World Bank's Response to COVID-19 (Coronavirus) in Africa.
[39] World Bank's Response to COVID-19 (Coronavirus) in Africa.
[40] Debt Service Suspension and COVID-19 (worldbank.org).

Other multilateral development banks, bilateral creditors and other development partners have also provided support in various ways. However, the financing gaps remain large. A recent Brookings Institution study (Kharas & Dooley, 2020) suggests that, even allowing for the contributions of multilateral development banks and agencies, the developing world still faces a potential shortfall of close to $2 trillion.

Comprehensive measures need to be in place to durably address debt vulnerabilities in Africa. While the DSSI has helped free up resources from debt service to provide governments the fiscal capacity to cope with the pandemic, such temporary and short-term measures alone are not sufficient to address unsustainable debt (Reinhart & Pazarbasioglu, 2021). The inconsistent application of the terms and conditions for DSSI participation, as well as the absence of private sector participation, have created challenges to the implementation of DSSI. The Common Framework endorsed by the G-20 aims to improve debt treatment efficiency in a tailored way, with broad creditor participation, to support countries with unsustainable debt dynamics and those with sustainable debt but which face liquidity issues or high debt vulnerabilities.

5.2 More ambitious intervention needed

Strengthening the relief effort is essential to save lives and mitigate the health threat posed by Covid-19 and its immediate social, economic and financial impacts. Such strengthening should include the following:

- Controlling Covid-19 to prioritise the rollout of vaccines and mitigate the damage.[41] Every month of delay will cost Africa $13.8 billion in lost GDP, in addition to the loss of lives and human capital.[42] Yet, without additional support, it is estimated that 90% of people in the world's poorest countries, many of them in Africa, are unlikely to receive a vaccine until 2022 (Krueger, 2021). The vaccination of the majority of Africa's 1.3 billion population will require huge investment and faces substantial logistical challenges. Besides securing the available vaccines, there is a need not only for investment in health care centres and training of medical professionals but also for investments in transport infrastructure and cold-chain logistics for vaccine distribution. With further waves still likely, strong multilateral cooperation is required to strengthen the effort to bring the pandemic under control.

- Expanding the existing social protection delivery systems to reach currently excluded groups and the newly poor. Providing timely support has become increasingly important as food security problems have deteriorated in many parts of the continent after the pandemic. Disruption in food supply chains has potentially significant adverse effects on household income, food security and nutrition, especially for the poor. An estimated 27% of the population in the

[41] An African Plan to Control COVID-19 is Urgently Needed - The Lancet.
[42] Remarks by World Bank Group President David Malpass at the Virtual Meeting on the Africa COVID-19 Vaccine Financing and Deployment Strategy.

continent is food insecure.[43] In the Sahel alone, more than 11 million people face the threat of famine (Diagana, 2020). According to a household survey in Ethiopia, in June 2020 about half the respondents reported that their food insecurity status had worsened compared to a year ago, while the rest reported that it had remained the same (Abay et al, 2021). Adapting the existing social protection system to swiftly respond to the pandemic's impact would require tailoring to the regional and national context, including expanding social assistance coverage, modifying delivery modalities and incorporating other innovative approaches.

Creating an integrated regional market and improving people's access to long-term finance are crucial for supporting economic restructuring and sustained productivity growth in Africa post-corona. Global trade was expected to contract by over 10% in 2020 thanks to the turmoil of the pandemic, a similar pace to that found during the global financial crisis (IMF, 2020a). The disruptions to global supply chains are expected to result in export earnings losses of $101 billion for Africa, of which an estimated $65 billion will be for oil-producing countries (Signé & van der Ven, 2020). These disruptions are likely to lead to potential shifts in global and regional value chains, severely affecting Africa, since it depends heavily on international markets. The implementation of the African Continental Free Trade Area (AfCFTA) could play an important role in stimulating post-corona development across the continent and supporting African countries to improve market integration, attract FDI, diversify their exports and accelerate growth (World Bank, 2020d). FDI inflows can bring in not only the resources to alleviate the risks of debt financing but also the technologies and know-how to upgrade and diversify economies, facilitate formalisation and create more and better jobs. With the right conditions, participation in global and regional value chains can support structural transformation and foster economic diversification at a lower level of development (Luo & Gereffi, 2018). Improvements in access to long-term finance may not only ease the debt vulnerabilities but also, with efficient resource allocation, support the private sector, including small and medium-sized enterprises and low-skilled workers, and enhance productivity growth and inclusiveness.

Harnessing digital technology is showing a growing potential to support a more resilient recovery and help the region leapfrog to a higher equilibrium of sustained growth. The pandemic has catalysed changes, expanding businesses' online presence and spurring digital identification, and has boosted new smart regulations initiatives. Before the pandemic, Africa had the lowest percentage of adults holding an account at a formal financial institution, with banking penetration below 20% in most of Eastern Africa, but the highest mobile money account penetration, especially in Kenya (73%), Uganda (50%) and Zimbabwe (50%) (Demirgüç-Kunt et al, 2018). Leveraging technology for identification and building on Africa's innovative financial services, and mobilising the private sector would support the deepening of the financial system to increase long-term finance and facilitate economic growth (Maimbo, 2020). As connectivity became

[43] Opinion Piece: COVID-19 impacts on the poverty landscape: social protection measures to protect food and nutrition security (fao.org).

front and centre during the pandemic, initiatives to boost broadband access surged and the private sector also participated (Diop, 2020). In Kenya, after the government fast-tracked regulatory approval, high-altitude internet balloons beaming 4G signals will bring connectivity to rural areas (Wilson, 2020). The increase in the coverage, speed and affordability of internet connections can bridge the digital divide and boost productivity in the region.

Investing in infrastructure and human capital is vital for relief, restructuring and recovery. Strengthening Africa's strained health care systems to save lives is the first priority in response to the pandemic. Eliminating basic health coverage gaps can improve productivity, employment and earnings, setting the economy back on the right track. Effective investments in education can improve human capital. Globally, for an extra year of schooling, hourly earnings increase by 9% (Psacharopoulos & Patrinos, 2018). Improving infrastructure and accelerating digitalisation are crucial to support the recovery and long-term development of the continent. Each dollar invested in transport, energy and water systems can save $4 over the lifetime of the assets (Hallegatte et al, 2019). Digitally connected firms in Africa employ eight times more workers and create higher-skilled, full-time jobs (Georgieva & Selassie, 2020). The development of an Africa-wide Covid-19 digital platform supports countries' ability to examine the pandemic situation, implement the necessary responses, improve transparency, and direct resources towards mitigation (Songwe, 2020). Closing the infrastructure gap and digital divide therefore plays a crucial role in supporting human development and ensuring access for the most vulnerable to quality health care and education. Improvements in human capital, in turn, create the opportunity for digital transformation for inclusive growth and employment creation.[44]

5.3 Urgent need for additional resources

A significant amount of resources is needed to support Africa's post-corona future. As the pandemic is still ongoing and a possible future wave, with higher death ratios, threatens to overwhelm fragile health care systems and affect lives and livelihood across the continent, it is too early to estimate the full impact on its economies and the price tag for investments supporting recovery (Munshi et al, 2021). To attain levels of vaccination coverage to interrupt virus transmission alone, Africa would need about $12 billion for vaccines and incremental costs for deployment (World Bank Group & IMF, 2021). The range of estimates from various sources clearly indicates that the sheer magnitude of resources needed would far exceed governments' fiscal capacity. According to the World Bank's recent estimate, the substantial downturn in economic activity will have cost the region at least $115 billion in output losses in 2020, in part caused by lower domestic consumption and investment occasioned by containment measures put in place to slow the spread of the coronavirus.[45] According to the recent IMF *Regional Economic Outlook* (IMF, 2020a), Africa faces a great deal of uncertainty

[44] The Digital Economy for Africa Initiative (worldbank.org). https://www.worldbank.org/en/programs/all-africa-digital-transformation
[45] Africa Overview (worldbank.org). https://www.worldbank.org/en/region/afr/overview

regarding the availability of external financing: the region's needs in this area are estimated at about $900 billion over 2020–23, with the sources of between $130 billion and $410 billion unidentified.

With these stark funding shortfalls, the region risks slipping into a downward spiral. As global growth is significantly weakened thanks to the pandemic, and recovery is expected to be protracted and uncertain, countries that are already at high risk of debt vulnerabilities are further exposed. The lack of debt transparency makes the effort to relieve debt stress even harder. Low growth leads to limited effective demand, while high informality and an abundance of low-skilled labour translate into the prevalence of unproductive and unstable employment, and low education and inadequate health care worsen inequality and slow down demographic transition. As a result, productivity remains low and the cycles of low growth, high inequality and high poverty become self-reinforcing. On the fiscal side, low growth and high informality result in low revenue and large unmet needs for public spending; high external debt coupled with high interest rates lead to high debt services payments squeezing out productive investment and, in extreme cases, disorderly defaults. In the absence of additional resources, the cycle of low growth, high deficits and high debt vulnerabilities could be exacerbated.

Debt may create a development emergency in much the same way as the pandemic is creating a health emergency. Providing debt relief to over-indebted poor countries early in the process is crucial to help them get on the path to recovery. Returns on early interventions at sufficient scale are high in many economic areas (Artuc et al, 2020). If the region slips into debt crisis, the cost will be extremely high. Ferraro and Rosser (1994) showed that an explosion of debt in developing countries would have serious consequences: decline in the quality of life within debtor countries, political violence associated with that decline, and subsequent effects on developed countries; in Africa, a primary concern of any debt crisis would also include the desperate human costs (Ferraro & Rosser, 1994). World Bank (2021c) showed that the debt crises of the 1970s and 1980s resulted in almost two decades of negative per capita income growth in Africa. Furceri and Zdzienicka (2012) argued that past debt crises led to significant and long-lasting output losses, reducing output by about 10% after eight years, using an unbalanced panel of 154 countries from 1970 to 2008. Evaluative lessons suggest that, in most countries, rapid help was needed to keep businesses alive and prevent massive job losses as a result of crises such as the global economic crisis of 2008, the food crisis of 2007 and the East Asian crisis of 1998 (Stone et al., 2020).

Getting the concessional resources that Africa needs is important and so is their effective use. It is crucial for governments in Africa and the international community to work together to seize the opportunity – let no crisis go to waste – to save lives and implement reforms to prioritise investments to build greater resilience, boost productivity and generate more and better jobs (World Bank, 2020b). Channelling resources to areas with the highest short- and long-term impacts and ensuring the quality of investment are essential.

- First, reallocate resources taking into consideration changes in the post-corona world. Reallocating resources from low-efficiency areas to high-impact areas not only frees up much-needed space in an evolving global environment but also creates the opportunity to potentially crowd in more resources when investors and donors see higher and more sustainable returns.
- Second, prioritise resource use to control the pandemic's damage in the short term and create the opportunity for sustained productivity growth in the long term. Besides urgent and forceful debt relief to prevent countries from slipping deeper into the high debt–low growth trap, the list of priorities for rebuilding Africa post-corona will include shoring up the health sector to save lives and limit further spread of the contagion, providing social protection to the most vulnerable to mitigate the crisis shocks, implementing a decisive economic stimulus to prevent the collapse of business and stop massive un- and underemployment from exploding further, investing in infrastructure and human capital, and improving the business environment for long-term productivity growth. This will require concessional resources for cash assistance, food aid and debt relief in the short term and for investment in infrastructure and human capital to increase productivity in the long term.
- Third, use resources effectively on investments tailored to local situations to generate long-lasting results. The dash for shovel-ready projects may undermine the selection process, particularly when capacity is weak, and the context is drastically changing post-pandemic. Unclogging the bottlenecks to growth is essential. Take education as an example. This requires identification of the main factors that have limited effective learning in the specific local context, from inclusive access to education, to curriculum design, to school-to-work transition, and beyond. Experience in many countries suggests that, when projects are prepared in a rush, the incidence of corruption and mismanagement rises and the quality and value for money of projects declines (Fardoust et al, 2012). Taking advantage of sound initiatives on the ground would help identify projects within a good public investment management system. Infrastructure Consortium for Africa and Project Preparation Facilities Network are two good examples.

The stakes are high. The pandemic has wiped out years of progress and exacerbated the existing challenges of governance. Seizing the opportunity to incentivise and implement reforms addressing structural weaknesses in the post-corona era is crucial for protecting lives, livelihoods and the future. Injecting additional concessional resources for urgent and timely intervention is vital to prevent Africa from slipping into a downward spiral and to support a resilient recovery. The cost of inaction would be prohibitive. Fiscal consolidation at a time when fiscal risks are more likely to materialise is not a viable option. Making hard trade-offs between addressing immediate pandemic needs and long-term development will result in irreversible scars and low equilibrium. It is essential for countries in Africa, the international community, and all development partners and creditors to work together more closely and seize the opportunity for reforms supporting economic diversification and structural transformation, creating more and better jobs for the growing labour force, and enhancing productivity. Now is the time to take decisive action to protect Africa's 1.3 billion people from more severe and prolonged suffering and to support them in getting back on track towards long-term sustainable and resilient development.

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