

## Section 2 COVID-19: Drivers of Cross-Country Differences in Growth Impact

The COVID-19 pandemic has generated the deepest and most synchronized decline in economic growth rates across countries in the world since World War II. Current forecasts suggest that more than 90 percent of the countries in the world will experience a contraction in gross domestic product (GDP) per capita in 2020—surpassing the 85 percent of countries in recession at the height of the Great Depression (World Bank 2020q). In Sub-Saharan Africa, the economic impact of the pandemic has been severe even though the pandemic has not been as widespread as initially anticipated.<sup>1</sup> Uncertainty still continues as the health crisis is not over yet. Therefore, the region cannot let its guard down. An important amount of resources still needs to be distributed toward strengthening the continent's health systems and effectively protecting medical personnel while guaranteeing timely and affordable health care for its citizens.

Despite of the synchronization of the global pandemic crisis around the world, there is still heterogeneity on the depth of the impact and the consequent policy responses across countries and regions. Those cross-country differences in terms of different structural characteristics and policy responses may have shaped the growth impact differences. This section finds that Sub-Saharan Africa appears to have suffered a lesser blow from the pandemic than other developing regions. For instance, the median decline in 2020 growth across Sub-Saharan African countries (5.4 percent) is smaller than that of East Asia and the Pacific (6 percent), the Middle East and North Africa (6.9 percent), Europe and Central Asia (7.6 percent), and Latin America and the Caribbean (7.7 percent). Still, there is great variability in the 2020 growth decline across Sub-Saharan African countries. Three countries have a decline in economic growth smaller than three percentage points (Malawi, Mozambique, and Burundi). Angola, Ghana, Nigeria, and Senegal exhibit declines in growth that are in line with the median of the region. South Africa, on the other hand, has downward revision in growth of 8 percentage points. Finally, countries that are highly dependent on commodity revenues or tourism experienced a decline in growth that exceeded 10 percentage points (e.g. Cabo Verde, Mauritius, the Republic of Congo, Zimbabwe, Botswana, the Seychelles, and South Sudan).

The main findings are summarize as follows:

First, fiscal space plays a role in mitigating the impact or averting a deeper decline in growth in response to the pandemic. Softening the blow of future deleterious shocks will require African countries to strengthen the institutions that support transparent, efficient, and accountable fiscal policy. Governments will need to create the preconditions to foster domestic resource mobilization and improve their efficiency of public spending. Introducing digital technologies to broaden the tax base and strengthening tax administration are beneficial. Fostering public investment management systems has been found to boost the public investment multiplier.

Second, the composition of government debt matters for alleviating the adverse growth impact associated with the COVID-19 pandemic. External borrowing from official creditors entails lower risks (in terms of interest rates, maturity, and refinancing) than from private creditors. In

<sup>1</sup> The extent of the spread of the pandemic might also be underestimated, as testing is lower than in other regions in the world (section 1).

one of the striking findings, countries with less risky debt profiles (i.e. countries with a greater propensity to borrow from official creditors—including multilateral organizations) tended to exhibit a lower decline in their growth rate. This result may imply that managing debt profiles (i.e. reducing the government debt risk profile) may help tackle vulnerabilities, and hence increase resilience.

Third, diversifying trade patterns across markets is crucial as intraregional trade integration may help secure the supply chains of essential goods—particularly, during pandemics. Consequently, Sub-Saharan Africa needs policies to foster greater intraregional trade integration. This will help increase export market diversification and build resilience against shocks such as a pandemic crisis. The evidence in this section shows that countries that are more exposed to trade with advanced countries have suffered a greater decline in economic growth (e.g. through global value chains). At the same time, countries that have greater intraregional trade appear to have been relatively shielded.

Fourth, diversifying trade across products is also important on the road to recovery. Countries with greater commodity trade exposure—more, specifically, a larger share of commodity exports in GDP—tend to experience a larger downfall in economic growth. During the pandemic period, more diversified value-added exporters have also experienced a large decline in economic growth due to the disruption in global value chains. On the other hand, some less diversified oil exporters were able to mitigate a larger decrease in growth due to saving prior to the pandemic. Regardless of this result, as the global economy recovers, African countries still have to advance their export product agenda—especially away from commodities and toward goods and services with value addition. Designing strategies to diversify exports or create value addition in commodities (e.g. agribusiness and direct marketing) can improve the ability of countries to develop resilience against shocks.

Finally, the quality of institutions is essential to kick in the effects of policies: stronger policies along with better institutional quality enabled countries to record a lower decline in economic activity in the pandemic period. Enhancing institutions, consequently, help design and implement effective policy responses to recover rapidly and thrive in the aftermath of the pandemic.

What would it take for Sub-Saharan African countries to recover faster and more sustainably? Recovery from the disruption in global supply chains may take time (as well as other external drivers of growth). Therefore, it is indispensable to find ways to reactivate domestic and regional engines of growth. The full implementation of the African Continental Free Trade Area (AfCFTA) will help boost the continent's competitiveness and promote the development of regional value chains (section 3). To engineer a recovery that surpasses pre-pandemic levels, key elements of the roadmap include building up institutions and generating fiscal space—including measures to mobilize domestic resources, promote public investment, and implement debt transparency and management.

## 2.1. COVID-19: AN EXPLORATORY ANALYSIS OF THE OUTPUT EFFECTS ACROSS COUNTRIES

The COVID-19 shock that has hit the world economy and resounded throughout African nations is the combination of demand and supply shocks, which tend to covary. Theoretically, the COVID-19 shock has both aggregate supply and aggregate demand implications.<sup>2</sup> From the supply side, the virus can affect workers' participation in economic activities and then reduce the labor supply. However, the reduction in labor supply goes beyond the number of infected people as a result of strict lockdown measures (such as travel bans, workplace and school closings, and so on). From the demand side, the virus exposes individuals who purchase goods to infection. Therefore, private consumption declines. The access to goods is even more restricted as stores shut down or operate at reduced hours. At the same time, the uncertainty about the duration and depth of the virus may delay the spending of consumers and firms (Knightian uncertainty).<sup>3</sup>

Additionally, the lockdown measures of the COVID-19 pandemic led to the temporary closure or slowdown in operations of many factories and business. Consequently, these operations demanded fewer inputs, including less energy and reduced cargo shipping. In turn, the demand for energy, such as liquefied natural gas used in shipping, also decreased. The decreased demand for energy (i.e. oil) had an impact on international energy prices (i.e. crude oil prices), and as a result of this global shock, stock markets plunged, and oil prices fell to even lower levels.

The COVID-19 crisis led to disruptions in global supply chains. Wuhan, the Chinese city in Hubei province that was the initial epicenter of the epidemic, is a major transportation hub with railways, roads, and expressways passing through the city and connecting to other major cities. This city is also a traditional manufacturing hub and promotes modern industrial activities in China, such as the automobile industry (e.g. Peugeot Citroen, Renault, Honda, and Dongfeng, among others). The lockdown imposed in Wuhan by the Chinese government led to the temporary suspension or slowdown of business in manufacturing sectors and services and disrupted global supply chains. As the COVID-19 virus spread throughout different countries in Asia, Europe, and the Americas, some governments implemented containment measures including international travel bans—thus, disrupting the transportation and tourism industries. Global and local businesses slowed down significantly, leading many workers to be laid off.

This section investigates the impacts of COVID-19 on economic growth in Sub-Saharan Africa and identifies factors that contribute to the economic resilience of countries during the COVID-19 pandemic shock. It presents linear regressions of growth on a wide array of variables (macroeconomic, trade, and financial variables). The dependent variable is the change in growth rate as measured by the difference of the 2020 GDP growth forecast undertaken by the World Bank's Global Economic Prospects in June 2020 vis-à-vis January 2020.<sup>4</sup> The regression analysis is conducted for a sample of 135 developing countries, including 47 Sub-Saharan African

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<sup>2</sup> See Guerrieri et al. (2020).

<sup>3</sup> Knightian uncertainty refers to the absence of any quantifiable knowledge about the occurrence of an event. Agents cannot have the information needed to set the likelihood of such event. In the presence of Knightian uncertainty, economic agents keep their safest assets in their portfolio and defer future consumption and investment plans.

<sup>4</sup> Berkmen et al. (2012) use the difference between 2009 growth outturns and growth forecasts made before the crisis to provide an initial exploration of the real effects of the 2008–09 global financial crisis. The authors argue that the use of these forecasting errors enables them to avoid issues such as controlling for variations in growth rates due to differences in levels of development or cyclical positions, or other factors unrelated to the impact of the crisis.

countries.<sup>5</sup> One of the empirical results shown in table OA2.1, in the online appendix, indicates that the dummy variable for Sub-Saharan Africa is positive and, in most cases, significant. This finding implies that (conditional on the drivers of growth) the decline in growth—although substantive—was not as large in Sub-Saharan Africa as in other developing economies in the sample. Moreover, compared with the West and Central Africa region, the East and Southern Africa region exhibited on average a smaller decline in economic growth—again, on average, and conditional on the drivers of growth. These findings raise the question: why were some regions/countries able to mitigate or avoid a deeper decline in economic growth while others were not?

Creating a cushion can make an economy more resilient against crises, and better crisis management policies can also mitigate negative impacts on economic growth. Building up fiscal space for appropriate pandemic policies matters particularly if a country has a higher degree of exposure to the global markets and their economic structure is less flexible. Diversifying trade patterns (across products and markets) is also crucial, and so is strengthening intraregional trade in Sub-Saharan Africa, as higher commerce across borders within the region may help secure the supply chains of essential goods in times of crisis—and, particularly, during pandemics.

Although economies with greater exposure to global markets may be more susceptible to shocks from the COVID-19 pandemic, having reserves and fiscal space could prevent the economies from entering into much deeper recessions. The economic effects of the COVID-19 shock can be transmitted through three main channels, including health, trade, and financing. Regarding the health channel, tables OA2.1 and OA2.2 in the online appendix show that the estimated coefficients of government response and, especially containment and health measures, are negative and significant.<sup>6</sup> Therefore, containment measures implemented by the government that target any specific segment of the population or geographical area rather than generalized containment may help prevent the domestic economy from falling into a further slump. If the government fails to deliver any effective pandemic policies, then the economy suffers and growth declines further. The empirical results fail to show any significant impacts of health indicators in the regressions. This could be attributed to the fact that measuring impacts via the health channel is challenging as the COVID-19 is still a novel disease.<sup>7</sup> When looking at the Country Policy and Institutional Assessment (CPIA) overall index,<sup>8</sup> better government policies—such as appropriate economic management policies—foster higher economic growth (figure 2.1).

An inspection of the trade channel, moreover, shows that countries with greater trade exposure tend to exhibit a deeper decline in economic growth (figure 2.2). Empirical evidence supports the existence of a negative relationship between trade exposure and growth. The deleterious effects of trade exposure can be partly explained by vulnerabilities to commodity price volatility

5 When accounting for the information of the variables involved in the regression analysis, the number of countries in the effective sample is up to 101.

6 The government response indicator (from Oxford Policy Tracker) captures a series of containment and health measures as well as economic support measures implemented by governments in response to COVID-19. The containment and health measures include school closings, workplace closings, cancellation of public events, restrictions on gathering, closure of public transportation, stay-at-home requirements, restrictions on internal movement, and international travel controls. The economic support measures record whether the government is providing direct cash payments to people who lose their jobs or cannot work, or if it is freezing households' financial obligations.

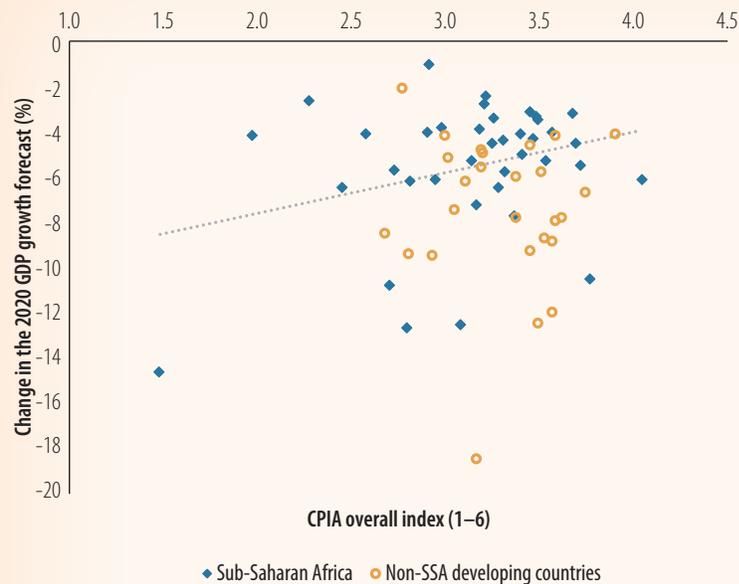
7 Medical researchers' work is still ongoing and in progress, and they are still finding new evidence. Accordingly, there have not always been definite treatments of COVID-19 yet.

8 CPIA is a broader measure of a country's policies and institutions.

(e.g. international oil prices). The estimated coefficients of international trade openness have a negative and significant impact on economic growth (-0.024 points in regression [1] in table OA2.1, in the online appendix). Furthermore, if a country or region has fewer linkages to the global financial markets—say, due to thinner domestic financial markets—the decline in economic growth through this channel would be weak or negligible. For example, in figure 2.3 regions that have greater exposure to global financial markets show a larger decrease in GDP growth than the regions with less exposure to global financial markets.<sup>9</sup> Consequently, the slump in stock and oil markets explains the heavy declines in Latin America and the Caribbean (-7.7 percentage points), Europe and Central Asia (-7.6 percentage points), and the Middle East and North Africa (-6.9 percentage points) compared with relatively smaller declines in South Asia (-5.3 percentage points) and Sub-Saharan Africa (-5.4 percentage points).

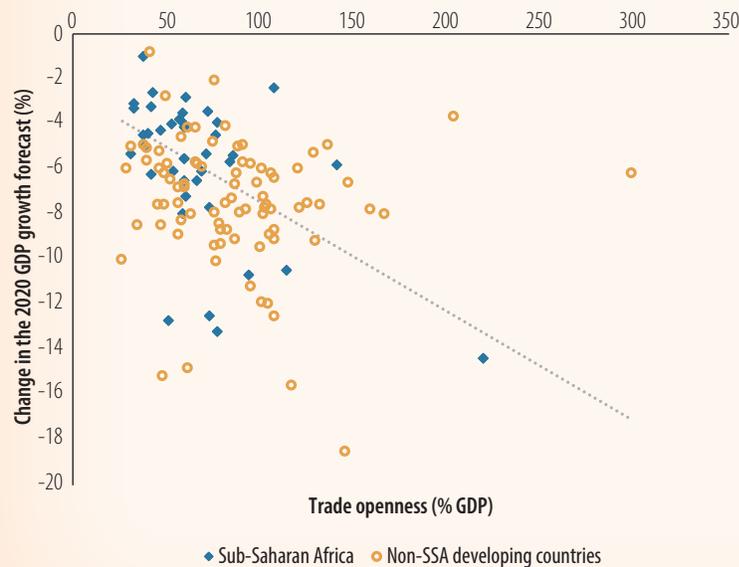
Fiscal space would help generate a cushion against crisis even if the country is highly dependent on external financing. The regression analysis finds that countries that are more dependent on external financing could experience deeper declines in economic growth. For instance, in regression [1] in table OA2.1, in the online appendix, the estimated adverse impact of (gross) capital flows on economic growth at -1.5 is significantly greater than the one of trade openness. Therefore, countries

**FIGURE 2.1: CPIA Overall Index versus Change in GDP Growth**



Source: World Bank World Development Indicators.  
 Note: CPIA = Country Policy and Institutional Assessment; GDP = gross domestic product.

**FIGURE 2.2: Trade Openness versus Change in GDP Growth**

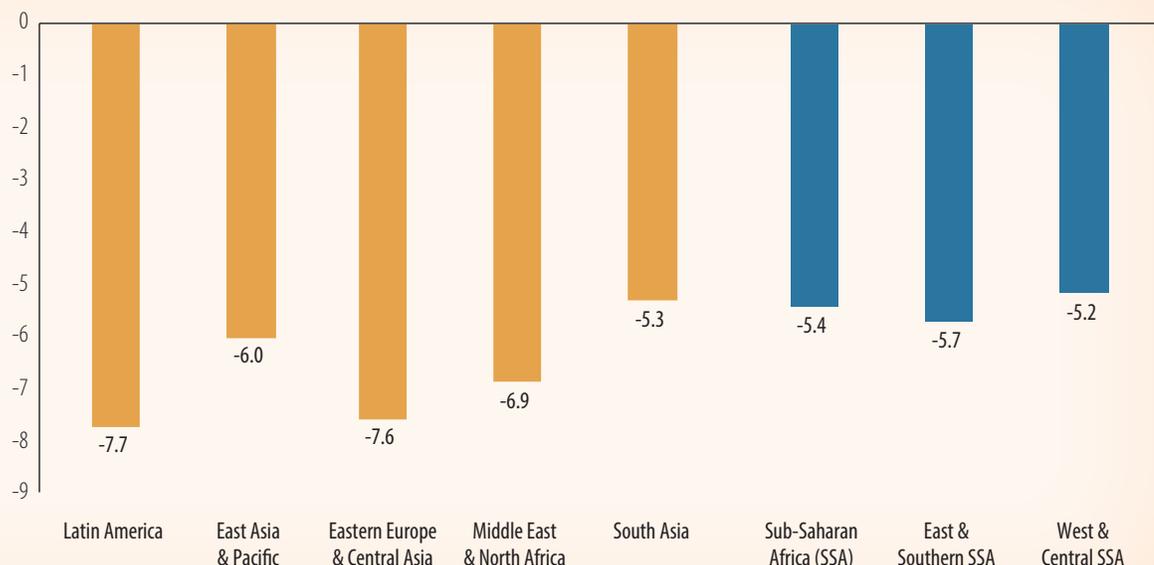


Source: World Bank World Development Indicators.  
 Note: GDP = gross domestic product.

<sup>9</sup> Regions such as East Asia and the Pacific, Latin America and the Caribbean, and Eastern Europe and Central Asia have more emerging market economies than regions in South Asia and Sub-Saharan Africa. Therefore, many countries in South Asia and Sub-Saharan Africa still have underdeveloped domestic financial markets.

Regions with greater exposure to global financial markets experience a larger decrease in GDP growth compared with regions with less exposure.

**FIGURE 2.3: Change in the 2020 Growth Forecast, by Region (percentage points)**

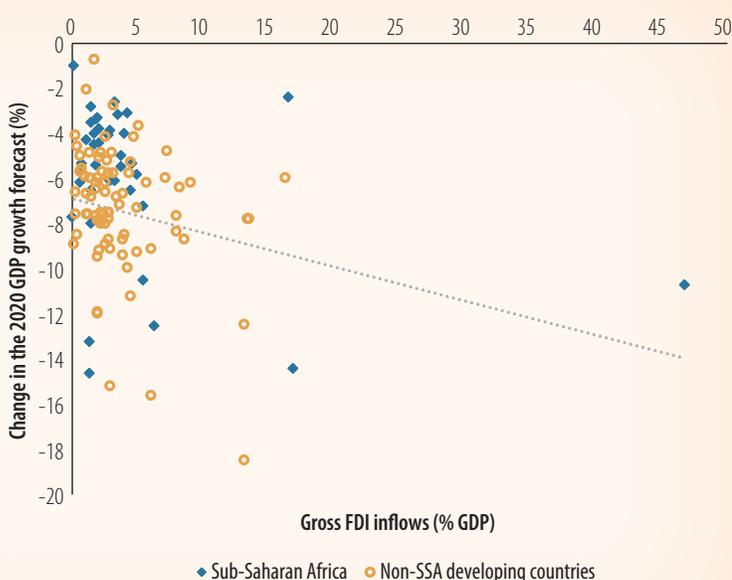


Source: World Bank Global Economic Prospects, various issues.

with greater dependence on external financing tend to have larger declines in growth. When looking at the composition of capital inflows, the regression analysis finds that portfolio investment inflows and other investment inflows are significantly positive at 0.28 in regression [3] in table OA2.2, in the online appendix. Consequently, portfolio investment inflows and other investment inflows help prevent further declines in GDP growth. Figure 2.4 illustrates

Countries with greater FDI dependence tend to have a large decline in growth.

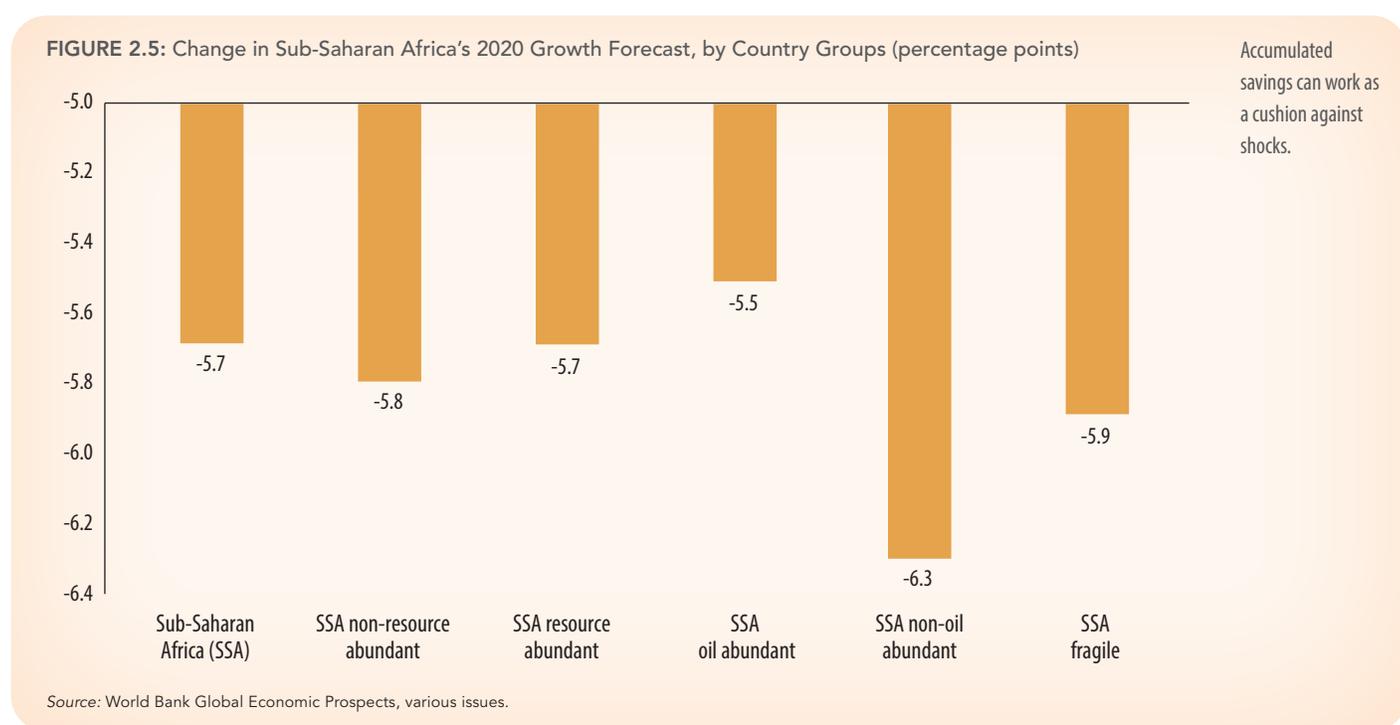
**FIGURE 2.4: Gross FDI Inflows versus Change in GDP Growth**



Sources: World Bank World Development Indicators; IMF Balance of Payments Statistics 6.0.  
Note: FDI = foreign direct investment; GDP = gross domestic product.

that countries with greater foreign direct investment (FDI) dependence tend to have a large decline in growth. The regression results, however, do not robustly support the evidence in figure 2.4 because the coefficients of FDI flows have insignificantly negative impacts on economic growth (at -0.04 in regression [11] in table OA2.2, in the online appendix). FDI is one of the major capital flows into the Sub-Saharan Africa region. Most likely, FDI activity is more dynamic in commodity-abundant countries because those commodities attract massive foreign investments.

Although countries with more concentrated economic structures are vulnerable to the crisis, accumulated savings can work as a cushion against shocks, as shown in figure 2.5. Oil abundant countries experience lower declines at -5.5 percentage points relative to non-oil abundant countries at -6.3 percentage points in Sub-Saharan Africa (figure 2.5). Prior to the COVID-19 shock, oil exporters excluding Nigeria<sup>10</sup> accumulated some reserves from oil export proceeds, and consequently, the resulting fiscal space from these revenues may have helped finance policy actions and reduce the adverse impact from the pandemic even if their economic structure was not as diversified. Oil abundant countries registered more favorable fiscal and current account balances in 2019, therefore, those countries had some resources in their coffers prior to the COVID-19 crisis. For instance, oil exporting countries in Sub-Saharan Africa recorded a fiscal surplus that exceeded 1 percent of GDP in 2019 and exhibited a current account deficit of around 2 percent—the smallest among commodity exporting groups in the region.



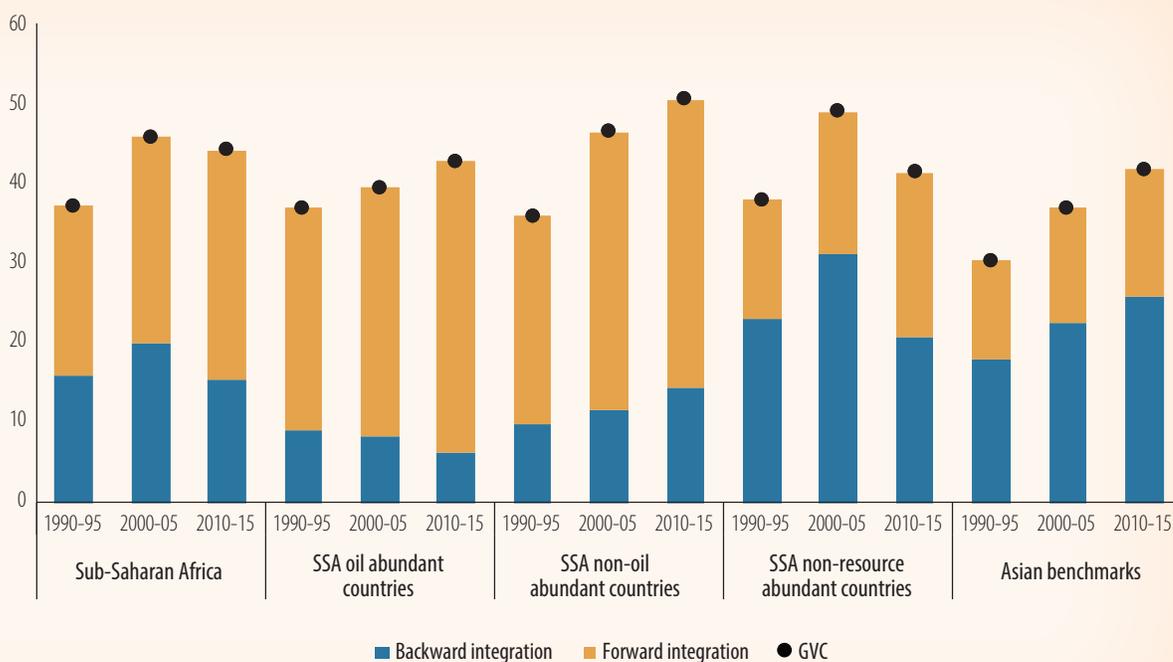
The cushion created by the fiscal space matters even if the economy's structure tends to be driven by primary goods/commodities. For instance, empirical evidence suggests that natural resource/commodity exporters experience larger negative and significant impacts on economic growth (see table OA2.2, in the online appendix). It has often been suggested that commodity trade exposure can be reduced if a country diversifies its economic structure by developing greater value addition capabilities and exporting more value-added products. Sub-Saharan Africa has indeed increased its exposure to global value chains over the past 20 years. Oil abundant Sub-Saharan African countries have a higher participation in forward integration, while non-oil abundant countries have a higher participation in backward integration from 2000–05 to 2010–15 (figure 2.6).<sup>11</sup> Global value chains nearly collapsed during the COVID-19

<sup>10</sup> This statement explains Sub-Saharan Africa's regional average, but not the case of Nigeria since it recorded deficits.

<sup>11</sup> Section 3 provides more details on this.

Oil abundant Sub-Saharan African countries have a higher participation in forward integration, while non-oil abundant countries have a higher participation in backward integration.

FIGURE 2.6: Participation in Global Value Chains, 1990–2015 (% of gross exports)



Sources: EORA database; Coulibaly, Kassa, and Zeufack 2020.

Note: Backward integration is the share of foreign value added in a country's exports. Forward integration is the share of a country's value added in other countries' exports. Asian benchmarks = Bangladesh, Cambodia, Indonesia, and Vietnam; GVC = global value chain; SSA = Sub-Saharan Africa.

crisis, and the trade disruptions have resulted in temporary suspensions and/or slowdowns of production processes within global value chains. Table OA2.2, in the online appendix, confirms this finding, for example, with the negative and significant growth effects of countries with greater export linkages to advanced countries and the positive (although not significant) impact of intraregional trade. Greater dependence on global value chains has deeper negative impacts on economic growth. Therefore, countries with greater participation in global value chains have been affected by the disruptions from the pandemic while intraregional trade may provide an avenue to shield economies from the pandemic.

The regression analysis also examines the impact on growth of debt management and fiscal and/or external savings. The empirical results show that (1) accumulating external debt by official creditors is less risky than ones by private creditors, therefore, the composition of debt profiles matters, and (2) maintaining primary balance and current account surpluses helps the economy as a cushion effect in the crisis. Changes in a country's borrowing pattern will alter the risk profile and may vary the transmission mechanisms of the pandemic shock. Especially a shift in the composition of debt from public creditors to private creditors can render the economy more vulnerable, due to greater currency, interest rate, maturity (i.e. shorter intervals), and refinancing risks. Enhanced debt management requires greater debt transparency, particularly in low-income countries. Poor recording, monitoring, and reporting systems have increased opacity in the debt profiles of low-income countries. This has resulted in greater risks associated with

massive hidden debt operations and greater (than expected) interest payments, which leads to heavier government burdens (World Bank 2020a). Empirical evidence shows that countries with greater public debt exposure to private creditors tend to experience a larger decline in economic growth as the coefficients of public and publicly guaranteed (PPG) external debt to private creditors are negative and in some cases significant, while the ones of PPG external debt to public creditors are positive and significant (0.0752 points in regression [2] in table OA2.1, in the online appendix).

Accumulating government primary and current account surpluses helps create a cushion in the economy and enhance resilience against the crisis. Reducing general government gross debt also helps mitigate macroeconomic vulnerability in the event of economic shocks. For instance, the coefficients of the government primary balance and current account balance are positive and significant in regression [1] in table OA2.1, in the online appendix; therefore, both fiscal and external savings play a role in limiting the adverse impacts of the pandemic on economic growth. Consequently, countries with smaller primary deficits or primary surpluses have space to finance policies that could help avoid deeper declines in economic growth. The same can be said about countries that have accumulated external savings (current account surpluses). Finally, the estimated coefficients of general government gross debt are negative but insignificant in most cases, and hence a country with larger general government gross debt could still face a significant decrease in economic growth.