1. Recovery and Rising Risks

Macroeconomic outcomes in sub-Saharan Africa continue to strengthen, reflecting domestic policy adjustments and a supportive external environment, including continued steady growth in the global economy, higher commodity prices, and accommodative external financing conditions. Growth is expected to increase from 2.7 percent in 2017 to 3.1 percent in 2018; inflation is abating; and fiscal imbalances are being contained in many countries.

While the improved outcomes are welcome, the nature of the adjustment has been such that underlying vulnerabilities—both near-term and medium-term—have yet to be decisively addressed to shield the recovery against risks arising from both domestic and external shocks. More progress on domestic revenue mobilization is needed to ensure debt sustainability and create fiscal space for much needed investment and development spending. Further, potential growth over the medium term remains too low to create the number of jobs needed to absorb anticipated new entrants into labor markets.

The fiscal consolidation thus far largely reflects the oil price rebound for oil exporters coupled with sharp cuts in capital spending in a number of countries. With few exceptions, there has been relatively little progress in strengthening domestic revenue mobilization. Indeed, in some oil-exporting countries (Angola, Republic of Congo, Equatorial Guinea, Gabon) non-commodity revenues declined in real terms in 2017 although other resource-intensive countries were able to raise non-resource revenues. Many countries have delayed adjusting domestic fuel prices in response to the recent oil price increase, resulting in the re-emergence of wasteful energy subsidies. Domestic arrears also remain large, with the stock amounting to about 5 percent of GDP on average at the end of 2017. And beyond the central government, state-owned enterprises (SOEs) are becoming a major fiscal risk in some countries where budgetary resources are used to keep inefficient SOEs afloat.

This fiscal performance constrains the private sector response and deepens pressures on financial systems. The continued incurrence of domestic arrears, typically to suppliers, has also contributed to the buildup in nonperforming loans (NPLs) seen in many countries (Angola, Chad, Ghana, Equatorial Guinea, Mozambique), weighing on credit to the private sector and increasing financial sector vulnerabilities.

Financial sector vulnerabilities are elevated in some countries with high NPLs, low bank profitability, and significant shortfalls in capital ratios. In others, attractive returns on government securities have supported bank profitability.

On the external side, current account balances are little changed. Financial inflows, however, were strong, with Eurobond issuances at record highs in the first half of 2018. The turbulence in emerging market economies as monetary policy normalization in advanced economies progressed has led to some increase in spreads. Reserve buffers have however generally not been rebuilt despite the favorable environment and, in half of the countries in the region, remain below levels considered adequate.

The aggregate picture hides a wide range of country experiences. The recent peace treaty in South Sudan, the ongoing peace process in Mozambique, as well as the improved relations between Eritrea and Ethiopia, provide a window for those countries to move forward. In Angola, important steps have been taken to address longstanding governance issues and to tackle the deep macroeconomic imbalances that have held the economy back in recent years.

Looking forward, the global economy is entering a period of unusually elevated policy uncertainty with significant downside risks that could have adverse impacts on many countries in the region. Growth is already slowing in most advanced economies and could slow more sharply in the event trade tensions escalate. The combination of rising interest rates as output gaps close in the advanced economies and a continued strong dollar will raise debt service burdens, increase the cost of new borrowing, and

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heighten pressures on competitiveness in those countries whose currencies are pegged, formally or informally, to appreciating currencies.

To better position themselves to address these challenges, countries should:

- Implement fiscal strategies that are designed to reduce debt vulnerabilities consistent with a steady fiscal consolidation. Most countries have devised such strategies; however, to be effective, their implementation needs to proceed even at times of temporary commodity price upswings or ahead of elections, which are scheduled within the next year in many of the larger economies on the continent, including Nigeria, Senegal, and South Africa.
- Advance revenue mobilization. With tax revenues, on average, at 3–5 percent of GDP below estimated potential, there is substantial scope for countries to boost their revenue base and open up fiscal space to address their development priorities. The common elements of the successful revenue mobilization episodes in the region included a focus on basic institutions, on top of an effective and modern tax policy and administration. It also requires measures to build the tax base, to simplify the tax system, and to tackle exemptions and incentives. Importantly, successful reforms did not follow a set template but were tailored to country circumstances (IMF 2018a).
- Enhance the efficiency of expenditures, in particular to address the re-emergence of energy subsidies which are known to be inefficient, by implementing automatic fuel pricing mechanisms (as successfully introduced in Ghana and Mozambique) and, at the same time, undertaking mitigating measures to compensate the poor.
- Allow greater exchange rate flexibility where institutional setups permit and barring balance sheets vulnerabilities.
- Address growing financial sector weaknesses in a timely manner. Waiting until there is a collapse forces a disruptive adjustment and adds to fiscal costs, deepening the drag

on growth. Some countries recently made progress in reducing NPLs (Equatorial Guinea, Guinea-Bissau), strengthening capital buffers (Angola, Ghana, Mozambique), and adopting new prudential rules (Economic and Monetary Community of Central Africa (CEMAC), West African Economic and Monetary Union (WAEMU)). Nevertheless, addressing persistent NPLs requires comprehensive NPL reduction strategies.

• Pursue policies to foster private investment and enhance potential growth, including opening to trade (notably in the context of the African Continental Free Trade Area), promoting digital connectivity and a flexible education system, removing market distortions, encouraging financial deepening, ensuring a sound business environment, better allocating public spending, and ensuring adequate provision of public goods (including welldeveloped infrastructure).

Against this backdrop, Chapter 2 provides a detailed analysis of the trends and dynamics of flows to sub-Saharan African countries by focusing on three key questions: (1) how have nonofficial financial flows—both by asset type and investor residency evolved over time? (2) what factors have been driving capital flows to the region? and (3) what are the domestic macroeconomic implications (in terms of exchange rates, output, and financial stability) of the various types of foreign inflows?

Finally, Chapter 3 explores how sub-Saharan Africa can create future-proof jobs for its rapidly growing labor force in the context of rapid technological changes, considering three scenarios reflecting different global uncertainties that may shape the future of work in the region and related to technological change, geopolitics, and climate change.

MACROECONOMIC DEVELOPMENTS AND PROSPECTS

A Less-Supportive External Environment with Rising Uncertainty

While global growth continues to expand steadily, rising trade tensions, anticipated monetary policy

normalization, and volatility in asset markets cloud the outlook for sub-Saharan Africa. Global growth is projected at 3.7 percent in 2018 and 2019, down from the 3.9 percent projection of the April 2018 *World Economic Outlook* (WEO). The expansion has besides become more uneven and appears to have peaked in some major economies (Figure 1.1). This is taking place in

Figure 1.1. Global Growth Projections: Current versus April 2018



Source: IMF, World Economic Outlook database.

Note: Solid lines show current projections; dotted lines show projections of April 2018, IMF, World Economic Outlook database.

Figure 1.2. Selected Commodity Prices: Expected Changes Average 2019–20 versus 2017









Note: Data as of September 2018.

an environment of increased trade tensions, with tariff increases already in place for a number of products, weakening sector-specific sentiment and other forward-looking indicators, and contributing to greater volatility in commodity and other asset markets. Over the medium term, potential growth is expected to remain below precrisis averages amid population aging and sluggish productivity growth.

Despite increased volatility in commodity markets, the outlook for energy points to higher prices relative to what was expected last April, but is mixed for metals and other commodities exported by the region (Figure 1.2). While prospects for energy prices bring a relief to oil producers, they also imply a worsening of the terms of trade for oil importers (three-quarters of the countries in the region).

Global financial conditions remain accommodative but have tightened somewhat since mid-April 2018 with higher bond spreads and capital outflows from certain emerging and frontier markets. Global investors' appetite for the region's securities was elevated, with international sovereign bond issuances by sub-Saharan African frontier markets in 2018 reaching US\$13.8 billion in the first half of the year, higher than the annual total in any previous year, and compared with US\$7.6 billion for the whole year 2017 (Figure 1.3). Senegal, for instance, issued US\$2.2 billion worth of Eurobonds in March 2018 with issuance being five times oversubscribed, while Angola and Ghana issued Eurobonds worth US\$3 billion and US\$2 billion, respectively, in May, with issuances being three and four times oversubscribed, respectively. In July, Angola reopened the May Eurobond issuance and raised an additional US\$500 million.

The Modest Recovery Continues, Mainly Driven by Oil Exporters

Average growth for the region (weighted by GDP in purchasing power parity terms) is expected to reach about 3.1 percent in 2018, up from 2.7 percent in 2017 (Figure 1.4). Growth momentum improved most notably for oil exporters, mainly in Nigeria, but remains subdued in South Africa.

• Nigeria is expected to grow by 1.9 percent in 2018, up from 0.8 percent in 2017, mostly owing to fewer disruptions in oil production and some pick-up in the non-oil economy.

The recovery is expected to contribute about 0.7 percentage points to the region's average growth in 2018 and lift activity in Nigeria's trading partners through stronger remittances, financial spillovers, and import demand (IMF 2018b).¹ For example, spillovers to Benin's and Niger's growth are estimated to be ¹/₂ and ¹/₃ percentage points, respectively. Over the medium term, and under current policies, growth is expected to plateau at about 2¹/₂ percent, still below the rate of population increase.

• Growth in South Africa is expected to be about 0.8 percent in 2018. While a pickup in private activity is possible as policy uncertainty is reduced, public investment remains constrained by limited fiscal space and weaknesses in SOEs' balance sheets. On current policies, growth is expected to stabilize at about 1.8 percent over the medium term. Spillovers to the region are likely to manifest themselves mainly through the financial sector and import demand (IMF 2016).

Across countries, there is a sizable disparity in growth performances.² Non-resource-intensive countries continue to grow at about 6 percent on average; resource-intensive countries have seen some pickup in growth but still below levels attained prior to the 2014 commodity price shock; and a few countries continue to deal with security problems imposing severe human and economic tolls. One-third of the population of sub-Saharan Africa lives in countries where GDP per capita fell in 2017 and is expected to fall further in 2018 and 2019.

On current policies, growth is expected to accelerate over the medium term to about 4 percent, or 1½ percent in per capita terms. But this will not be enough for the region to fully harness its demographic dividend, as job creation will likely continue to fall short of what is needed to absorb new entrants to the labor markets. Indeed, with the number of sub-Saharan Africans reaching working age (15–64) projected at more than 100 million during 2030–35, exceeding that of the rest of the world, the region will need to create on average 20 million jobs (IMF 2015) every year during 2018–35, that is twice as many as has been created on average over the past five years (Figure 1.5).

Inflation Pressures are Expected to Ease Further

Inflation pressures in sub-Saharan African economies are waning, especially in oil-exporting economies. Average inflation in oil-exporting countries is expected to fall from 17 percent in 2017 to about 13 percent in 2018. Elsewhere, inflation remains relatively low. Inflation dynamics reflect the relatively slow pace of the recovery, some tightening of monetary policy or higher agricultural production and, in many countries, the incomplete pass-through of higher oil prices.



Figure 1.5. Sub-Saharan Africa: Change in Employment



Note: See page 52 for country groupings tables.

¹ Using the estimated spillover coefficients of Nigeria and South Africa to the rest of the region of 0.08 and 0.11, respectively (Arizala and others 2018).

² See appendix tables for historical and forecasts for key macroeconomic variables.

Foreign Exchange Reserve Buffers need to be Rebuilt

Compared with 2017, current account balances are expected to improve in oil-exporting countries and deteriorate in other countries. Despite the adjustment in current account balances for oilexporting countries, foreign exchange reserve buffers are expected to remain below levels deemed





Sources: IMF, World Economic Outlook database; and IMF staff calculations.

Note: Oil exporters, except for Angola, Nigeria, and South Sudan, are grouped into one data point corresponding to Economic and Monetary Community of Central Africa (CEMAC). West African Economic and Monetary Union (WAEMU) countries are grouped into one single data point and classified as non-resource-intensive. See page 52 for country groupings tables.

Figure 1.7. Sub-Saharan Africa: Overall Fiscal Balance, 2017–18

adequate based on metrics derived from emerging and developing countries' crises experiences (Figure 1.6).³

Fiscal Consolidation is Proceeding, but its Quality Needs to Improve

Baseline projections point to a further narrowing of fiscal deficits in sub-Saharan Africa. The average fiscal deficit for the region is set to shrink from 4.2 percent of GDP in 2017 to 3.3 percent in 2018. This masks however significant variations across economies, with fiscal balances expected to improve in oil-exporting countries, remain unchanged in non-resource-intensive countries, and deteriorate somewhat in other resource-intensive countries (Figure 1.7). The improvement in fiscal balances in oil-exporting countries stemmed in most cases from increased revenues from the oil sector and cuts in capital expenditures, with a notable exception of Nigeria where public investment has doubled over the last two years, albeit from low levels. Further radical cuts in capital expenditure risk undermining medium-term growth, if this investment is not picked up by the private sector.

Meanwhile, progress on much needed domestic revenue mobilization has been elusive, remaining far short of the region's potential. Under current medium-term fiscal plans, the revenue gap, estimated at 3–5 percent of GDP on average across countries, is not expected to be closed.⁴ Indeed,



Source: IMF, World Economic Outlook database.

Note: NRIC = non-resource-intensive countries; ORIC = other resource-intensive countries;. See page 52 for country groupings and page 53 for country abbreviations tables.

³ The assessment of reserve adequacy is made using IMF tools specifically designed for emerging market economies and creditconstrained economies. See http://www.imf.org/external/np/spr/ara/ for details.

⁴ Sub-Saharan African countries could on average mobilize about 3 to 5 percent of GDP in additional tax collection, through a combination of reforms improving the efficiency of current systems including the reduction of tax exemptions, and of institutional changes, such as improvements in governance and measures to control corruption (IMF 2018c).

domestic revenues are envisaged to rise by about 2½ percent of GDP in oil exporting countries, and only by ½ percent of GDP in other countries (Figure 1.8).

The quality of the fiscal adjustment is also threatened by the re-emergence of fuel subsidies. While most countries did pass lower oil prices through to domestic prices, most countries have not raised prices as much in response to the recent increase in international fuel prices. Indeed, between early 2017 and April 2018, the median pass-through coefficient was zero for oil exporters and 47 percent for oil importers (Box 1.1).⁵ Fuel prices are on average at about US\$1.09 per liter (Figure 1.9), implying an estimated average fuel subsidy of 2 percent of GDP per annum once transportation and distributions costs, profit margins, and taxes are taken into account.

Figure 1.8. Sub-Saharan Africa: Medium-Term Fiscal Plans 2018–23



Sources: IMF, World Economic Outlook database; and IMF staff calculations.

Note: Excludes Burundi, Eritrea, and South Sudan due to data availability. See page 52 for country groupings tables.

Figure 1.9. Sub-Saharan Africa: Gasoline Prices, April/May 2018

BALANCE SHEET VULNERABILITIES REMAIN ELEVATED

Debt Vulnerabilities Persist

In 2017, 15 sub-Saharan African countries were classified at high risk of debt distress (Burundi, Cameroon, Cabo Verde, Central African Republic, Ethiopia, The Gambia, Ghana, São Tomé and Príncipe, Zambia) or in debt distress (Chad, Republic of Congo, Eritrea, Mozambique, South Sudan, Zimbabwe) (Figure 1.10). Debt dynamics for countries in debt distress or at high risk of debt distress mainly reflect large primary deficits, which for many countries widened sharply with the commodity price collapse (IMF 2018d). In several cases, exchange rate depreciations have given rise to negative balance sheet effects and contributed to a deterioration in debt solvency and liquidity indicators (Figure 1.11).

Reflecting the ongoing fiscal consolidations and growth rebound, the average level of public debt in 2018 is expected to remain around its 2016 level, at about 57 percent of GDP, but there is wide heterogeneity across countries. Debt reduction mainly reflects adjustments in oil exporters and to a lesser extent in non-resource-intensive countries (Figure 1.12). Also, in some highly indebted countries (Republic of Congo, The Gambia) improved revenue performance and higher GDP growth are expected to yield significant improvements in debt servicing capacity.



Sources: Country authorities; and IMF staff calculations.

Note: See Box 1.1. for details. See page 53 for country abbreviations table.

⁵ Defined as the nominal change in domestic retail prices divided by the nominal change in international prices, both in domestic currency.

Baseline public debt trajectories are subject to significant uncertainties. In particular, several countries face increased foreign exchange risk and debt management challenges with nontraditional official and private creditors playing a more important role. The share of foreign-currency denominated public debt in total public debt increased across sub-Saharan Africa from an average of 23 percent in 2011-13 to 32 percent of GDP in 2017 (Figure 1.13). On the creditor landscape, while the share of concessional financing has remained unchanged and official creditors continue to represent the largest creditor group, the share of debt held by private banks and bondholders has increased to about 15 percent. At the same time, borrowing from non-Paris Club countries, especially from China, has been rising.

Figure 1.10. Sub-Saharan Africa: Debt Risk Status for PRGT Eligible Low-Income Developing Countries, 2008–17



Source: IMF, Debt Sustainability Analysis database.

Note: Debt risk ratings for Burundi, Chad, The Gambia, Lesotho, Rwanda, São Tomé and Príncipe, and Zimbabwe begin in 2009, Cabo Verde in 2014, and for South Sudan in 2015. PRGT = Poverty Reduction and Growth Trust.

Figure 1.11. Sub-Saharan African Countries at High Risk or in Debt Distress: Cumulative Contribution from Debt Decomposition, 2013–17



Sources: IMF, World Economic Outlook database; and IMF staff calculations.

Furthermore, fiscal uncertainties related to contingent liabilities and the accumulation of public domestic arrears also increased in some countries. Arrears amount to about 5 percent of GDP on average (end-2017 mean) and exceed 20 percent in several countries (Equatorial Guinea, Gabon, The Gambia). In most countries, government arrears to suppliers of goods and services account for the bulk of domestic arrears, followed by those to other private firms and workers as well as to SOEs. In some cases, there has also been an accumulation of arrears among SOEs. The accumulated SOE liabilities to the economy have occasionally reached a worrisome level of 10 percent of GDP or more (Cabo Verde, Cameroon, Ghana, São Tomé and Príncipe, South Africa), implying contingent fiscal liabilities that may compromise the general





Source: IMF, World Economic Outlook database. Note: See page 52 for country groupings tables.

Note. See page 52 for country groupings tables

Figure 1.13. Sub-Saharan Africa: Public Sector Debt by Currency, 2011–17



Sources: IMF, Debt Sustainability Analysis database; and IMF staff calculations.

Note: See page 52 for country groupings tables.

government's debt sustainability. In the context of continued restructuring efforts, several countries have managed to clear SOE arrears (Burkina Faso, Côte d'Ivoire), while others increased transparency by auditing the SOE sector (Benin, Niger, Seychelles) and leveraging findings of official reports on SOE performance (Cabo Verde, Ghana, Liberia). Nevertheless, direct support of SOEs' quasi-fiscal activities via subsidies or on-lending represents a considerable burden on the budget in some cases, crowding out higher-priority public spending (Botswana, Cabo Verde, Madagascar).

Weaknesses in Bank Balance Sheets are Weighing on Credit Growth

In most sub-Saharan African economies, NPLs are high (Figure 1.14). The accumulation of NPLs has been especially rapid in state-owned banks (Angola, Gabon), mainly reflecting economic slowdown, poor risk management practices (Angola), and high level of arrears to government suppliers (Chad) or delays in their repayment (Equatorial Guinea, Gabon, Ghana, Malawi). In some cases (Ghana), a more stringent application of loan classification requirements and earlier loss recognition, following asset quality reviews, also contributed to the increase in the reported levels of NPLs. However, there are also indications that in some countries NPLs are understated due to evergreening.

Bad loans have eroded commercial banks' profitability in a few countries, while in others (Nigeria, WAEMU), attractive returns on government securities have supported bank profitability. Capital ratios vary significantly among individual banks with some banks experiencing severe shortfalls in several jurisdictions (Ghana, Guinea, Guinea-Bissau, Malawi, Nigeria, Togo).

High NPL ratios, together with slowing activity, have contributed to slowing credit to the private sector in three-quarters of countries (Figure 1.15) most notably in Botswana, Equatorial Guinea, Gabon, Ghana, Guinea, Guinea-Bissau, Liberia, Malawi, and São Tomé and Príncipe. The slowing of credit to the private sector can also be attributed to weak growth and, to some extent, tighter monetary conditions (Cameroon,





Sources: Country authorities; and IMF, International Financial Statistics. Note: See page 52 for country groupings and page 53 for country abbreviations tables.



Figure 1.15. Sub-Saharan Africa: Private Sector Credit Growth

Source: IMF, International Financial Statistics. Note: See page 53 for country abbreviations table. Equatorial Guinea). Other contributing factors include high levels of household indebtedness (Botswana), uncertainty in the economic and political outlook (Gabon, Ghana, Guinea), and a redirection of bank lending toward government securities (Guinea, Malawi) (Figure 1.16).

Other sources of concern on the health of banks' balance sheets include foreign currency liquidity mismatches (Angola) and high loan concentration (Benin, Malawi, Namibia).

RISKS TO THE OUTLOOK

External Risks

Trade tensions

Escalating trade conflicts threaten to derail the global economic recovery in the near term and dampen medium-term growth prospects. Furthermore, a shift away from trade openness in global markets and toward more inward-looking policies would make it more difficult for sub-Saharan economies to achieve the Sustainable Development Goals (SDGs), and to meet the challenges associated with rapid technological change and demographic pressures (Chapter 3).

Figure 1.16. Sub-Saharan Africa: Banks' Holdings of Government Debt

Trade tensions among the United States, other major advanced economies, and China could entail a cumulative loss of GDP in sub-Saharan Africa of up to 1½ percent of GDP during 2018–21 (Figure 1.17).⁶ Sub-Saharan African countries most affected by the trade tensions would be the commodity exporters and those countries (commodity exporters and importers alike) that are more integrated in global markets. The estimated impact reflects the adverse effects of escalating trade tensions on global demand, including import demand from China, commodity prices, and domestic investment.





Source: IMF Research Department staff calculations. Note: Dots show the average and the vertical lines indicate the interquartile range.



Source: IMF, International Financial Statistics.

Note: See page 52 for country groupings and page 53 for country abbreviations tables.

⁶ Consistent with the scenarios presented in the October 2018 *World Economic Outlook*, trade tensions simulations assess the economic impact on sub-Saharan African countries of tariffs that have been imposed or announced between the United States and several of its trading partners. Several rounds of tariffs are assumed. First, the United States imposes tariffs on steel (25 percent) and aluminum (10 percent) and a 25 percent tariff on US\$50 billion of imports from China, and all US trading partners respond with commensurate retaliatory measures. Second, the United States imposes 25 percent tariffs on US\$200 billion of imports from China, and China responds by imposing tariffs that vary between 5 and 25 percent on US\$60 billion of imports from the United States. Third, the United States follows through with its threat to impose 25 percent tariff on all imported cars and car parts (about US\$350 billion), and the impacted trading partners respond with similar tariffs on US exports of cars and car parts and other goods. Finally, these tariffs are assumed to hamper confidence and tighten financial conditions for corporates as markets expect further worsening of trade tensions.

Tighter global financial conditions

Tighter global financial conditions resulting from faster than envisaged monetary policy normalization in advanced economies or a sudden shift in investors' sentiment could constrain financing and growth for many sub-Saharan African countries. Frontier markets have for now weathered relatively well the bouts of volatility that have hit a few large emerging market economies, and the attendant tightening in spreads since mid-April 2018 (Figure 1.18 and Box 1.2). So far, market pressures have been stronger for the emerging market economies showing evident weaknesses, for example, political uncertainty or macroeconomic imbalances (Argentina, South Africa, Turkey). But should these pressures persist, their spillover effects for the broader category of emerging and frontier markets could become significant.

Higher US interest rates and a stronger dollar could also heighten the risks of a financial crisis, as observed historically in emerging and developing economies. In particular, the probability of a large reversal in foreign flows in sub-Saharan Africa is significantly higher as US interest rates go up (see Chapter 2), while around one-third of currency crises have been associated with a reversal in foreign flows. Thus, the large amounts of maturing bonds for the region's frontier markets in 2019–20 and in 2024–25 suggest substantial refinancing risks (Figure 1.19).

Figure 1.18. Sub-Saharan African Frontier and Emerging Market Spreads, 2014–18



Source: Bloomberg Finance, L.P.

Note: Data as of September 20, 2018. ¹ The emerging market average includes the Emerging Market Bond Index Global (EMBIG) spreads of Argentina, Brazil, Bulgaria, Chile, Colombia, Hungary, Malaysia, Mexico, Peru, Philippines, Poland, Russia, South Africa, Turkey, and Ukraine.

² The frontier markets spread includes the spreads of Angola, Cameroon, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Kenya, Namibia, Nigeria, Senegal, Tanzania, and Zambia These risks are compounded by growing sovereignbanks linkages, which make banking sectors increasingly vulnerable to a tightening of global financial conditions and fiscal challenges.

Domestic Risks

Policy slippages

While most countries have medium-term fiscal plans which aim to achieve sustainable debt levels, those strategies need to be implemented (Figure 1.20). Thus, it is important to resist populist pressures to ease consolidation efforts for example in the event of temporary spikes in commodity prices or in the run-up to elections. Indeed, and particularly for the emerging market economies and frontier economies with significant exposures to international capital markets, it will be critical to avoid policy slippages or higher policy uncertainty including in the run-up to elections in 2019 in countries such as Nigeria, Senegal, and South Africa.

Security risks

Elevated security risks, in part related to civil unrest and terrorist attacks, impose an enormous human toll, are a drag on growth in many countries of the region, and constrain countries' ability to deliver basic public services. The largest number of incidents of civil unrest and terrorism in the past five years occurred in Nigeria, albeit their frequency has been declining. The number of terrorist attacks in G5 Sahel countries nearly doubled in 2017. The United Nations Office for the Coordination of Humanitarian Affairs (UN-OCHA) estimates that





Source: Bloomberg Finance, L.P.

Figure 1.20. Sub-Saharan Africa: Public Sector Debt to GDP, 2011–23



Sources: IMF, World Economic Outlook database; and IMF staff calculations.

Note: Baseline projections reflect the program or baseline scenarios reported in the latest IMF staff reports. "No adjustment" projections assume that the primary deficit, the real interest expenditure, and the other components of debt accumulation will remain at their 2017 levels, while the exchange rate and real GDP growth components are as in baseline projections. Excludes Burundi, Eritrea, and South Sudan due to data availability. See page 52 for country groupings tables.

security issues will result in more than 30 million people suffering from food insecurity in 2018 (UN-OCHA 2018). Moreover, insecurity has led to a dramatic increase in the number of internally displaced persons (Figure 1.21). While this number stood at about 4 million in 2012, it reached about 11 million in 2017, with largest increases reported for the Democratic Republic of Congo, Ethiopia, and South Sudan. Moreover, in 2017 there was a total of 4 million people seeking refuge in other sub-Saharan African countries, up from 1 million in 2010 (UNHCR 2018). In parallel, about 170,000 migrants from sub-Saharan Africa sought asylum in Europe in 2017, and about 1 million during 2010–17 (Connor 2018).

POLICIES

Prior to the commodity price shock, the region enjoyed a sustained period of strong growth (during 2000–13), thanks to deep structural reforms and



Source: United Nations High Commissioner for Refugees.

highly supportive external conditions. But with a likely less-supportive external environment and as new challenges relating to rapid advances in technology and climate change emerge, sub-Saharan African countries need to create a growth model that is more resilient and capable of creating enough jobs for the region to harness fully its demographic dividend. Doing so would require strong, sustainable, and inclusive growth. Achieving this in turn would require policies to strengthen resilience and facilitate the reallocation of labor and capital into more productive sectors to lift incomes faster.

Strengthening the Foundations for Sustained, Strong, and Inclusive Growth

Increasing fiscal space

Improving the quality of fiscal adjustment is key to ensuring stronger and more sustainable outcomes, while creating fiscal space to pursue development priorities.

Advance revenue mobilization. With average revenue estimated at 3–5 percent of GDP below potential, there is substantial scope for all countries to raise revenue. A common factor underpinning successful revenue mobilization episodes in the region has been an effective and modern tax policy and administration, such as taxpayer identification numbers, a semi-autonomous revenue authority, the VAT, and taxpayer segmentation. Countries that succeeded in raising revenues paid special attention to measures to build the tax base, simplify the tax system, and tackle exemptions and incentives (IMF 2018a).

- Enhance the efficiency of expenditures. One component is to address the re-emergence of energy subsidies through the implementation of automatic fuel pricing mechanisms (as successfully introduced in Ghana and Mozambique) and, at the same time, undertake mitigating measures to compensate the poor. In addition, countries need to continue to improve the efficiency of public investment by strengthening infrastructure governance institutions for the planning, allocation, and implementation of public investment. They also need to continue enhancing public financial management to avoid the incurrence of arrears and misallocation of expenditure, including by reforming loss-making SOEs. Finally, given the relatively high levels of wage bills in the region, wage bill reform, if properly designed and effectively implemented, would improve the efficiency of expenditures. Such measures should be however carefully designed and targeted since many public-sector workers are employed in the education and healthcare sectors.
- Improve debt management frameworks to better manage currency and interest rate risks (IMF 2018d). This entails strengthening capacity to undertake cost-risk analysis of borrowing options and manage repayments on commercial borrowing (Kenya, Uganda). Cost-risk analysis has helped increase awareness of debt portfolio risks and of the importance of developing the government securities markets in the medium term. Some countries (Cabo Verde, Ghana, Kenya, Tanzania) are updating their medium-term debt strategy to address contingent liability risks. Furthermore, deepening domestic sovereign debt markets (Ghana, Kenya, Namibia, Nigeria, Tanzania) could provide ways to lower currency and interest rate risks.

Addressing financial sector weaknesses

Growing financial sector weaknesses need to be addressed in a timely manner. Waiting until there is a collapse forces a disruptive adjustment and adds to fiscal costs, deepening the drag on growth. Some countries are taking steps to reduce NPLs, including by strengthening creditor rights and reducing lengthy judicial processes in recovering collateral (Guinea-Bissau), halting net accumulation of public domestic arrears to the private sector (Equatorial Guinea), improving the credit information system, modernizing the insolvency regime, and implementing financial education programs for medium-sized enterprises (MSMEs).⁷ Nevertheless, addressing persistent NPLs requires comprehensive NPL reduction strategies, including regulatory efforts to accelerate loss recognition, a stronger supervisory focus on recovery actions by banks and reforms of insolvency and debt enforcement frameworks to enable swift restructuring of the debt of distressed but viable borrowers, and support the consistency and efficiency of judicial proceedings. Authorities could also establish permanent macroprudential buffers (on top of micro-prudential minimum) which could be relaxed at the discretion of regulators in the event of shocks, thereby allowing NPLs to be absorbed by capital and for a continued provision of credit.

Countries also recently made progress in strengthening their banking sectors. Angola, Ghana, and Mozambique raised their minimum statutory capital requirement (and in Angola an asset quality review of the systemic banks will be conducted to inform potential capitalization needs); CEMAC adopted a number of new regulations, including on the definition of systemically important institutions (in line with the Basel Committee recommendations); the accelerated resolution of small MFIs; and of a sound emergency liquidity assistance framework; and WAEMU adopted new prudential rules aligned with the Basel II/III

⁷ Many countries in the region have recently engaged in several initiatives to promote bank lending. Cabo Verde considers providing partial guarantees on loans to SMEs; CEMAC plans to update the credit registry (postponed to end 2020) and to have an operating credit bureau by early 2020; Guinea has operationalized a new credit information system to provide better information on customers' creditworthiness; Kenya is improving information from credit reference bureaus and adopted a law on movable collateral registry to expand the collateral available against bank lending; Niger has strengthened the credit bureau through March 2018 legislation that obliges utilities to provide information about the payment discipline of their clients and is preparing a law on "warrantage" (defined as granting credit with grain as collateral in secure warehouses).

principles that should help consolidate banks' balance sheets and address vulnerabilities.

Entrenching external adjustment

The commodity-exporting sub-Saharan African countries, which experienced historically large negative terms of trade shock in late-2014 and 2015, have seen a progressive improvement in their current account balances in 2016 and 2017 but did little to increase their resilience to such shocks. The adjustment following the shock relied initially mainly on import compression and later was facilitated by a gradual improvement in the terms of trade and a recovery in external demand. Meanwhile, exchange rates and relative prices have played a limited role in part because 10 out of the 23 commodity-exporting countries maintain fixed exchange rate regimes, and in part because of the low sensitivity of current account balances to real exchange rate changes. The latter is due to a limited responsiveness of output and exports to real exchange rate changes, largely reflecting a small share of manufacturing in their economies. The contribution of relative prices to the adjustment has been the largest in non-resource-intensive countries while oil-exporting countries and non-oil-resourceintensive countries have benefitted little from changes in relative prices (Figure 1.22).

The adjustment needed to align current account balances with fundamentals and desired policies is not large (Figure 1.23). But facilitating adjustments to shocks would require reducing the region's dependence on commodity exports and improving flexibility by advancing on structural transformation and product and labor markets reforms. Key product market reforms to be implemented in sub-Saharan African countries include: improving product market regulation and encouraging competition (Angola, Côte d'Ivoire, South Africa), providing reliable sources of basic industrial inputs such as electricity (Angola, Côte d'Ivoire, Nigeria), improving the efficiency and finances of SOEs in key network sectors (Angola, Cameroon, Côte d'Ivoire, South Africa), and improving access to credit (Angola, Cameroon, Nigeria). Labor market reforms should aim to reduce skills mismatches through better education and vocational training (Botswana, Namibia, South Africa), minimize the side effects of collective bargaining agreements, and reduce hiring and firing barriers (South Africa).

Source: IMF staff calculations

Note: Dots show the median deviations and the vertical lines indicate the interquartile range. See page 52 for country groupings tables.

Figure 1.22. Sub-Saharan Africa: Contribution to Current Account Adjustment, 2014–17

Source: IMF staff calculations

Note: Contributions based on the results of an extended model of the Harberger-Laursen-Meltzer effect. The model relates changes in the current account balance to the terms of trade, domestic and external demands, the nominal exchange rate, and foreign-domestic relative prices. The residuals also contain the average country fixed effects. See page 52 for country groupings tables.

Such reforms would enhance the sensitivity of current account balances to real exchange rate movements.

Improving policies to smooth output fluctuations

Output fluctuations in the region are highly impacted by commodity price volatility.⁸ Empirical evidence suggests that commodity price shocks are a key driver of real GDP volatility (Figure 1.24) with the sensitivity of output to commodity prices in diversified economies being lower than in less diversified ones. In particular, the contribution of oil price volatility to output fluctuations ranges from 0 to 2 percent at the short- to long-term horizons in diversified economies, compared with 10 percent in less diversified economies (Figure 1.25).

Thus, promoting greater economic diversification would enhance sub-Saharan Africa's resilience to commodity price fluctuations. Greater economic diversification would shield the region from global commodity market volatility. Many of the drivers of economic diversification are akin to drivers of economic growth, given that these are parallel and mutually reinforcing processes. From this perspective, a better investment climate and labor mobility would facilitate economic diversification. Other key factors include higher quality of infrastructure and human capital.

Sub-Saharan African economies could also be more resilient to commodity price shocks if countries improve their fiscal policy frameworks with a view to enhancing their ability to run countercyclical fiscal positions relative to the commodity cycle (Figure 1.26).⁹ Indeed, sub-Saharan African countries tend to contract their primary deficits when commodity prices are high (above trend or during "good times") but only by a small margin.¹⁰ In contrast, when commodity prices are low (below trend or during "bad times"), primary fiscal deficits tend to increase in half of oil exporters and other resource-intensive countries.¹¹ This suggests that several sub-Saharan African countries face the challenge of building sufficient fiscal buffers during good times.

Overall, improved fiscal policy frameworks to enhance sub-Saharan Africa's resilience to commodity prices include fiscal rules supported by adequate Public Financial Management (PFM) systems, a greater use of state-contingent financial instruments, and for commodity exporters, an adequate institutional framework to manage the revenue inflows from natural resources.

- Fiscal rules could help prepare countries to deal with low commodity prices by inducing swifter consolidation during the upturn, thereby helping bolster fiscal space. While about 21 sub-Saharan African countries are using some form of fiscal rule, many would benefit from greater emphasis on improving the transparency, to avoid ambiguities and ineffective enforcement. A recent IMF staff analysis (IMF 2018c) finds that most sub-Saharan African low-income and developing countries that have debt rules are within comfort levels, as their debt-to-GDP ratios in 2017 are below debt ceilings set under the fiscal rules (Benin, Burkina Faso, Mali, Niger). Nevertheless, fiscal rules in some countries should be aligned with countries' debt-servicing capacity.
- Adequate PFM systems need to be in place to ensure effective implementation of fiscal rules. Important required PFM elements include: (1) a well-established medium-term budget framework, focusing on medium-term fiscal priorities; (2) a top-down budgeting process and a comprehensive budget reporting system; (3) effective budget execution systems (commitment controls and cash management); (4) reliable data and technical forecasting capacity (to minimize forecasting errors);

⁸ The results are based on a panel vector autoregression (VAR) model that includes filtered variables of GDP, commodity price, country-specific real effective exchange rates, global economic growth, and US nominal effective exchange rate. The results are broadly consistent with those obtained when a country-specific commodity price index (reflecting each country's commodity export basket) is used instead.

⁹ The commodity price index is country specific and reflects each country commodity export basket.

¹⁰ Statistical tests rejected the null hypothesis that the degree of comovement of the primary deficit with the commodity cycle is zero in good times for oil exporters and other resource-intensive countries.

¹¹ This is statistically significantly different from zero only for other resource-intensive countries.

(5) effective internal and external audit systems (to ensure accountability); and (6) regular publication of fiscal data to ensure transparency.

Figure 1.24. Contribution of Oil Price Shock to Output Volatility by Economic Classification

Note: See page 52 for country groupings tables.

Figure 1.25. Contribution of Oil Price Shock to Output Volatility by Degree of Diversification

Source: IMF staff calculations.

Note: Threshold reflects whether the country is above or beneath the sub-Saharan African average and is computed from the diversification index of Papageorgiou, Rehman, and Wang (forthcoming).

Source: IMF staff calculations.

Note: Cycles are obtained by applying the Hodrick-Prescott filter to commodity prices and to the change of the primary fiscal deficit-to-GDP ratio. Identification of "good times" are periods when output exceeds its long-term trend.

- Contingent financial instruments such as insurance schemes and forward markets to hedge commodity price risk could help lower costs associated with volatility in commodityrelated earnings. These instruments could help reduce policy procyclicality. In addition, they could enable countries to address liquidity needs more promptly following a shock, since instruments disburse quickly (avoiding the need for procyclical policy measures) and help to preserve debt sustainability through contingent transfers. A few countries have used marketbased instruments to hedge against commodity price risks (Ethiopia, Ghana, Malawi) with varying degrees of success. Nevertheless, in general, these instruments are seldom used due to their possibly large cost, a lack of liquidity, their complexity in some cases, and the fact that they only protect against one specific risk. Most countries therefore tend to prefer self-insurance by building buffers.
- Adequate institutional frameworks to manage the revenue inflows from natural resources should be established in the case of commodity exporters.

Monetary policy frameworks also should be further improved to anchor inflation expectations while smoothing output fluctuations. Some progress has been achieved recently in reforming monetary policy frameworks to enhance liquidity management and monetary policy transmission, but further efforts should be pursued. Policy recommendations include reducing excess liquidity in banking systems (especially in CEMAC) through active use of open market operations or/ and increasing the level of reserve requirements; developing interbank markets by improving information on counterparty risks and the development of repo transactions based on public debt securities; bringing and maintaining shortterm interest rates to positive territory in real terms (especially in Angola, Nigeria); narrowing the overnight interest rate corridor and establishing a symmetrical interest rate corridor with rates linked to the key policy rate; developing robust forwardlooking frameworks for forecasting liquidity and managing inflation; improving the communication of monetary policy actions and objectives to the

public to help anchor expectations; easing interest rate controls; limiting fiscal dominance; and strengthening the independence of central banks.

Living Standards Could Rise Faster

The projected 1.5 percent per capita growth on average over the medium term is commensurate to that of other economies in the Middle East and Central Asia, but much lower than in Asia, developing Europe, and Latin America (Figure 1.27). And in general, most economies in sub-Saharan Africa are projected to grow far below the rates expected in countries from other regions at similar levels of per capita income (Figure 1.28).¹² This is the case for several large economies, including Nigeria and South Africa, which are expected to see their real per capita income fall

Source: IMF, World Economic Outlook database. Figure 1.28. Expected Average GDP per Capita Growth and Initial Levels of GDP per Capita, 2018–22

Sources: IMF, World Economic Outlook database; Penn World Table 9.0; and IMF staff calculations.

or stagnate over the medium term. In contrast, several countries including Ethiopia, Senegal, and Tanzania, are poised to see their per capita income rise faster than what would be expected given their level of income.

Differences between the region's growth performance and its faster growing comparators' stem mainly from total factor productivity (TFP) growth and physical capital accumulation (Figure 1.29).

Productivity growth could be raised by facilitating the movement of labor and capital both between and within sectors (Diao, McMillan, and Rodrik 2017).¹³ This means broadening the sources of productivity gains from the positive demand shocks

Figure 1.29. Real GDP Growth Decomposition

Sources: IMF, World Economic Outlook database; Penn World Table 9.0; International Labour Organization; and IMF staff calculations.

¹² The negative slope of the fitted line indicates that on average poorer countries tend to grow faster than richer ones. Being below (above) the fitted line indicates a slower (faster) convergence than what one would expect given the initial level of income.

¹³ See de Vries, Timmer, and de Vries (2015). The sample includes nine economies from sub-Saharan Africa (Botswana, Ethiopia, Ghana, Kenya, Malawi, Mauritius, Senegal, Tanzania, Zimbabwe), seven from Latin America, six from Asia, and two from the Middle East and North Africa.

and productivity gains in agriculture, which many countries in the region have experienced during 2000–10 (Figure 1.30), to increased efficiency in other sectors.¹⁴ In this regard, the latest wave of technological progress (Chapter 3), the Fourth Industrial Revolution, could increase productivity in sub-Saharan Africa by allowing countries to leapfrog old technologies and some infrastructure. At the same time, these trends could create challenges, with the reshoring of manufacturing activity to advanced economies potentially undermining the traditional export-led growth model that has allowed many east Asian and Latin American economies to transition to higher income status.

Thus, policymakers in the region need to chart a path toward the better outcomes that the Fourth Industrial Revolution could lead to in the long term as presented in Chapter 3. And doing so means that they would need to encourage alternative growth strategies and embrace the opportunities from the Fourth Industrial Revolution by promoting digital connectivity and a flexible education system, removing market distortions, better allocating public spending, and undertaking policies that will foster private investment and risk-taking. Such policies include improving financial deepening, trade openness and integration (including within the continent in the context of the African Continental Free Trade Area),¹⁵ ensuring a sound business environment (especially stronger regulatory and resolution frameworks), and providing adequate public goods, including welldeveloped infrastructure (IMF 2018e).

These policies could also contribute to allowing sub-Saharan African countries to close efficiency gaps relative to comparators in various sectors, including in manufacturing (about 0.5 percentage points), other industries (0.35 percentage points), and services (0.3 percentage points). If these efficiency gaps were to be closed, average TFP growth would increase by about 1.5–2 percentage points over the medium term.¹⁶ And in such a scenario, average medium-term growth during 2018–22 would reach about 6 percent, compared to 4 percent in the baseline scenario. Higher growth could raise employment growth by an additional 0.6–0.8 percentage points over the medium term, lifting total net employment creation to about 16 million jobs by 2022, closer to the 20 million needed to absorb new entrants to labor markets. Raising growth would also accelerate progress toward reaching the SDGs, building on the progress that has been achieved so far (Box 1.3).

Source: de Vries, Timmer, and de Vries (2015).

Note: $\Delta y_t = \sum \alpha_{it-1} \Delta y_{it} + \sum y_i \Delta \alpha_{it}$ where α_{it} is the employment share of sector *i* at time and y_{it} is labor productivity. The first term is the weighted sum of the sectoral "within" components of productivity growth and the second term represents the contribution of labor reallocation across sectors. EMDEs = emerging market and developing economies.

¹⁴ These results are consistent with Diao, McMillan, and Rodrik (2017) who attribute the 2000–10 productivity gains mostly to a reallocation of factor inputs across sectors, resulting from positive demand shocks.

¹⁵ In March 2018, in Rwanda, a large majority of African Union member countries signed an agreement to create a single continental market for goods and services. The agreement will become effective once at least 22 member countries have ratified it.

¹⁶ These calculations assume that the recent structural transformation in sub-Saharan Africa is similar to the one of the 1990–2000 period, when commodity prices were depressed, and that the various elements of the decomposition exercise grow at rates similar to those observed in non-sub-Saharan African economies over the same period, excluding within agriculture productivity gains.

Box 1.1. The Re-Emergence of Fuel (Energy) Subsidies in Sub-Saharan Africa

Universal fuel and energy subsidies have been prevalent in sub-Saharan Africa, but they have substantial drawbacks. One of the rationales behind energy subsidies is that they can provide a highly visible benefit for important segments of the population. However, they are poorly targeted and have a negative impact on economic efficiency by fostering fuel overconsumption, curtailing investment and maintenance in the oil-refining and electricity sectors, and crowding out more productive government spending.

The sustained increase in international fuel prices since the second half of 2017 has been passed through only partially in sub-Saharan African oil importers, while oil exporters have mostly kept domestic fuel prices constant. Between early 2017 and April/May 2018, the median pass-through coefficient (defined as the nominal change in domestic retail prices divided by the nominal change in international prices, both in domestic currency) was zero in oil exporters and positive in oil importers (47 percent, Figure 1.1.1). In contrast, during the period when oil prices fell sharply between mid-2014 and early 2017, oil exporters increased prices of most fuel products (with a median pass-through coefficient of –19 percent) while oil importers recorded a pass-through coefficient of 62 percent (Figure 1.1.2).

While fuel subsidies in sub-Saharan Africa would have fallen by 1 to 2 percent of GDP per annum between mid-2014 and early 2017, an analysis based on fuel prices by April/May 2018 suggests that those benefits would have been wiped out since then. In particular, staff analysis suggests that net fuel subsidies would have increased by an average of 2 percent of GDP between early-2017 and April/May 2018 (to about 2 percent of GDP).

Sources: Country authorities; and IMF staff calculations. Note: See page 53 for country abbreviations.

Figure 1.1.2. Sub-Saharan Africa: Pass-Through of Changes in International Fuel Prices, June 2014 to January 2017

This box was prepared by Mauricio Villafuerte with assistance from Tunc Gursoy.

Box 1.2. Market Developments in Sub-Saharan African Frontier Economies in Periods of Financial Volatility

Protracted trade tensions and bouts of volatility emanating from large emerging market economies (Argentina, Turkey) have contributed to some tightening of financial conditions in sub-Saharan Africa, the most visible effects being a significant increase in spreads and substantial portfolio outflows. The increase in spreads has been larger and more sustained compared to the "taper tantrum," but smaller in magnitude than the increase seen between August 2015 and January 2016 when oil prices fell and stock markets crashed in several advanced economies and China. Portfolio outflows have led to a weakening of some sub-Saharan African currencies, especially the South African rand, which was also potentially influenced by idiosyncratic domestic factors in addition to spillovers from trade tensions and Turkey.

There has been a sustained increase in spreads in sub-Saharan Africa since April, with a peak increase of more than 220 basis points (Figure 1.2.1). In comparison, the "taper tantrum" saw a smaller and shorter-lived spike in spreads of 150 basis points; while the "stock and oil crash" episode of August 2015 saw a larger increase of more than 400 basis points.¹ Furthermore, while the increase in spreads has been large recently, the levels of spreads, at about 600 basis points on average, is still below the peak of 900 basis points reached in January 2016.

While all frontier economies in sub-Saharan Africa have seen increases in spreads, exchange rate developments have been more mixed. The Angolan kwanza and the South African rand have depreciated substantially, but most other currencies have seen only moderate movements (Figure 1.2.2). Exchange rate movements have mirrored capital outflows which have reached over US\$2 billion since April, with South Africa accounting for about 75 percent of the outflows (Figure 1.2.3). As with spreads, the "stock and oil crash" episode saw the largest exchange rate depreciation for most countries and the largest cumulative outflows. At the same time, stock prices have fallen in most countries during the latest episode.

While we have seen a substantial tightening of financing conditions in sub-Saharan Africa since April, the effects have generally been smaller than the period after August 2015. Risks, however, remain elevated as faster than envisaged tightening of monetary policy in advanced economies, or continued volatility emanating from emerging market economies, can lead to further volatility for sub-Saharan African countries. Figure 1.2.1. Sub-Saharan African Selected Frontier Markets: Sovereign Bond Spreads

Source: Bloomberg Finance, L.P.

Note: Selected frontier markets include Angola, Côte d'Ivoire, Gabon, Ghana, Nigeria, Senegal, South Africa, and Zambia. EM = emerging market.

Figure 1.2.2. Sub-Saharan African Frontier Markets: Change in Nominal Exchange Rates (US dollars to national currency)

Source: Bloomberg Finance, L.P.

Note: EM = emerging market; EMEs = emerging market economies. Negative (positive) changes represent a depreciation (appreciation). See page 53 for country abbreviations table.

Source: Haver Analytics based on data from Emerging Portfolio Fund Research database. Note: EM= emerging market.

This box was prepared by Siddharth Kothari.

¹ For comparison, the EMBI Global index saw much smaller increases in spreads of only about 100 basis points after these episodes, with the largest increase following the "taper tantrum."

Box 1.3. Progress Toward the Sustainable Development Goals

The United Nations' 2030 Agenda for Sustainable Development consists in a far reaching and comprehensive set of Sustainable Development Goals (SDGs) for the world.¹ The implementation of the Agenda was initiated in 2015.

The SDGs were set after a period of significant progress on social and economic development. Since 2000, sub-Saharan African economies have achieved on average a 50 percent increase in real per capita GDP; life expectancy has increased steadily, reaching 60 years by 2016; infant mortality and maternal death rates have fallen sharply; and achievements in primary and higher education have improved, although sub-Saharan African countries are still lagging in pre-school education. And despite a low stock and quality of public infrastructure relative to other regions, investment in infrastructure has been at a comparable level to that in emerging economies (IMF 2018a). At the same time, improvements in telecommunication access have been significant (Figure 1.3.1).

However, reaching the SDGs remains a significant challenge given existing gaps in areas such as education, electricity, health, roads, and water and sanitation (UN 2018). Achieving the SDGs by 2030 would require a significant increase in expenditure in these five areas—initial results of studies on Benin and Rwanda estimate an additional financing need of about 20 percent of GDP a year. Raising tax revenues and enhancing spending efficiency is expected to finance a small part (about 5 percent of GDP) of this spending need, leaving a significant gap for which financing needs to be identified. Higher and sustained growth would also help countries meet the SDGs.

Meanwhile, the IMF has undertaken a number of initiatives to support progress toward the SDGs, including: increasing support for developing countries to boost domestic revenue mobilization, notably through increased resources allocated to technical assistance in this area; expanding infrastructure policy support through strengthening institutional capacity for public investment management; intensifying support for fragile and conflict-affected states and affected neighbors; deepening analysis and policy advice on gender, inequality, and financial inclusion; boosting financial support for low-income countries (LICs) and countries hit by natural disasters; addressing climate change issues in areas of IMF expertise—notably energy pricing; and providing capacity building to strengthen national statistical systems and contributing to the development of an SDG global indicator framework.

This box was prepared by Reda Cherif.

¹ The SDGs consist of 17 broad goals related to areas such as poverty, hunger, health, inclusiveness, water and sanitation, energy, employment and growth, industrialization and innovation, and the environment.

REFERENCES

- Arizala, F., M. Bellon, M. MacDonald, M. Mlachila, and M. Yenice. 2018. "Regional Spillovers in Sub-Saharan Africa: Exploring Different Channels." IMF Spillover Notes, International Monetary Fund, Washington, DC.
- Connor, P. 2018. "At Least A Million Sub-Saharan Africans Moved to Europe Since 2010." Pew Research Center, Washington, DC.
- de Vries, G., M. Timmer, and K. de Vries. 2015. "Structural Transformation in Africa: Static Gains, Dynamic Losses." *The Journal of Development Studies* 51(6): 674–88.
- Diao, D., M. McMillan, and D. Rodrik. 2017. "The Recent Growth Boom in Developing Economies: A Structural Change Perspective." NBER Working Papers 23132, National Bureau of Economic Research, Cambridge, MA.
- International Monetary Fund (IMF). 2015. Regional Economic Outlook: Sub-Saharan Africa. Chapter 3, Washington, DC, April.
- . 2016. "South Africa: 2016 Article IV Consultation-Staff Report." IMF Country Report No. 16/217, Washington, DC.
- _____. 2018a. *Regional Economic Outlook: Sub-Saharan Africa*. Chapter 2, Washington, DC, April.
- . 2018b. "Nigeria: 2018 Article IV Consultation-Staff Report." IMF Country Report No. 18/63, Washington, DC.

- . 2018c. *Fiscal Monitor*. Chapter 1, Washington, DC, April.
- _____. 2018d. "Macroeconomic Developments and Prospects in Low-Income Developing Countries." IMF Policy Papers, Washington, DC.
- . 2018e. *Regional Economic Outlook: Sub-Saharan Africa*. Chapter 3, Washington, DC, April.
- Papageorgiou, C., S. Rehman, and K. Wang. Forthcoming. "Trade Diversification, Growth and Volatility." In Encyclopedia of International Economics and Global Trade, Volume 3: International Trade and Commercial Policy, edited by Francisco L. Rivera-Batiz. Singapore: World Scientific Publishing Co.
- United Nations (UN). 2018. *The Sustainable Development Goals Report 2018*. New York.
- United Nations High Commissioner for Refugees (UNHCR). 2018. *Population Statistics*. Geneva.
- United Nations Office for the Coordination of Humanitarian Affairs (UN-OCHA). 2018. *Sahel: Overview of Humanitarian Needs and Requirements*. New York.