

Regional Economic Outlook

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Financial and Economic

Sub-Saharan Africa

Recovery Amid Elevated Uncertainty

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APR 19

World Economic and Financial Surveys

Regional Economic Outlook

Sub-Saharan Africa
Recovery Amid Elevated Uncertainty

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Abbreviations

AfCFTA	African Continental Free Trade Area	MENA	Middle East and North Africa
AfDB	African Development Bank	NAFTA	North American Free Trade Agreement
AMU	Arab Maghreb Union	NEER	nominal effective exchange rate
ASEAN	Association of Southeast Asian Nations	NPLs	nonperforming loans
CEMAC	Central African Economic and Monetary Community	PAFTA	Pan-Arab Free Trade Area
CBR	correspondent banking relationship	PRGT	Poverty Reduction and Growth Trust
CGE	computable general equilibrium	RECs	Regional Economic Communities
COMESA	Common Market for Eastern and Southern Africa	REO	Regional Economic Outlook (IMF)
CPI	consumer price index	SACU	Southern African Customs Union
GDP	gross domestic product	SADC	Southern African Development Community
ECOWAS	Economic Community of West African States	SOEs	state-owned enterprises
EPU	economic policy uncertainty	SSA	Sub-Saharan Africa
HIPC	Heavily Indebted Poor Country	UN	United Nations
ICRG	International Country Risk Guide	UNCTAD	United Nations Conference on Trade and Development
IDPs	internally displaced persons	US	United States
IFRS 9	International Financial Reporting Standard 9	VAT	value-added tax
IMF	International Monetary Fund	WAEMU	West African Economic and Monetary Union
LAIA	Latin American Integration Association	WEO	World Economic Outlook (IMF)
MDRI	Multilateral Debt Relief Initiative	WTO	World Trade Organization

List of Country Abbreviations:

DZA	Algeria	DJI	Djibouti	KEN	Kenya	RWA	Rwanda
AGO	Angola	EGY	Egypt	LSO	Lesotho	STP	São Tomé & Príncipe
BEN	Benin	GNQ	Equatorial Guinea	LBR	Liberia	SEN	Senegal
BWA	Botswana	ERI	Eritrea	LBY	Libya	SLE	Sierra Leone
BFA	Burkina Faso	SWZ	Eswatini	MDG	Madagascar	SOM	Somalia
BDI	Burundi	ETH	Ethiopia	MWI	Malawi	ZAF	South Africa
CPV	Cabo Verde	FRA	France	MLI	Mali	SSD	South Sudan
CMR	Cameroon	GAB	Gabon	MRT	Mauritania	SDN	Sudan
CAF	Central African Rep.	GMB	Gambia, The	MUS	Mauritius	TZA	Tanzania
TCD	Chad	DEU	Germany	MAR	Morocco	TGO	Togo
COM	Comoros	GHA	Ghana	MOZ	Mozambique	TUN	Tunisia
COD	Congo, Dem. Republic of	GIN	Guinea	NAM	Namibia	UGA	Uganda
COG	Congo, Republic of	GNB	Guinea-Bissau	NER	Niger	ZMB	Zambia
CIV	Côte d'Ivoire	ITA	Italy	NGA	Nigeria	ZWE	Zimbabwe

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The following conventions are used in this publication:

- In tables, a blank cell indicates “not applicable,” ellipsis points (. . .) indicate “not available,” and 0 or 0.0 indicates “zero” or “negligible.” Minor discrepancies between sums of constituent figures and totals are due to rounding.
- An en dash (–) between years or months (for example, 2009–10 or January–June) indicates the years or months covered, including the beginning and ending years or months; a slash or virgule (/) between years or months (for example, 2005/06) indicates a fiscal or financial year, as does the abbreviation FY (for example, FY2006).
- “Billion” means a thousand million; “trillion” means a thousand billion.
- “Basis points” refer to hundredths of 1 percentage point (for example, 25 basis points are equivalent to $\frac{1}{4}$ of 1 percentage point).

Executive Summary

TWO-TRACK RECOVERY AMID ELEVATED UNCERTAINTY

The economic recovery in sub-Saharan Africa continues, but there is duality in growth performance and prospects within the region. Aggregate growth is set to pick up from 3 percent in 2018 to 3.5 percent in 2019 and stabilize at slightly below 4 percent over the medium term—or about 5 percent, excluding the two major economies, Nigeria and South Africa. These aggregate numbers mask considerable duality in growth prospects within the region. About half of the region's countries, mostly non-resource-intensive, are expected to grow at 5 percent or more, and see a faster rise in income per capita than the rest of the world on average over the medium term. However, the remaining countries, comprising mostly resource-intensive countries are expected to fall behind. And as these countries—including Nigeria and South Africa—are home to more than two-thirds of the region's total population, it is important for the policy uncertainties that are holding back growth to be addressed for the lion's share of sub-Saharan Africans to enjoy improved standards of living.

External and domestic headwinds are weighing on growth prospects.

- The global expansion is losing momentum, including in key trading partners such as China and the euro area; trade tensions remain elevated; global financial conditions are volatile and have tightened somewhat relative to October 2018; and commodity prices are expected to remain low. On the domestic front, climate shocks are likely to impact agricultural output in southern Africa, while policy uncertainty is weighing on growth prospects in several countries.
- Debt vulnerabilities remain elevated in some countries. Weaknesses in public balance sheets are also weighing on countries' external positions, with reserve buffers below levels typically considered adequate in more than half of the countries in the region.
- At the same time, high nonperforming loans continue to put a strain on financial systems, while weaknesses in public financial management systems are manifesting themselves in large domestic arrears with potential effects on growth and domestic financial systems.

The familiar challenge of finding ways to address human and physical capital investment needs is being complicated by declining fiscal space and a less supportive external environment. Central to resolving this challenge is building fiscal space, enhancing resilience to shocks, and fostering an environment conducive to sustained, high and inclusive growth. Meeting this challenge would be even more difficult if the downside risks to growth materialize (for example, if global growth is even weaker than envisioned in the current baseline). This underscores the need to accelerate reforms and calibrate the size and pace of policy adjustments to ensure that any shift in policies is consistent with credible medium-term macroeconomic objectives, available financing, and debt sustainability.

While the dualism between resource-intensive and non-resource-intensive countries is manifest in their economic prospects, policy priorities, and the severity of their budgetary constraints, these countries also share the challenges of strengthening resilience and creating sustained high and inclusive growth. Addressing these challenges would require:

- Stepping up revenue mobilization, ensuring efficient public investment, strengthening public financial management, containing fiscal risks from state-owned enterprises, improving debt management and resolution frameworks, and enhancing debt transparency. Enhancing exchange rate flexibility, in countries that are outside monetary unions, and strengthened monetary policy and financial systems are also key.

- Raising both productivity and private investment, while ensuring a more equitable sharing of the benefits of increased prosperity. Achieving this will require policies to enhance the contestability of markets and create an environment that fosters a dynamic private sector, such as addressing salient constraints to business operations and deeper trade integration (notably through the African Continental Free Trade Area, AfCFTA), and by improving access to and the provision of financial services and basic services (including health and education).

THE ECONOMIC CONSEQUENCES OF CONFLICT

The second chapter explores the challenges faced by conflict-affected countries in sub-Saharan Africa, providing a comprehensive analysis of the trends and economic consequences of conflicts. Although the intensity of conflicts in recent years is lower than that observed in the 1990s, the region remains prone to conflicts, with around 30 percent of the countries affected in 2017. Moreover, the nature of conflicts has changed, with traditional civil wars being replaced by non-state-based conflicts, including the targeting of civilians through terrorist attacks.

Conflicts in the region are associated with a large and persistent decline in per capita GDP and have significant spillover effects on nearby regions and countries. They also pose significant strains on countries' public finances, lowering revenue, raising military spending, and shifting resources away from development and social spending, which further aggravates the conflicts' economic and social costs.

The findings highlight the significant costs and formidable challenges faced by countries suffering from conflict and underscores the need to prevent conflicts, including by promoting inclusive economic development, building institutional capacity, and social cohesion. For countries in conflict, efforts should focus on limiting the loss of human and physical capital by protecting social and development spending. While this may be especially daunting given fiscal pressures, well-targeted and coordinated humanitarian aid and concessional financial assistance can provide some relief.

IS THE AFRICAN CONTINENTAL FREE TRADE AREA A GAME CHANGER FOR THE CONTINENT?

The third chapter takes stock of intraregional trade in Africa and examines the potential benefits and challenges of implementing the AfCFTA. The AfCFTA agreement envisions elimination of tariffs on most goods, liberalization of trade of key services, addressing nontariff obstacles that hamper intraregional trade, and eventually creating a continental single market with free movement of labor and capital.

The AfCFTA will likely have important macroeconomic and distributional effects. It can significantly boost intra-African trade, particularly if countries tackle nontariff bottlenecks to trade, including physical infrastructure, logistical costs, and other trade facilitation hurdles. The picture is not uniform. More diversified economies and those with better logistics and infrastructure will benefit relatively more from trade integration. Fiscal revenue losses from tariff reductions are likely to be limited on average, with a few exceptions. Moreover, deeper trade integration is associated with a temporary increase in income inequality.

The findings suggest that, in addition to tariff reductions, policy efforts to boost regional trade should focus on reforms to address country-specific nontariff bottlenecks. To ensure that the benefits of regional trade integration are shared by all, policymakers should be mindful of the adjustment costs that integration may entail. For less developed and agriculture-based economies, trade policies should be combined with structural reforms to improve agricultural productivity and competitiveness. Furthermore, governments should facilitate the reallocation of labor and capital across sectors (for example, active-labor market programs such as training and job-search assistance, and measures that enhance competitiveness and productivity) and bolster safety nets (income support and social insurance programs) to alleviate the temporary adverse effects on the most vulnerable.

1. Two-Track Recovery Amid Elevated Uncertainty

Economic recovery in sub-Saharan Africa is set to continue with growth projected to pick up from 3 percent in 2018 to 3.5 percent in 2019.

But economic performance remains bifurcated (Figure 1.1).

- Some 21 countries, mainly the region's more diversified economies, are expected to sustain growth at 5 percent or more and remain on the impressive per capita convergence path they have been on since the early 2000s.
- But in the 24 other more resource-dependent economies, including the largest (Nigeria and South Africa), the growth looks set to remain anemic in the near term. With some two-thirds of the region's population residing in these countries, this implies much slower improvement in standards of living for the lion's share of sub-Saharan Africans.

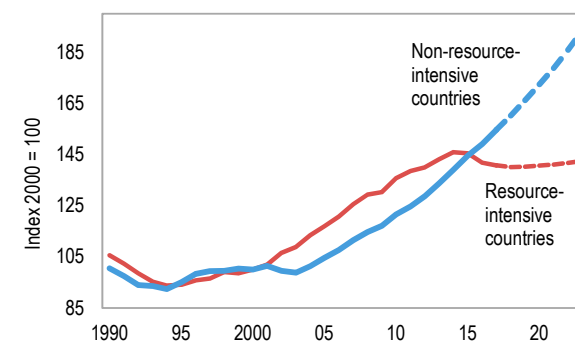
Against the backdrop of a complex and less-supportive external economic and geopolitical environment, the implications for policies (in the broadest of terms) are twofold:

- For the fast-growing economies, there is need to hand over the reins of growth from the public to the private sector. High growth in many of these countries has in part been spurred by higher levels of public investment, leading to a steady increase in public debt levels, notwithstanding rapid growth. This is a sign that fiscal policy has been procyclical, and the focus should switch toward limiting the increase in public debt and looking for alternative approaches to create fiscal space for further development spending, including through higher revenue mobilization, strengthening public financial management, and enhancing the efficiency of public investment.
- In the more resource-intensive countries and slower growing economies, there is a pressing need to complete the required fiscal

and external account adjustments to lower commodity prices, for reforms to facilitate economic diversification, and to promptly address the policy uncertainties that are holding back growth (particularly in Nigeria and South Africa). Weaknesses in public and private balance sheets are weighing on credit to the private sector and growth.

On current plans, macroeconomic policies are reasonably well calibrated in most countries in the region. Most sub-Saharan African countries have either a neutral or a tight monetary policy stance and have announced fiscal consolidation plans, which if implemented would contain their debt trajectories. These macroeconomic policies may need to be recalibrated to support growth in the event downside external risks materialize. However, countries would need to ensure that any shift in their policy stance is consistent with credible medium-term macroeconomic objectives, available financing, and debt sustainability. Fast-growing countries that face elevated debt vulnerabilities would need to prioritize rebuilding their buffers. In contrast, in the face of shocks that are deemed temporary, slow-growing countries could seek additional financing to accommodate a more gradual macroeconomic adjustment. And where this additional financing is not available, they should design the composition of macroeconomic adjustments with the least damage to near- and medium-term growth prospects.

Figure 1.1. Sub-Saharan Africa: Real GDP per Capita, 1990–23



Source: IMF, World Economic Outlook database.

Note: See Statistical Appendix for country groupings table.

This chapter was prepared by a team led by Papa N'Diaye, coordinated by Nkunde Mwase and composed of Seung Mo Choi, Jesus Gonzalez-Garcia, Cleary Haines, Andresa Lagerborg, Miguel Pereira Mendes, and Torsten Wezel.

Such policies, together with measures to raise productivity growth and ensure more equitable sharing of the benefits of increased prosperity, would help sub-Saharan African countries strengthen resilience and create the conditions for sustained high and inclusive growth.

The rest of this chapter looks more closely at (1) the challenges the global environment poses for the region, (2) the causes behind and impact of rising public debt levels, and (3) some of the reforms needed to facilitate higher productivity growth.

Chapter 2 is devoted to a comprehensive analysis of the challenges faced by conflict that is exacting a toll on human lives and economies in a number of countries in the region, in particular, the analysis considers (1) the evolution in prevalence and intensity of conflicts over time in sub-Saharan Africa, (2) the impact (both directly and indirectly, through spillover effects) of conflicts on economic growth, (3) the key channels through which conflict affects output, and (4) the fiscal implications.

Chapter 3 assesses the opportunities for the region from the African Continental Free Trade Area (AfCFTA), which is in the process of ratification by countries. The agreement should create an important avenue to expand trade and foster closer economic integration between countries in the region. The analysis focuses on three key questions (1) How has Africa's intraregional and international trade evolved over time and what lessons can be drawn from the continent's subregional economic communities on the potential for further integration? (2) What is the potential impact of the AfCFTA on intraregional trade, and what policies are needed to foster further regional trade integration? and (3) How will the AfCFTA affect the welfare, income distribution, and fiscal revenue of African countries?

MACROECONOMIC DEVELOPMENTS AND PROSPECTS

A Complex External Environment

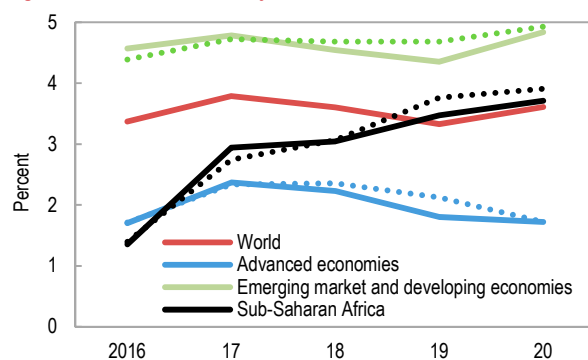
The global expansion has weakened amid rising trade tensions, volatile global financial conditions, and lower commodity prices (Figure 1.2). Global growth is estimated at 3.6 percent in 2018,

0.1 percentage point less than projected in the October 2018 *World Economic Outlook* (WEO), and is expected to slow to 3.3 percent in 2019 before recovering to 3.6 percent in 2020. The outlook for the global economy reflects a persistent weakening in activity in advanced economies, especially the euro area, and a slowdown, albeit temporary, in emerging markets. Over the medium term, global growth is expected to remain below the average prior to the global financial crisis amid weak productivity growth and a declining labor force growth in advanced economies.

Meanwhile, countries continue to deal with sharp swings in commodity prices (Figure 1.3). Volatility in commodity prices has increased, with a sharp fall in oil prices during the last quarter of 2018. Other non-oil commodity prices have also weakened, partly due to subdued demand from China. This marks a break from the sustained commodity price recovery since 2016, and markets are expecting most commodity prices to weaken further in 2019–20. Thus, the terms of trade for the region's oil exporters are expected to deteriorate, while those for the oil importers are poised to improve somewhat (Figure 1.4).

Volatility has also increased in global asset markets, and at the same time global financial conditions tightened in the latter half of 2018 (Figure 1.5). Nevertheless, foreign investors' appetite for the region's securities remained elevated, with issuances of international sovereign bonds by sub-Saharan African frontier markets reaching US\$17.2 billion in 2018, higher than the annual total in any previous year. Nigeria and Angola

Figure 1.2. Global Growth Projections: Current versus October 2018

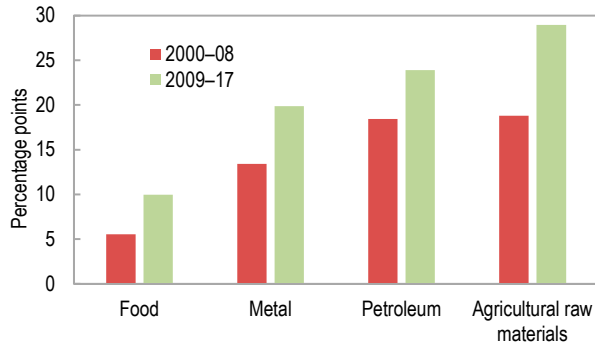


Source: IMF, World Economic Outlook database.

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

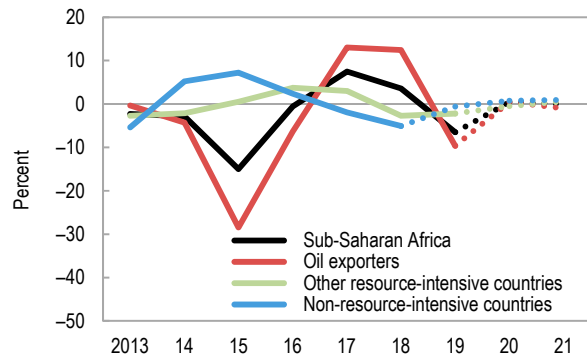
accounted for over half of the issuances, with about US\$5.4 billion and US\$3.5 billion worth of Eurobonds, respectively, with the remainder broadly evenly distributed across four other countries (Côte d’Ivoire, Ghana, Kenya, Senegal). But while

Figure 1.3. Real Commodity Price Indices: Volatility of Changes in Price Indices, 2000–08 and 2009–17



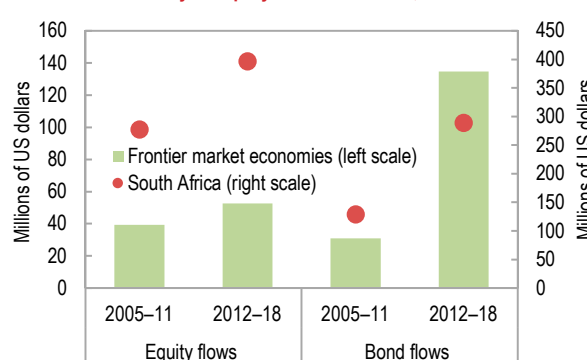
Source: IMF, Commodity Price System.
 Note: Standard deviation of biannual change in indices. All indices are deflated with US consumer price index.

Figure 1.4. Sub-Saharan Africa: Goods Terms of Trade Growth, 2013–21



Source: IMF, World Economic Outlook database.
 Note: See Statistical Appendix for country groupings table.

Figure 1.5. Sub-Saharan African Frontier and Emerging Market Economies: Volatility of Equity and Bond Flows, 2005–11 and 2012–18



Source: Haver Analytics.
 Note: Standard deviation of monthly flows.

the issuances were oversubscribed, the borrowing cost at issuance for the 30-year maturity has increased (for example, by about 162.5 basis points for Nigeria over the past year). The tightening in financing costs reflects monetary policy normalization in advanced economies and increased risk aversion, with some differentiation based on countries’ underlying fundamentals.

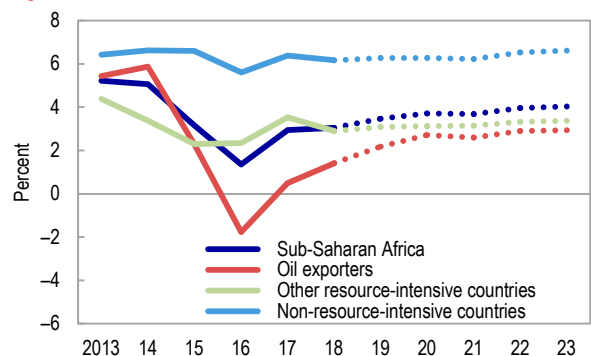
The Recovery Is Expected to Continue at a Slower Pace than Envisaged in October 2018

Against the backdrop of a less supportive external environment, sub-Saharan Africa’s average growth (weighted by GDP in purchasing power parity terms) is expected to increase from 3.0 percent in 2018 to 3.5 percent in 2019 and 3.7 percent in 2020 (Figure 1.6), about ¼ percentage point less than envisaged in the October 2018 *World Economic Outlook*. But these aggregate figures mask considerable heterogeneity across countries, with substantial differences between resource-intensive and non-resource-intensive countries.

Starting with resource-intensive countries, the overall performance remains weak in the largest economies, especially Nigeria and South Africa.

- Growth in Nigeria was 1.9 percent in 2018 and is expected to reach 2.1 percent in 2019, driven by recovering oil production and a pickup in the non-oil economy in the aftermath of the election. However, the near-term outlook remains subdued as a result of lower oil prices, which have large spillover effects, including to the non-oil economy. Over the medium

Figure 1.6. Sub-Saharan Africa: Real GDP Growth, 2013–23



Source: IMF, World Economic Outlook database.
 Note: See Statistical Appendix for country groupings table.

term, and under current policies, growth is projected to plateau at about 2¾ percent, implying that per capita income will remain broadly unchanged. These subdued growth prospects are likely to weigh on the region's growth performance both directly and indirectly through spillovers to Nigeria's trading partners, remittances to recipient countries, and financial linkages (see IMF 2018a).

- South Africa is expected to grow at 0.8 percent in 2018 and 1.2 percent in 2019. The recovery is predicated on a gradual improvement in business and consumer confidence as policy uncertainty diminishes. Under current policies, growth is expected to stabilize at about 1.8 percent over the medium term, barely above population growth. As a result, positive spillovers to other countries through import demand and the financial sector are likely to be limited (see IMF 2018a).

Non-resource-intensive countries are expected to continue growing rapidly at about 6.3 percent on average in 2019–20. Ethiopia, the region's third largest economy, is expected to see growth accelerate to 7.7 percent as the uncertainty engendered by political headwinds and external shocks abates. The government has also announced its intention to pursue reforms to hand the reins of growth to the private sector, which, if implemented properly, could raise growth in the medium term. Growth will remain driven mainly by rapid public investment (Senegal) and private consumption (Côte d'Ivoire, Kenya), particularly in the western and eastern parts of the region. Growth in other resource-intensive countries is expected to pick up, albeit at a more moderate pace of about 3.1 percent on average.

For the region as a whole and based on current policies, medium-term growth is expected to plateau at about 3¾ percent, or 1¼ percent in per capita terms. This is well below what is needed to lift the living standards of the region's population to the average of the rest of the world and help create the 20 million jobs a year needed to absorb new entrants to labor markets.

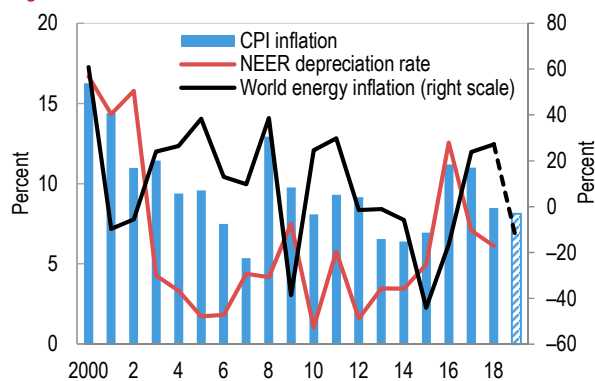
Inflation Pressures Are Easing, Driven by Low Oil Prices

Average inflation in sub-Saharan Africa is projected to decline to 8.1 percent in 2019 from 8.5 percent in 2018, reflecting the large decline in global energy prices. The pass-through of lower energy prices is expected to more than offset the lingering effects from past exchange rate depreciation (Figure 1.7). Demand pressures have played a limited role in inflation dynamics, and there is little persistence in inflation pressure, with only a quarter of each year's inflation manifesting itself into the next year, on average, across countries.

External Buffers Remain Low

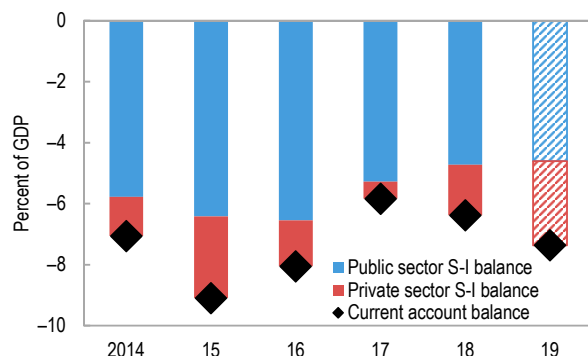
The (simple) average current account deficit is projected to widen to 7.3 percent of GDP in 2019 from 6.6 percent of GDP in 2018, mainly reflecting a larger deficit in non-resource-intensive countries and oil-exporting countries. The deficit in oil-exporting countries is expected to widen, owing to projected lower oil prices. The size of the current account deficit primarily reflects imbalances in public accounts (Figure 1.8), with public savings-investment deficits about three times as large as for the private sector in non-resource-intensive countries. The region is highly vulnerable to terms-of-trade shocks, and these have a large impact on current account positions, mainly through the trade balance. In particular, a 1 percent change in the commodity terms of trade translates into a 0.3–0.6 percent of GDP change in the trade balance, with the effects varying across countries and between positive and negative shocks.

Figure 1.7. Sub-Saharan Africa: CPI Inflation



Source: IMF, World Economic Outlook database.

Note: CPI = consumer price index; NEER = nominal effective exchange rate.

Figure 1.8. Sub-Saharan Africa: Savings-Investment Balance, 2014–19

Source: IMF, World Economic Outlook database.

Note: S-I = savings-investment.

Current account positions in the region remain below levels consistent with medium-term fundamentals and desired policies.¹ However, the range of current account imbalances varies widely across countries, ranging from no gaps in oil-exporting countries to large ones in non-resource-intensive and other resource-intensive countries.

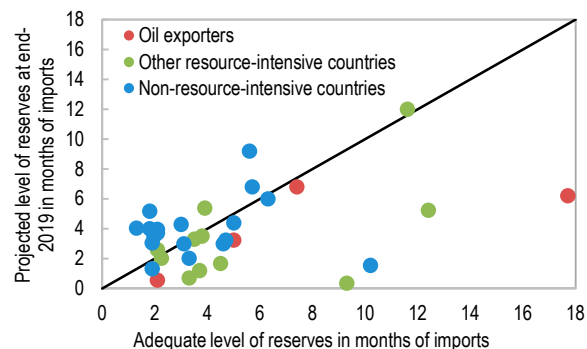
Widening current account balances are expected to further weaken foreign exchange reserve buffers, which are projected to fall to 3.7 months of imports in 2019, weakening particularly in oil exporters, and remaining below levels deemed adequate based on metrics derived from the crisis experiences of emerging market and developing economies (Figure 1.9).² The level of reserves in the region had been bolstered somewhat in 2018 by large capital inflows, especially following Eurobond issuances by frontier economies.

Fiscal Consolidation Is Expected to Proceed More Slowly as Terms-of-Trade Gains Erode

Following a significant contraction in 2018 by about ½ percent of GDP, the (simple) average fiscal deficit in the region is expected to narrow to about 3.2 percent in 2019–20 and continue on a consolidation path beyond 2020. The consolidation path primarily reflects the evolution of fiscal positions in oil-exporting countries, which are now expecting much lower oil revenue (Figure 1.10). This highlights the procyclicality of revenue and

¹ Based on the findings from staff analysis in “The Revised EBA-Lite Methodology” (forthcoming).

² The assessment of reserve adequacy is made using IMF tools specifically designed for emerging market economies and credit-constrained economies. See <http://www.imf.org/external/np/spr/ara/> for details.

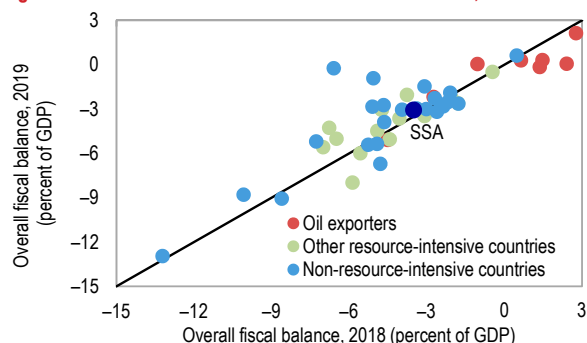
Figure 1.9. Sub-Saharan Africa: Reserve Buffers

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

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

capital spending to oil prices. In the face of adverse terms-of-trade shocks, fiscal adjustment tends to be uneven and skewed toward revenues and capital expenditure, particularly for oil exporters (Figure 1.11).

But this procyclicality is asymmetric. In general, an increase in the terms of trade above trend during “good times” raises revenues in oil exporters, while during a decline below trend in the terms of trade in “bad times,” revenues generally fall by an even larger margin. This reflects in part the sensitivity of corporate profits to commodity price cycles, compounded by tax design challenges (related, for example, to forward-carry losses). Similarly, oil exporters tend to expand capital expenditure

Figure 1.10. Sub-Saharan Africa: Overall Fiscal Balance, 2018–19

Source: IMF, World Economic Outlook database.

Note: See Statistical Appendix for country groupings table.

when the terms of trade are increasing and contract such expenditure during bad times by an even larger margin. Recurrent expenditures are much less sensitive to terms-of-trade cycles, reflecting some rigidities in spending items. Fiscal positions are expected to remain broadly unchanged in other resource-intensive countries and improve somewhat in non-resource-intensive countries. The improvement in non-resource-intensive countries mostly reflects some increased grants.

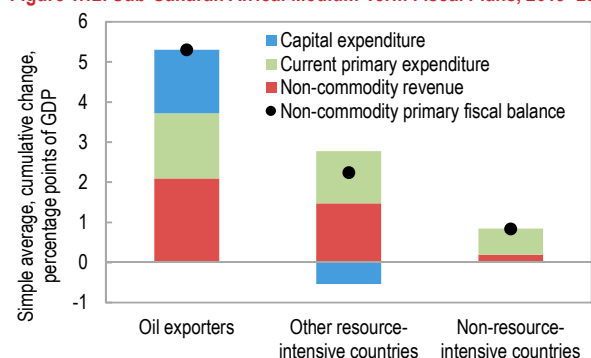
While some countries have made some progress on domestic revenue mobilization, most have not. Noncommodity revenue (excluding grants) increased as a ratio of GDP in 2018 in 25 countries, with the largest increases in the Democratic Republic of the Congo, Equatorial Guinea, Niger, Sierra Leone, and Togo. Most of the revenue increase stemmed from tax revenue.³ Progress on domestic revenue mobilization reflected (1) tax policy reforms, including through lower exemptions, and (2) improvements in revenue administration, including by assigning tax identification numbers to commercial importers, improving the land registry, and strengthening tax audits. In other countries, non-commodity-related revenue remained broadly unchanged or even declined as a share of GDP in a few cases (Botswana, Republic of Congo, Nigeria). The fall in noncommodity revenue partly reflects one-off factors and the introduction of exemptions (Botswana). Weak revenue administration and narrow tax bases continue to hold back domestic revenue mobilization. Overall, for sub-Saharan African countries, the revenue gap, estimated at

3–5 percent of GDP on average across countries, is not expected to be closed through the medium term (Figure 1.12).

Public Debt Vulnerabilities Remain Elevated

Sixteen sub-Saharan African countries are classified as having either a high risk of debt distress (Burundi, Cameroon, Cabo Verde, Central African Republic, Chad, Ethiopia, Ghana, Sierra Leone, Zambia) or being in debt distress (Republic of Congo, Eritrea, The Gambia, Mozambique, São Tomé and Príncipe, South Sudan, Zimbabwe) (Figure 1.13). The remaining 19 low-income and developing countries have low to moderate debt vulnerabilities. For middle- and upper-income countries, public debt remains sustainable under the baseline in most cases. However, debt ratios are close to or exceed risk thresholds in a few countries (Namibia, Seychelles).

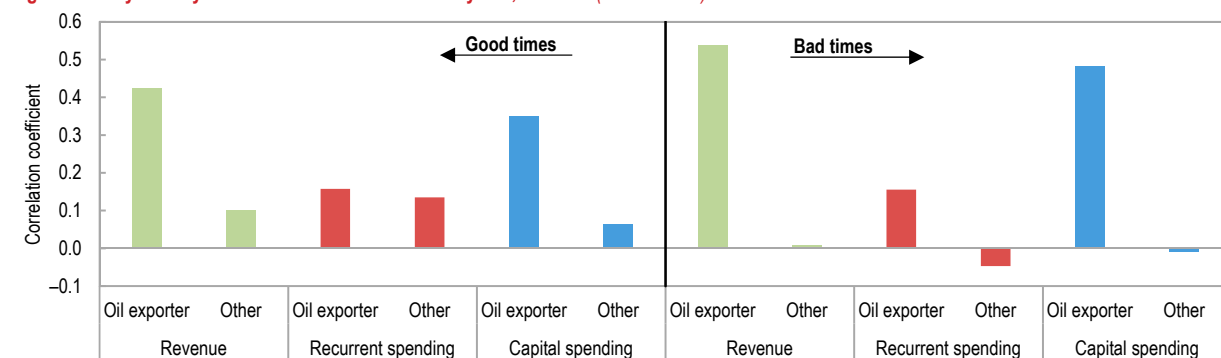
Figure 1.12. Sub-Saharan Africa: Medium-Term Fiscal Plans, 2018–23



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

Note: Excludes Burundi, Eritrea, and South Sudan due to data availability. See Statistical Appendix for country groupings table.

Figure 1.11. Cyclicity of Fiscal and Terms of Trade Cycles, 2000–17 (In real terms)



Source: IMF staff calculations.

³ For successful episodes of revenue mobilization, identified in IMF (2018b), the annual increase in the revenue-to-GDP ratio was 1.2 percentage points, two-thirds of which was contributed by taxes.

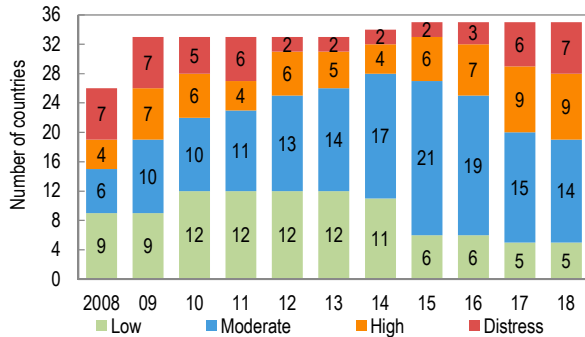
Average public debt in sub-Saharan Africa was estimated at close to 56 percent of GDP at the end of 2018, with wide heterogeneity in debt dynamics across countries. Oil exporters have seen some debt reductions, while other resource-intensive and non-resource-intensive countries continue to see increases in debt. Debt reductions mostly reflect fiscal consolidation in non-resource-intensive countries and a growth rebound in oil exporters.

Recent GDP rebasing contributed to a sizable drop in the debt ratio (The Gambia) and to a lesser extent elsewhere, as this was partially offset by commercial bank resolution (Ghana) and expansion in the debt perimeter to cover the broader public sector (Senegal). Also, in some highly indebted countries, continued improvement in revenue performance (Republic of Congo) and higher GDP

growth (The Gambia) are expected to strengthen debt-servicing capacity. Progress with debt resolution has helped reduce outstanding external arrears (Chad), and a number of other highly indebted countries are making good faith efforts to reach agreement with creditors (Republic of Congo, The Gambia).

Looking ahead, under current consolidation plans, public debt ratios are expected to stabilize or even decline across country groupings on average (Figure 1.14). But the baseline public debt trajectories are subject to significant uncertainties, including foreign exchange and rollover risk. Furthermore, fiscal uncertainties related to state-owned enterprises (SOEs) and the accumulation of public domestic arrears also weigh on public balance sheets (Cameroon, Ethiopia, The Gambia, Mozambique). In some cases, SOEs pose significant fiscal and financial risks, in part due to their relative economic size (Angola, Cabo Verde, South Africa), and have contributed to crowding out higher-priority public spending (Botswana, Cabo Verde, Madagascar).

Figure 1.13. Sub-Saharan Africa: Debt Risk Status for PRGT Eligible Low-Income Developing Countries, 2008–18



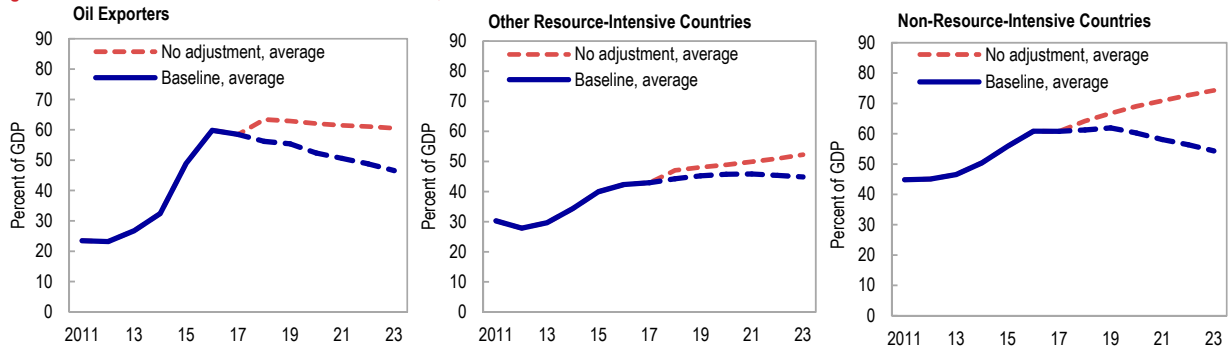
Source: IMF, Debt Sustainability Analysis Low-Income Developing Countries database.

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.

Weaknesses in Bank Balance Sheets Are Weighing on Credit Growth

Nonperforming loans (NPLs) remain high in many sub-Saharan African countries and have continued to rise, particularly in some countries where the ratios are already elevated (Central African Economic and Monetary Community [CEMAC]) (Figure 1.15). The high NPL levels reflect the legacy of the 2014 commodity shock,

Figure 1.14. Sub-Saharan Africa: Public 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 Statistical Appendix for country groupings table.

weak risk management practices, and government arrears (Central African Republic, Chad, Equatorial Guinea). In Ghana, write-offs are helping reduce the NPL overhang, as the systemwide NPL ratio reached 18.2 percent at end-2018. More generally, high NPL levels are weighing on credit growth (Figure 1.16) and encouraging banks to hold more government bonds (Bouis, forthcoming).

Despite some improvements in capital adequacy ratios, pockets of vulnerability remain. Banks' capital has increased as a ratio to risk-weighted assets in several countries (Chad, Republic of Congo, Equatorial Guinea, Gabon, Ghana, Malawi, Namibia), though zero risk weighting of government bonds could mask underlying capital coverage in the event that sovereign risk materializes (Figure 1.17). In many countries, capital increases reflect recent measures to raise minimum capital requirements, to resolve insolvent banks, or to

support illiquid ones (Ghana, Kenya). However, in a number of countries, a few small banks remain undercapitalized (Kenya, Nigeria, Togo), and in a few cases, systemic banks remain undercapitalized as well. Other sources of concern for the health of banks' balance sheets include foreign currency liquidity mismatches (Angola), high loan concentration (Benin, Equatorial Guinea, Eswatini, Malawi, Namibia), insufficient provisioning (Angola), and increased household and corporate debts (Tanzania).

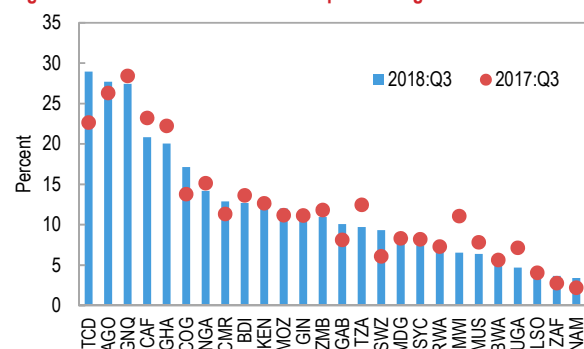
RISKS TO THE OUTLOOK

Risks are mainly tilted to the downside in the near term and balanced over the medium term. In the near term, deteriorating external conditions could slow growth in sub-Saharan Africa amid an escalation and broadening in trade tensions, stronger-than-anticipated tightening of global financial conditions, and greater policy uncertainty. In addition, the region's dependence on agriculture makes it vulnerable to extreme weather conditions. Over the medium term, while low potential growth and slow employment creation raise risks of dislocation and threaten social cohesion, further trade and financial integration promise to improve living conditions and facilitate structural transformation.

Trade Tensions

Trade tensions between the United States and China and several advanced economies have contributed to slowing global demand, especially in China, which in turn has led to lower commodity prices and

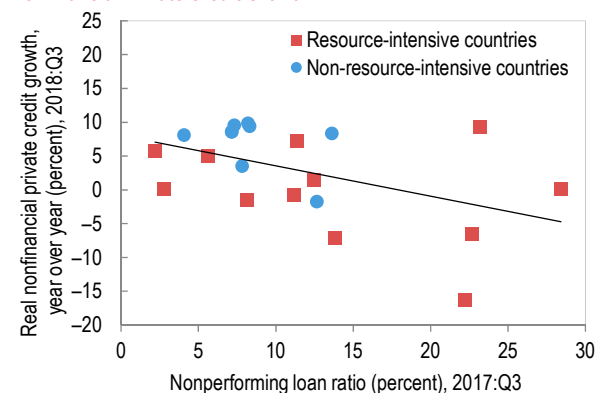
Figure 1.15. Sub-Saharan Africa: Nonperforming Loan Ratio



Sources: Country authorities; and IMF, Financial Soundness Indicators database.

Note: See page vi for country abbreviations table.

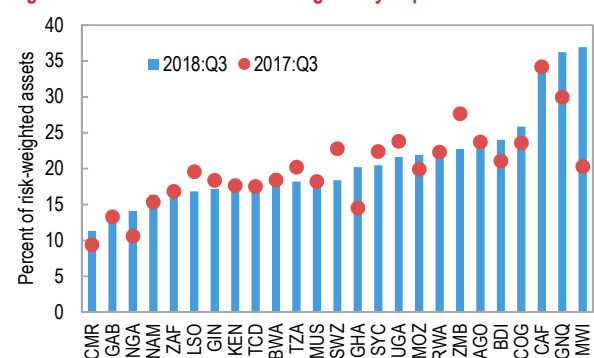
Figure 1.16. Sub-Saharan Africa: Nonperforming Loan Ratio and Real Nonfinancial Private Credit Growth



Source: IMF, Financial Soundness Indicators database.

Note: See Statistical Appendix for country groupings table.

Figure 1.17. Sub-Saharan Africa: Regulatory Capital Ratio



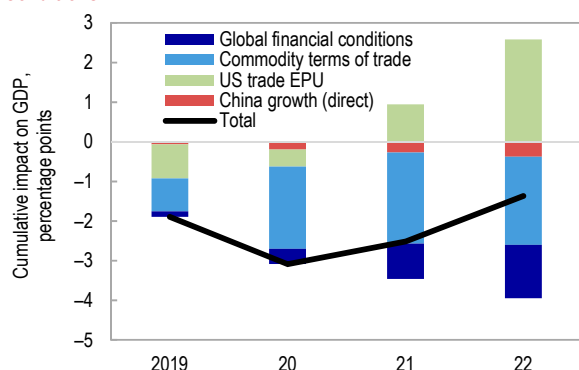
Sources: Country authorities; and IMF, Financial Soundness Indicators database.

Note: See page vi for country abbreviations table.

weaker demand for sub-Saharan Africa's commodity exports. Intensification of these tensions beyond what is already incorporated in the forecast could slow growth in the region significantly. Indeed, growth-at-risk analysis indicates that heightened trade tensions along with increased trade policy uncertainty in the United States, slower growth in China, lower commodity prices, and tighter global financial conditions could lower growth in sub-Saharan Africa by 2 percentage points in 2019 and 1½ percentage points in 2020 (Figure 1.18). Sub-Saharan African countries most affected by trade tensions would be commodity exporters, along with those countries (commodity exporters and importers alike) that have stronger linkages with China and global markets, and those with large refinancing needs.

However, if there is a resolution of trade differences without increasing distortionary barriers, improved sentiment and continued easing financing

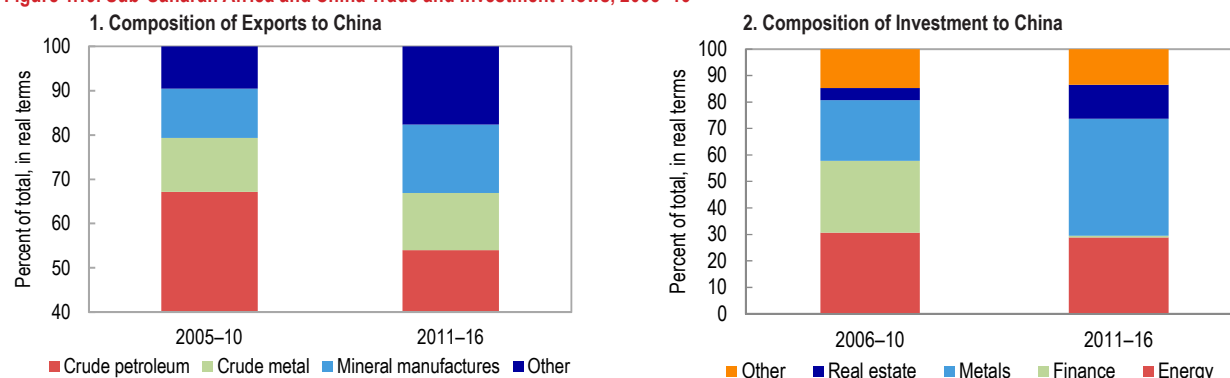
Figure 1.18. Trade Tensions, China Slowdown, and Global Financial Conditions



Source: IMF staff calculations.

Note: EPU = economic policy uncertainty.

Figure 1.19. Sub-Saharan Africa and China Trade and Investment Flows, 2005–16



Sources: United Nations, Commodity Trade Statistics database; Chinese Global Investment Tracker; and IMF staff calculations.

conditions could lift global growth, with positive effects on sub-Saharan Africa.

Sharper-than-Anticipated Growth Slowdown in China

China's economic ties with the region have deepened markedly over the past 20 years both through trade and financial linkages. China is the region's largest trading partner, accounting for about 20 percent of total trade. About 70 percent of the region's exports to China are related to commodities, particularly oil, minerals, and metals. About 20 percent of the region's imports are from China, and they are dominated by consumer goods imports (45 percent) and to a smaller extent physical capital goods and intermediates. Imports from China amounted to US\$67.5 billion in 2017, compared with US\$13.7 billion imports from the United States and US\$79.7 billion imports from Europe. At the same time, China has become a major creditor for the region, providing significant lending to several countries as well as foreign direct investment (about 5 percent of total foreign direct investment). China's direct investment into the region is typically in metals and energy and flows primarily to resource-intensive countries. These investments are then channeled back into China through exports of metals and minerals (Figure 1.19).

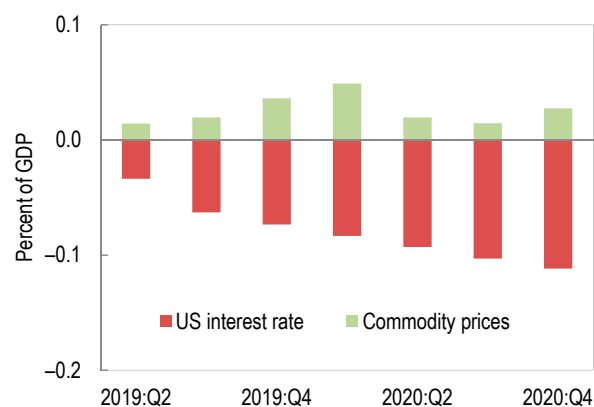
Thus, a sharper-than-anticipated slowdown in China has the potential to affect growth in the region significantly, mainly through trade linkages, particularly the demand for commodities with its attendant effects on commodity prices.

Overall, empirical estimates indicate that, over a one-year horizon, a 1 percent fall in industrial production in China leads to a 5–7 percent fall in metals and fuel prices (see IMF 2016b). These effects could be compounded by several factors, including a reduction in China’s investment in resource-intensive countries and increased volatility in global financial markets as uncertainty rises about economic prospects in China. Increased volatility in global markets could lead to a tightening in financing conditions for the region’s frontier economies.

Tighter Global Financial Conditions

Stronger-than-anticipated tightening of global financial conditions could arise from a range of triggers besides escalating trade tensions, including higher-than-expected inflation in the United States, a “no-deal Brexit” withdrawal of the United Kingdom from the European Union, or a deeper-than-envisaged slowdown in China. Tighter global financial conditions could constrain financing and growth for many sub-Saharan African countries, especially the region’s frontier economies, which have relied heavily on global markets to finance development needs. Furthermore, as tighter financial conditions are likely to manifest themselves in higher US interest rates, a stronger US dollar, and lower commodity prices, capital outflows and refinancing risks—particularly given the lumpy maturity of bonds (Figures 1.20 and 1.21)—could rise, increasing the likelihood

Figure 1.20. Net Financial Flows: Estimated Cumulative Impact of External Factors



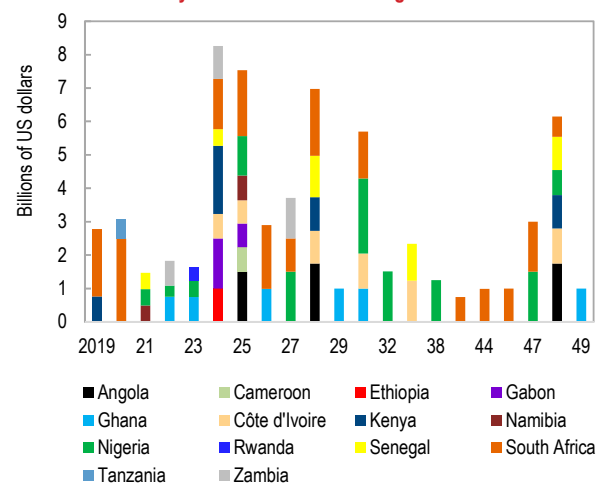
Source: IMF International Financial Statistics database. IMF staff estimation based on Chapter 2 in *Regional Economic Outlook: Sub-Saharan Africa*, October 2018.

of a balance of payments crisis in sub-Saharan Africa. Second-round effects could be substantial, compounded by growing sovereign-bank linkages that make banking sectors increasingly vulnerable to tightening global financial conditions and fiscal challenges.

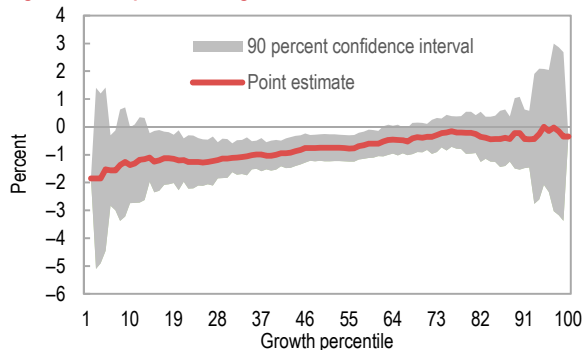
Climate Shocks

Climate shocks such as excessive rains or a delayed rainfall season can lower agricultural output, increase food imports, reduce export and tax revenue capacity, and increase public spending needs. Below-average precipitation can reduce growth by up to 1½ percentage points within the same year in extreme cases (Figure 1.22). Cyclone Idai made landfall in March 2019 in southeast Africa with more than 2.6 million people affected and a decimation of physical infrastructure and farmland. In addition, El Niño could cause droughts in southern Africa (Botswana, Lesotho, Malawi, Mozambique, South Africa, Zambia, Zimbabwe) as well as above-average rainfall in east Africa (Ethiopia, Kenya, Tanzania, White Nile Basin). Thus, southern African countries are likely to suffer from lower crop production, while east Africa could benefit from abundant production in certain areas while suffering from flooding in others (particularly along the river systems of Kenya). These weather vagaries could also imply significant welfare implications with potential effects on conflicts.

Figure 1.21. Sub-Saharan African Frontier and Emerging Market Economies: Maturity of International Sovereign Bonds



Source: Bloomberg Finance L.P.

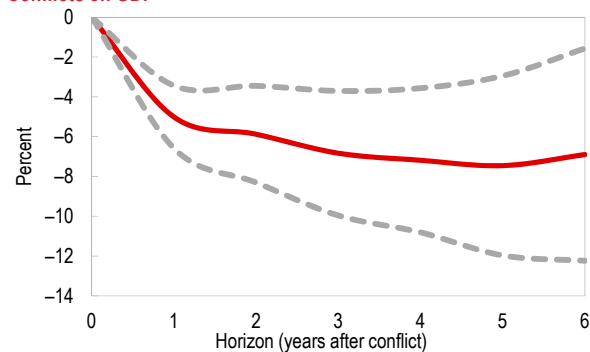
Figure 1.22. Impact of Droughts on GDP¹

Source: IMF staff calculations.

¹ Drought is defined as a dummy for average annual rainfall being at least one standard deviation below the mean.

Security

Heightened security risks have taken a toll on several countries, displacing millions of people and causing significant economic and social costs. The number of internally displaced persons is estimated to have reached 18 million in 2018 alone. As shown in Chapter 2, the loss of human life; destruction of infrastructure, human capital, and institutional quality; political instability; and elevated uncertainty associated with conflicts hamper investment and economic growth—not only in the year of the conflict but also afterward, making it difficult to escape the “conflict trap.” Intense conflicts could lower output by a cumulative 7½ percentage points through the medium term (Figure 1.23). They could also place significant strains on countries’ public finances, raising expenditure (including military spending) and lowering revenue, hampering governments’ ability to effectively respond to public finance challenges and thereby exacerbating the economic and social

Figure 1.23. Sub-Saharan Africa: Cumulative Impact of Intense Conflicts on GDP¹

Source: IMF staff calculations.

¹ Intense conflict is defined as moving from 0 to the top quartile of countries in terms of conflict-deaths-to-population ratio.

costs of the conflicts. Furthermore, these effects are also transmitted to neighboring regions and countries. In particular, the empirical evidence in Chapter 2 shows that large conflicts (involving 100 fatalities or more) in neighboring states within 500 kilometers are associated with a reduction in growth of about 2 percentage points. Thus, persistent security challenges could have global economic and humanitarian consequences.

POLICIES

For close to 20 years starting in the mid-1990s, the lion’s share of sub-Saharan countries recorded strong economic growth and improved development outcomes. During this period, growth was spurred by reforms and improved economic policies, a boom in commodity prices that benefited commodity exporters, fiscal space created by debt relief, and increased trade and investment flows.

But since 2015 this period of rising incomes has stalled, mainly for resource-intensive countries, and baseline projections indicate limited improvement over the medium term. The deterioration in economic outcomes and prospects is mainly due to the historically large adverse terms-of-trade shock in 2014. Oil exporters faced the largest real oil price decline since 1970—a decline that was unanticipated both in timing and magnitude, with real GDP for oil-exporting and other resource-intensive countries turning out to be significantly below earlier projections. At the same time, economic outcomes for non-resource-intensive countries have been broadly in line with projections, if not slightly better than expected, and baseline projections suggest continued strong growth over the medium term. Nevertheless, by 2023 more than half of sub-Saharan African countries won’t see a narrowing in their per capita income gap with the rest of the world. And as these countries are home to more than two-thirds of the region’s total population, it is imperative that the challenges they face be resolved if the region is to achieve its Sustainable Development Goals. Meeting these goals would require substantial investment in infrastructure, education, and health care, the financing of which hinges on the ability to spur joint efforts from national authorities, the donors’ community, and the private sector (Gaspar and others 2019).

The rest of this section considers the reforms required to strike a balance between continuing to invest in much-needed human and physical capital, keep public debt levels at manageable levels, and create conditions to generate jobs for some 20 million new entrants into the labor market each year.

Ensuring Macroeconomic and Financial Stability

Striking the right balance between addressing development needs and containing public debt levels.

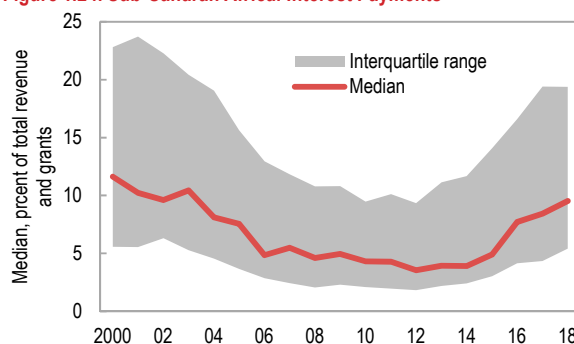
The reasons for the pronounced increase in public debt in many sub-Saharan African countries are generally country-specific. Some of the debt increase reflects efforts by countries to address much-needed human capital and infrastructure development needs at a time of easier global financial conditions. In other cases, the debt increase was unanticipated and instead reflected the adverse impact of the commodity price shock—in many cases, the impact of the 2014–16 commodity price slump on output (and public debt) was commensurate with that observed in the wake of the global financial crisis on many advanced and emerging market economies. And in other cases, the contributory factors to the public debt buildup have included the migration of contingent liabilities to the public sector balance sheet, sometimes reflecting losses by SOEs and valuation effects associated with exchange rate depreciations.

The concerns with the rising level of debt are threefold:

First, seven countries, mainly in fragile situations and/or hard-hit by the commodity price slump have found themselves unable to service their debt and thus needing to restructure it. This includes Chad, Mozambique, and the Republic of Congo.

Second, even where public debt remains at manageable levels, higher public debt is translating into higher debt service payments that are consuming a growing share of tax revenues. Debt servicing costs have increased sharply in sub-Saharan Africa, with the median interest payment burden doubling to about 10 percent of revenue since 2011 (Figure 1.24). This increase

Figure 1.24. Sub-Saharan Africa: Interest Payments



Source: IMF, World Economic Outlook database.

in debt service is due both to higher debt levels and a shift in the composition of debt. As official development assistance has declined in relation to recipient countries' GDP, and against a backdrop of increased fiscal space from debt relief, many countries in the region have turned to commercial and other nonconcessional sources to borrow to meet their development needs.

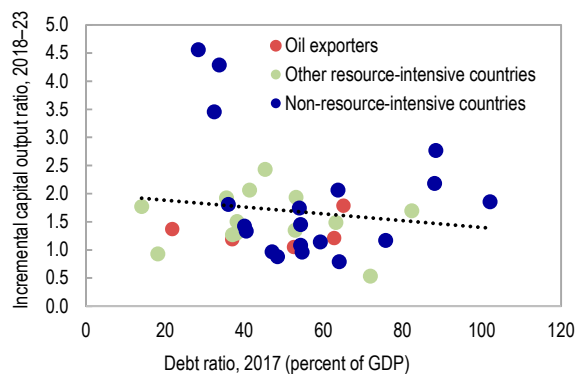
Third, the composition of public debt has become more complex in many cases. Of the US\$366 billion increase in debt between 2010 and 2017, about two-thirds was due to market borrowing (either from domestic financial systems and/or international capital markets) and thus subject to repricing risk; about 43 percent was in foreign currency and thus sensitive to exchange rate movements; and 13 percent was from bilateral creditors. Of course, the increased availability of alternative funding sources has also been helpful in some instances—for example, Côte d'Ivoire, Ghana, Kenya, Nigeria, and Senegal, have used favorable global financing conditions to improve the maturity structure of debt, replacing short-term debt with longer-term debt, thus reducing rollover risk.

These challenges highlight the need for fiscal policy to pay strong attention to avoiding an unsustainable debt buildup as well as strengthening debt management practices.

While debt ratios have gone up, the investment needs remain large, including in infrastructure, education, and health. To navigate these challenges and strike the right balance between meeting development needs and reducing debt vulnerabilities, the focus should be on:

- Ensuring efficient public investment. This requires improved project planning, allocation and implementation phases (IMF 2015a). In particular, it entails assessing the macroeconomic consequences and potential risks associated with alternative financing strategies, different public investment trajectories, and changes in investment efficiency. The appropriate trade-off between these two competing priorities clearly depends on country-specific circumstances and conditions, including financing modalities. The baseline projections assume higher efficiency in public investment for countries with high debt (Figure 1.25), but the case for ramping up infrastructure spending varies across countries based on needs, capacity, and fiscal space. Where debt dynamics are a serious cause for concern, the case for using fiscal savings to contain debt accumulation and rebuild fiscal buffers is stronger. Even so, rebalancing public spending away from nonessential recurrent spending and subsidies toward social and development spending could help provide space to advance development needs. Where infrastructure gaps are impeding growth and public investment management capacity is high, the case for using fiscal space for development purposes would be strong.
- Implementing growth-friendly fiscal policies. Multipliers of both public investment and consumption expenditure are significantly larger in countries where public investment is most efficient, and lower in countries where

Figure 1.25. Sub-Saharan Africa: Public Investment Incremental Capital Output Ratio and Public Debt



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

Note: Sample excludes outliers and negative incremental capital output ratio. See Statistical Appendix for country groupings table.

it is less efficient (IMF 2017). In many cases, improving the composition and quality of spending requires decisive action to substantially cut low-priority capital expenditure and recurrent spending while protecting social outlays to mitigate the impact on the most vulnerable population. Efficiency improvements in goods and services (including reducing subsidies), payroll cleanup, and limits on nonwage compensation (as successfully done in Benin) could help contain recurrent spending while placing priority on social spending on health, education, and social safety nets. The region's growth potential could also benefit from growth-friendly fiscal policies. For example, simulations indicate that reducing income and gender inequality in the West African Economic and Monetary Union (WAEMU) could boost real GDP per capita by 0.5 percentage point on average and reduce the volatility of GDP growth.

- Stepping up revenue mobilization. With an average revenue gap estimated at 3–5 percent of GDP, all countries have significant room to raise revenue. And yet progress on domestic revenue mobilization has been elusive. Revenue advanced in 2018 by about 0.3 percent of GDP on average across countries, mainly on the back of higher-than-anticipated oil prices. This compares with an average increase in revenue (excluding grants) of 1¼ percent of GDP in past successful cases of revenue mobilization, which was mostly contributed by noncommodity revenue (Liberia, 2006–10; Mozambique, 2007–12; Rwanda, 2012–14; Senegal, 2001–03; Tanzania, 2005–07; Uganda, 2014–16). These successful episodes were based on improvements in revenue administration and tax policy reform (IMF 2018c). To increase the efficiency of the tax system and enhance tax administration, a number of countries are considering measures to broaden their tax base, such as introducing or reforming the value-added tax system (Angola, Senegal), bringing the informal sector into the tax net (Senegal), and reducing tax expenditures (Benin, Kenya)—including by streamlining tax exemptions and ensuring that those exemptions in place are granted through a rules-based transparent process.

- Improving economic efficiency and containing fiscal risks from SOEs. In the context of continued restructuring efforts, several countries have increased transparency by publishing findings of official reports on SOE performance (Cabo Verde, Cameroon, Ghana), strengthening and improving the governance of an SOE oversight agency (Angola, Ghana), auditing SOE governance and operations (The Gambia, Niger, Seychelles), updating the legal framework for SOEs (Cameroon, Guinea, Mozambique), and outsourcing SOE management (Guinea-Bissau). In some cases, an SOE restructuring program includes resolving insolvent SOEs (Angola) or possible privatization of nonstrategic SOEs (Angola, Cabo Verde, Chad, Ethiopia, South Africa).
- Reducing procyclicality of spending. Some countries plan to develop a fiscal rule to support transparent and prudent management of future oil revenue and move to a fiscal stabilization fund to help reduce the procyclicality of spending (Angola, Senegal, Uganda).
- Strengthening public financial management. The failure of existing systems and tight financing conditions is manifesting itself in large domestic arrears (Cabo Verde, Cameroon, Ghana, São Tomé and Príncipe, South Africa, Zambia), with attendant negative effects on growth and domestic financial systems. Enhancing the medium-term expenditure framework (Angola, Botswana), switching to the Treasury Single Account (Republic of Congo, Côte d'Ivoire), moving to performance-based budgeting (Botswana), and enforcing internal controls (Angola, Uganda) could help avoid misallocation of expenditure and smooth arrears management. Furthermore, improving capital project selection (Benin, Senegal, Seychelles, Tanzania) would enhance the efficiency of investment and reduce potential risks arising from SOEs and public-private partnerships (Seychelles).
- Improving debt management frameworks to better manage currency and rollover risks. A number of countries have used debt buybacks to ease near-term refinancing risks and reprofile external debt (for example,

Ghana's buyback of the 2022 Eurobond with proceeds from the 2018 Eurobond, which was also its first ever bond with a 30-year maturity) and to better align the repayment currency with foreign exchange earnings (Seychelles). To reduce bunching of external loan repayments, most countries have turned to multitranche Eurobond issuances. Nevertheless, caution is warranted as delayed buybacks with the Eurobond proceeds could result in unnecessary carry costs.

Strengthening the effectiveness of monetary policy

The monetary transmission mechanism in the region has strengthened, but there are large differences across countries. Empirical evidence suggests that the transmission mechanism is much stronger in countries where monetary authorities clearly communicate their policy objective, instrument, and strategy. Strengthened communication and transparency have helped reduce the frequency of surprise monetary policy decisions (Mozambique, South Africa). However, in recent years, a few countries (Kenya, Malawi, Nigeria) have witnessed a reversal of some of these gains. In those cases, central bank financing, redirecting bank lending toward government securities (Malawi), crowding-out effects (Nigeria), and lending rate caps that reduce the central bank policy rate's signaling effect (Kenya) have affected the transmission mechanism. In addition, concerns about access to credit and borrowing costs have led to populist pressures to introduce interest controls (Kenya, Malawi), with attendant adverse consequences on the availability of credit.

Enhancing the monetary transmission mechanism would require raising caps on interest rates; moving toward a more market-oriented monetary policy operating system and reducing fiscal dominance; improving secondary bond and interbank markets; reducing excess liquidity in banking systems through active use of open market operations; enhancing transactions in interbank markets, including by addressing concerns about counterparty risks, such as a new collateral mechanism for bank refinancing operations (CEMAC, WAEMU); and expanding the collateral framework to include all government securities (CEMAC, Botswana). Additional policy recommendations include

bringing short-term interest rates into positive territory in real terms and keeping them there (especially in Angola); narrowing the overnight interest rate corridor and establishing a symmetrical interest rate corridor with rates linked to the key policy rate; developing robust forward-looking frameworks for forecasting liquidity and managing inflation; and strengthening the independence of central banks.

Enhancing real exchange rate flexibility

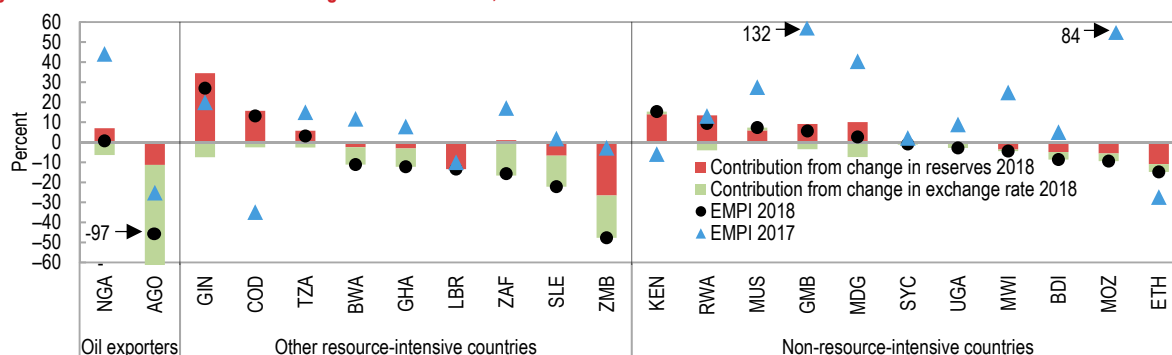
Lower external buffers have meant increased exchange rate pressures in some countries and have exacerbated foreign exchange shortages. This has translated into large premiums between official and parallel market exchange rates, particularly for oil exporters (Angola, South Sudan) (Figure 1.26) and a few other resource-intensive countries, such as Ghana. Countries have generally responded to market pressure by relying more on reserves than exchange rate flexibility. In part this reflects concerns about large foreign-currency-denominated liabilities, significant pass-through of exchange rate changes to inflation (estimated at about 40 percent), and limited responsiveness of output and exports to real exchange rate changes (owing to the small size of the manufacturing sector). Nevertheless,

further exchange rate flexibility, barring balance sheet vulnerabilities, as part of a broader product and labor market reform effort would enhance resilience and facilitate structural transformation. In countries with de jure fixed exchange rate regimes, such flexibility would mainly stem from relative price adjustments, and thus would require further structural reforms to enhance wage and price flexibility.

Securing financial stability

Several sub-Saharan African countries have tightened macroprudential policies to safeguard financial stability, including through restrictions on banks' foreign exchange positions, higher reserve requirements, and capital requirements (Angola, Ghana, Mozambique, Nigeria). Some countries are taking steps to reduce NPLs, including by strengthening creditor rights and reducing lengthy judicial processes in recovering collateral, halting net accumulation of public domestic arrears to the private sector (Equatorial Guinea), improving the credit information system, modernizing the insolvency regime, implementing financial education programs for medium-size corporates, and providing adequate safeguards to borrowers, including through customer protection measures.⁴

Figure 1.26. Sub-Saharan Africa: Exchange Market Pressure, 2017–18



Sources: IMF, International Financial Statistics database; and IMF staff calculations.

Note: The indicator of exchange market pressure index is the sum of the negative percent change in US dollar/local currency exchange rate plus the percent change in reserves. The changes are December to December of previous year. Negative values indicate pressure. EMPI = exchange market pressure index. See page vi for country abbreviations table and Statistical Appendix for country groupings table.

⁴ Many countries in the region have recently engaged in several initiatives to promote bank lending. Cabo Verde is considering providing partial guarantees on loans to small and medium-size enterprises; CEMAC plans to update the credit registry (though the initiative has been postponed until the end of 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 has adopted a law on a movable collateral registry to expand the collateral available against bank lending; and 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).

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 for the consistency and efficiency of judicial proceedings. Authorities could also establish permanent macroprudential buffers (on top of a microprudential minimum) that could be relaxed at the discretion of regulators in the event of shocks, thereby allowing NPLs to be absorbed by capital and for continued provision of credit.⁵

Sub-Saharan African countries have made progress in strengthening their banking sectors. 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 microfinance institutions, and a sound emergency liquidity assistance framework. WAEMU adopted new prudential rules aligned with the Basel II/III principles that should help consolidate banks' balance sheets and address vulnerabilities. Despite this progress, transitioning to the International Financial Reporting Standard 9 (IFRS 9) requires further strengthening banks' balance sheets, since the requirement to increase provisioning has meant raising further capital for many countries. Banks' compliance with IFRS 9 could have substantial macro-financial implications during the transition, including for credit growth and sovereign exposures, though it is too early to tell if the transition to IFRS 9 has had any such effect (Box 1.1).

The loss in correspondent banking relations is compounding financial sector challenges

A number of countries have responded to the loss of correspondent banking relationships (CBRs) by upgrading their anti-money-laundering/combating the financing of terrorism frameworks and other related legal and regulatory amendments in line with Financial Action Task Force standards (Angola, Seychelles). The decline in CBRs has resulted in a higher concentration in those relationships that remain, which carries a risk to financial stability

should any of the few remaining correspondent banks struggle to honor obligations. Looking ahead, ongoing reforms to strengthen the financial stability framework are expected to help reduce the risk of further loss of CBRs, especially through international capital adequacy requirements (Seychelles). In addition, countries are actively engaging with correspondent banks and their supervisors to better understand the specific reasons for the loss (Seychelles). There are various initiatives underway to help countries develop more sustainable frameworks, including at the multilateral level. For example, the IMF has established regional initiatives to facilitate policy dialogue and identify solutions to CBR issues, including a high-level workshop on CBR withdrawal for Southern African Development Community (SADC) countries in 2018 and three more events covering all of Africa planned for 2019. Some countries are also implementing a data monitoring framework (Angola, The Gambia, Seychelles) with some capacity support from the IMF.

Raising Medium-Term Growth

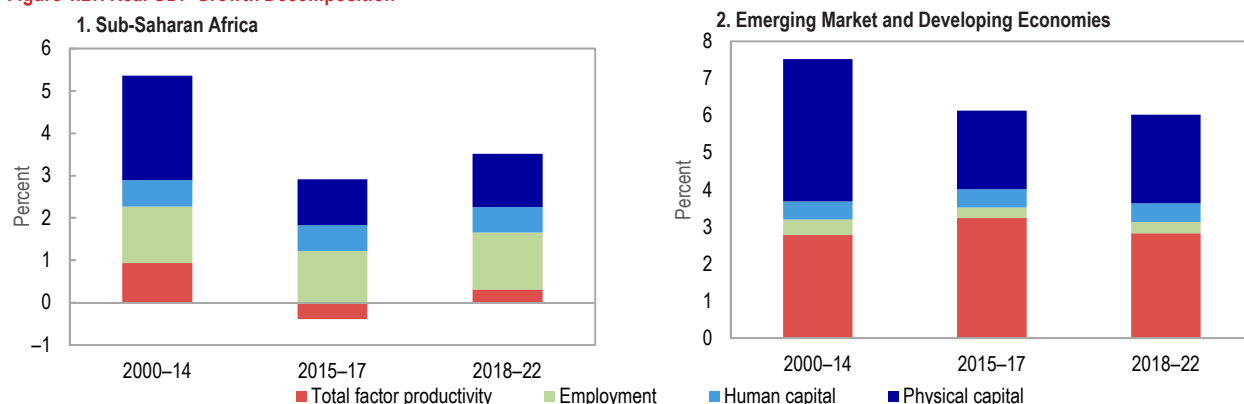
The region's medium-term growth prospects are held back by low productivity growth and limited physical capital accumulation, compared with countries at similar levels of development in Asia, developing Europe, and Latin America (Figure 1.27). Raising these growth prospects will require increasing productivity and promoting private investment and risk taking, including by deepening financial systems, while sustaining the gains will require making growth more inclusive.

Increasing productivity and enhancing the business environment

Increasing productivity will require enhancing the contestability of markets and nurturing a dynamic private sector. This in turn means removing the most salient constraints to business operations, especially access to reliable electricity provision, rent seeking, informal sector practices, security concerns, tax rates, and access to credit (Figure 1.28). Thus, measures aimed at leveling the playing field between public and private firms and between firms in the formal and informal sectors, improving governance, and fostering trade openness and integration could

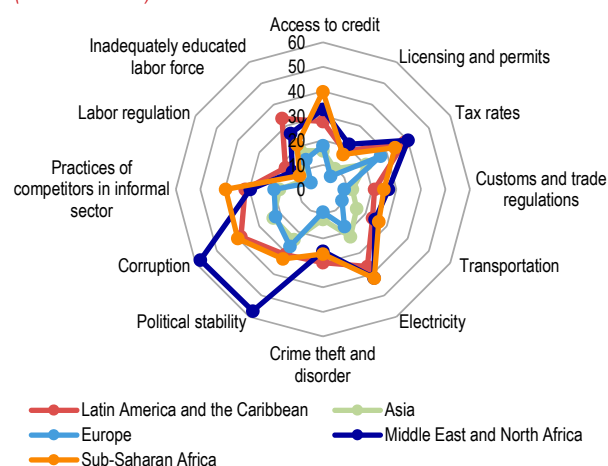
⁵ For more details, see IMF (2014 a, b).

Figure 1.27. Real GDP Growth Decomposition



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

Figure 1.28. Selected Emerging Market and Developing Regions: Major Constraints to Business Operations (Percent of firms)



Source: World Bank, Enterprise Survey Data.

spur competition and help lift productivity.⁶ As shown in Chapter 3, further trade integration through the AfCFTA could significantly boost intra-African trade, foster competition, and increase efficiency. The growth impact would be positive, but relatively muted, amounting to an estimated 1 percent increase in GDP levels if tariffs are eliminated and nontariff barriers are halved.

Deepening financial markets

Deepening financial systems with improved provision of and access to financial services as well as increased efficiency requires improving financial regulation and supervision, and more broadly,

improving the relevant institutional environment. Such efforts could help enhance access to finance, particularly for small and medium-size enterprises, as firm-level survey data suggest that access to finance tends to be more constrained in economies with very high NPL ratios or severe corruption. Countries in sub-Saharan Africa have focused on strengthening controls and anti-corruption frameworks (Angola, Benin). Additional measures to deepen financial markets include promoting credit/collateral registries (Angola, Benin, Tanzania), enhancing financial literacy (Seychelles), developing regional capital markets, and leveraging fintech (for example, mobile money, see Box 1.2) for greater financial inclusion.

Equality of opportunities

Empirical evidence suggests that most of the return to capital in sub-Saharan Africa accrues to nonfinancial corporates (55 percent), while households receive the least (20 percent), and their share has been declining over time. Within corporates, those with high levels of state ownership seem to enjoy higher benefits, including greater access to credit. Within households, there has been some progress toward greater equity, with the share of income earned by the highest 20 percent of the income distribution declining⁷ and that of the “middle-income earners” increasing. This is consistent with a scenario in which there is a rising middle class with increasing opportunities to reap benefits from returns to capital. Despite these

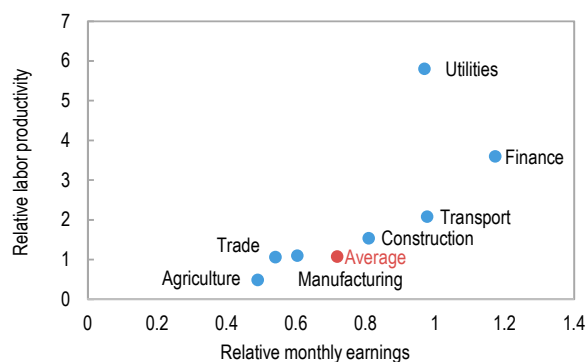
⁶ See IMF 2019a for a discussion on governance issues.

⁷ However, there are well-known underreporting issues for earners at the top of the income distribution.

improvements, however, there is scope to foster greater inclusion. Some 40 percent of people in sub-Saharan Africa still live on less than US\$1.25 a day, and the region has among the highest levels of gender inequality in the world. Addressing these challenges will require, in particular

- Facilitating the movement of labor toward other sectors than the government and agriculture to generate significant gains in efficiency (Figure 1.29).

Figure 1.29. Sub-Saharan Africa: Labor Productivity and Earnings Relative to Government Sector



Sources: Timmer, de Vries, and de Vries (2015); International Labour Organization; and IMF staff calculations.

Note: Weighted average.

- Fiscal reform, including domestic revenue mobilization and subsidy reform, to create space for transfer mechanisms targeted to the poor, and efficient spending on physical and human capital.
- Deepening financial systems with greater financial inclusion to help further reduce inequalities.
- Enhancing women’s participation in the economy, including by abolishing legal restrictions for women to open bank accounts or accept jobs, and addressing inequality in education (Box 1.3) to strengthen inclusivity of growth and growth potential.

These steps should be supported by measures to promote flexible education systems, while ensuring full enrollment with recourse to digital technologies to overcome existing bottlenecks.

Box 1.1. Transitioning to International Financial Reporting Standard 9

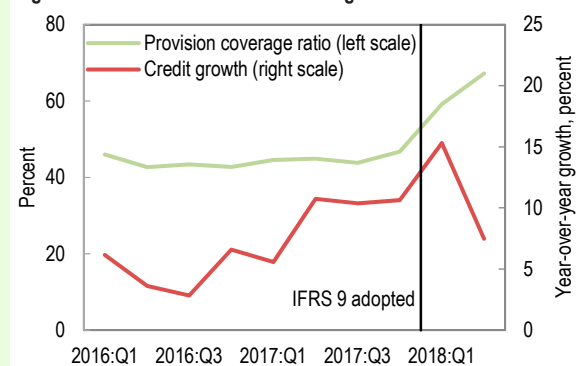
International Financial Reporting Standard (IFRS) 9, which changes the accounting rules for financial instruments, became effective worldwide in 2018. Adopting IFRS 9 is expected to provide more transparent disclosure of financial instruments, but banks would need to possibly increase provisions and possibly raise capital during the transition. Transitional arrangements, as introduced in some countries in the region, can help mitigate the potential impact on credit, while quantitative impact studies can help measure their severity.

Banks may need to increase loan loss provisions and raise capital, which is costly, during the transition to IFRS 9. IFRS 9 is used in about four-fifths of sub-Saharan African countries. While sectoral application of the standards differs across countries, banks are required to use IFRS 9 in many of them. Under the old standard (International Accounting Standard 39), provisions depended on actual incidences of default, implying that if a default had not occurred, banks did not have to take impairments. This implied a delayed recognition of credit losses in some cases, which was identified as a weakness of the old standard after the global financial crisis. Thus, the new standard, IFRS 9, intends to ensure that the credit risk of financial assets is assessed based on a forward-looking “expected credit loss” framework. This means that provisions are based on the likelihood of a default and potential losses. Overall, IFRS 9 is expected to provide more transparent disclosure of financial instruments. However, banks may need to raise regulatory capital due to increased provisions during the transition to IFRS 9, which is costly.

The modalities of the transition to IFRS 9 for banks vary across sub-Saharan African countries. In order to mitigate the potential impacts of IFRS 9 on capital positions, some authorities responded by allowing banks to adjust their capital over an extended period (for example, for three years in South Africa, four years in Rwanda and Nigeria, and five years in Kenya). Some authorities took a further step by setting the provisioning for government securities at zero (Rwanda).¹

There is a concern that adopting IFRS 9 could have adverse macro-financial impacts during the transition period, including downward pressure on credit growth. A quantitative assessment of the impact of the move to IFRS 9 on South African banks found a 39 percent increase in credit impairment but no breaches of capital adequacy ratios (SARB [2018]). In Rwanda, the provision coverage ratio has been on an increasing trend since the adoption of IFRS 9, and credit growth remains lower than the 2017 average (Figure 1.1.1). That said, the causality from IFRS 9 adoption to credit growth has so far been hard to establish (particularly given transitional arrangements). Further work by supervisors in the region will be needed to achieve compliance with the new global standard while avoiding an excessive impact on banks’ ability to lend.

Figure 1.1.1. Rwanda: Provision Coverage Ratio and Credit Growth¹



Source: IMF, Financial Soundness Indicators.

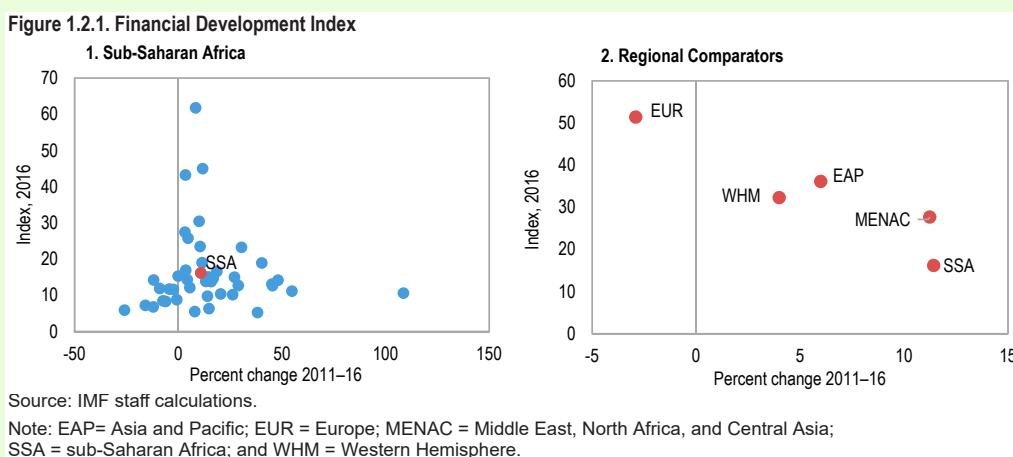
¹ Credit refers to total gross loans.

This box was prepared by Seung Mo Choi and Amadou Sy.

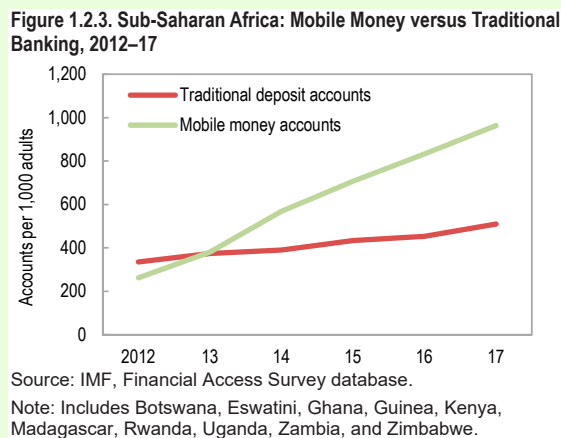
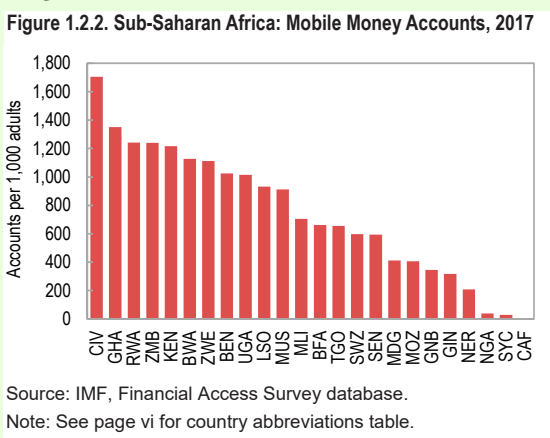
¹ However, setting the provisioning for government securities at zero could distort banks’ decision to allocate assets.

Box 1.2. Financial Development and Mobile Money Growth in Sub-Saharan Africa

*Financial development—excluding mobile money transactions—has grown faster in sub-Saharan Africa than in other regions, but its overall level continues to trail that of other economies.*¹ Progress in financial development differs across countries, with faster growth among countries that started off with lower financial development (Burkina Faso, Chad, Democratic Republic of the Congo, Republic of Congo, Côte d’Ivoire, Gabon, Sierra Leone, Togo). Overall, during 2011–16, the pace of development in financial markets has far exceeded that of financial institutions, albeit starting from a low base. Financial markets benefited primarily from deepening in the stock and bond markets, while financial institution development was propelled by improved access to banking sector infrastructure (branches and ATMs). Sub-Saharan African countries outperformed comparator regions in Asia and the Middle East and central Asia in these categories but trailed in financial deepening of banking and nonbanking sectors (Figure 1.2.1).



Usage of mobile money accounts has continued to surge at a faster pace than in other regions. Indeed, mobile money accounts have surpassed traditional deposit accounts in sub-Saharan African (IMF 2019a) (Figures 1.2.1 and 1.2.2).



This box was prepared by Amadou Sy and Torsten Wezel based on findings from IMF (2019b).

¹ Financial development is measured by the Financial Development Index, which encompasses financial institutions—banking and nonbanking—as well as markets across three dimensions: depth, access, and efficiency (Sahay and others 2015).

East Africa, which has the highest mobile money usage in sub-Saharan Africa, offers useful lessons as it developed an infrastructure that uniquely built on the latent demand for mobile financial services in the region

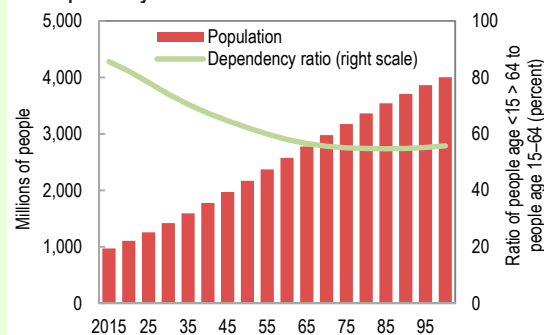
- East African countries favored a telecom-led regulatory model. In this framework, the telecom provider works with the financial regulator to establish the infrastructure for mobile payments. The telecom-led model has proved more successful in attracting users than the bank-led model that other sub-Saharan African countries promoted.
- East African countries tended to have a dominant telecom provider with a large market share, which provided an initial critical mass of users needed to push mobile money past the niche level. In Kenya, Safaricom has a share of nearly 70 percent of the market; in Tanzania, Vodacom has a market share of close to half. Having a large market share allowed most mobile payment users to operate on a single platform without facing compatibility issues, though this raises concentration and potential stability concerns. Mobile money interoperability is increasingly allowing transactions between users of different service providers.
- East African countries, particularly in the East African Community, have national identification systems. These systems facilitate faster mobile payment adoption rates and enable more secure transactions.

Box. 1.3. Sub-Saharan African Demographic Trends and Gender Gaps in Education

Sub-Saharan Africa's population is growing rapidly, presenting an opportunity for a demographic dividend. The region's population could double in the next three decades, and quadruple by the end of the century (Figure 1.3.1). The large entry of young people into the labor force is associated with a decline in the dependency ratio as fertility rates are expected to decline from current levels. This declining dependency ratio presents a large opportunity for the region. Indeed, many developing economies in south and east Asia that saw their dependency ratios decline witnessed a demographic dividend and rapid growth (IMF 2015b; Aiyar and Mody 2011). However, for the region to harness its demographic dividend, declining dependency ratios are not sufficient but need to be complemented by creating jobs to absorb new entrants into the labor market and scaling up human capital through improvements in health and education to ensure that new workers enter the labor market at higher wages and into higher-productivity employment.

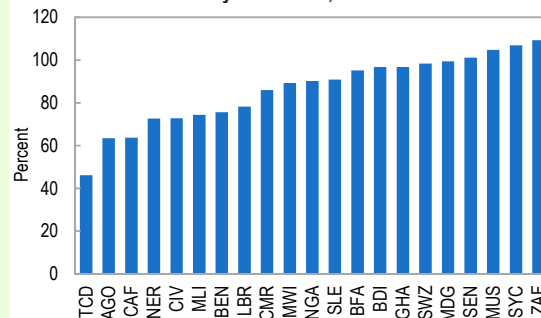
Scaling up human capital to support growth will require closing gender gaps in education which requires work on several margins. While gender gaps in education have narrowed substantially in many countries, some still see fewer than three girls enrolled in secondary education for every four boys in some sub-Saharan African countries (Figure 1.3.2). Higher public spending on education is part of the solution. Better infrastructure, in particular, improvements in sanitation facilities and women's health, and in some cases raising the legal age of marriage for men and women, are other factors that are associated with narrower education gaps across all developing economies (Jain-Chandra and others 2018). These policies should be complemented by measures to level the playing field for economic participation by women, including in the context of rapid technological advances, including automation. Overall, such measures would level the playing field between women and men and could result in higher productivity growth and stability gains (Cuberes and Teignier 2016; Sahay and Cihak 2018).

Figure 1.3.1. Sub-Saharan Africa: Projected Population Size and Dependency Ratio



Source: United Nations Population Division.

Figure 1.3.2. Selected Sub-Saharan African Countries: Ratio of Female-to Male Secondary Enrollment, 2016



Source: World Bank, World Development Indicators.

Note: See page vi for country abbreviations table.

REFERENCES

- Aiyar, S., and A. Mody. 2011. “The Demographic Dividend: Evidence from the Indian States.” IMF Working Paper 11/38, International Monetary Fund, Washington, DC.
- Bouis, R. Forthcoming. “Bank Holdings of Government Securities, Banking Sector Profitability, and Credit to the Private Sector.” IMF Working Paper, International Monetary Fund, Washington, DC.
- Cuberes, D., and M. Teignier. 2016. “Aggregate Effects of Gender Gaps in the Labor Market: A Quantitative Estimate.” *Journal of Human Capital*. (10) 1: 1–32.
- Gaspar, V., D. Amaglobeli, M. Garcia-Escribano, D. Prady, and M. Soto. 2019. “Fiscal Policy and Development: Human, Social, and Physical Investment for the SDGs.” IMF Staff Discussion Note 19/03, International Monetary Fund, Washington, DC.
- International Monetary Fund (IMF). 2014a. “Staff Guidance Note on Macroprudential Policy.” Policy Papers, Washington, DC.
- . 2014b. “Staff Guidance Note on Macroprudential Policy—Considerations for Low Income Countries.” Policy Papers, Washington, DC.
- . 2015a. “Making Public Investment More Efficient.” IMF Staff Report, Washington, DC, June.
- . 2015b. “How Can Sub-Saharan Africa Harness the Demographic Dividend?” Chapter 2 in *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, April.
- . 2016a. “Methodological Note on EBA-Lite.” Policy Papers, Washington, DC.
- . 2016b. “Spillovers from China: Financial Channels.” Spillover Notes 5, Washington, DC.
- . 2017. “The Impact of Fiscal Consolidation on Growth in sub-Saharan Africa.” Chapter 2 in *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, October.
- . 2018a. “Regional Spillovers in Sub-Saharan Africa: Exploring Different Channels.” Spillover Notes 18/01, Washington, DC.
- . 2018b. “Domestic Revenue Mobilization in Sub-Saharan Africa: What Are the Possibilities?” Chapter 2 in *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, April.
- . 2018c. “Balancing Act: Managing the Public Curse.” *Finance and Development*, Washington, DC, March.
- . 2019a. “Curbing Corruption.” Chapter 2 in the *Fiscal Monitor*, Washington, DC, April.
- . 2019b. “Fintech and Financial Development in Sub-Saharan Africa: A Game Changer?” African Department Paper 19/04, Washington, DC.
- Jain-Chandra, S., K. Kochhar, M. Newiak, Y. Yang, and E. Zoli. 2018. “Gender Equality: Which Policies Have the Biggest Bang for the Buck?” IMF Working Paper 18/105, International Monetary Fund, Washington, DC.
- Sahay, R. and M. Cihak. 2018. “Women in Finance: A Case for Closing Gaps.” IMF Staff Discussion Notes 18/05, International Monetary Fund, Washington, DC.
- Sahay, R., M. Čihák, P. N’Diaye, A. Barajas, R. Bi, D. Ayala, Y. Gao, A. Kyobe, L. Nguyen, C. Saborowski, K. Sviryzdenka, and S. R. Yousef. 2015. “Rethinking Financial Deepening: Stability and Growth in Emerging Markets.” IMF Staff Discussion Notes 18/08, International Monetary Fund, Washington, DC.
- South African Reserve Bank (SARB). 2018, Financial Stability Review, Second Edition, Pretoria.
- Timmer, M. P., G. J. de Vries, and K. de Vries. 2015. “Patterns of Structural Change in Developing Countries.” In *Routledge Handbook of Industry and Development* edited by J. Weiss and M. Tribe, 65–83. Routledge.

2. The Economic Consequences of Conflicts

Armed conflict in its various forms and manifestations remains pervasive around the world.¹ In sub-Saharan Africa, while a declining trend was observed in the incidence and intensity of conflicts since the early 2000s, there has been an uptick in violence in recent years that mirrors the global increase in conflict. Overall, about a third of the countries in the region have been affected by conflict in recent years.

As history has repeatedly shown, conflicts impose immeasurable human suffering and large economic and social costs. The loss of human life; destruction of infrastructure, human capital, and institutions; political instability; and greater uncertainty associated with conflicts can impede investment and economic growth—not only during conflict but also afterward, making it difficult to escape the “conflict trap.”² In addition, conflicts tend to complicate public finances, lowering revenue by destroying part of the tax base while raising military expenditures. Fiscal deficits and public debt rise as a result, and resources shift away from social and developmental spending, which further accentuates the conflicts’ debilitating consequences.

At the regional level, conflicts pose an additional challenge because of their potential spillover effects. Conflicts can spread to neighboring states—a direct spillover effect (Hegre and Sambanis 2006). They can also have indirect spillover effects by depressing economic activity (for instance, due to increased uncertainty or trade disruption) or by creating social strains (for example, due to a large influx of refugees) in nearby countries, even if those countries remain uninvolved in the conflict (Murdoch and Sandler 2002; Gomez and others 2010; Qureshi 2013).

Against this backdrop, this chapter explores the economic consequences of conflicts in sub-Saharan Africa by focusing on four key questions:

- How have the prevalence and intensity of conflict evolved over time?
- What is the impact of conflict on economic growth both directly, and indirectly through spillover effects?
- What are the key channels through which conflict affects economic growth?
- What are the fiscal implications of conflict?

The analysis, based on country- and state-level data for a sample of 45 sub-Saharan African countries during 1989–2017, shows that after peaking in the late 1990s, the number of conflict incidents and deaths in the region fell substantially during the 2000s. Since 2010, however, there has been a resurgence in conflict-related deaths, especially in the Sahel region—although they remain below the levels observed in the 1990s. Moreover, the nature of conflicts has also changed in recent years, with traditional civil wars being largely replaced by non-state-based conflicts, including the targeting of civilians through terrorist attacks.

The findings presented in this chapter show that the economic impact of conflict in sub-Saharan Africa is large and persistent. On average, annual growth in countries in conflict is about 3 percentage points lower, and the cumulative impact on per capita GDP increases over time. This effect can be attributed mostly to intense conflicts (that is, those with at least five conflict-related deaths per million people). Given the intensity of conflicts, however, those affecting the key economic/commercial hubs

This chapter was prepared by a team led by Siddharth Kothari and comprising Xiangming Fang, Lisa Kolovich, Cameron McLoughlin, Monique Newiak, Rasmane Ouedraogo, Brooke Tenison, Jiaxiong Yao, and Mustafa Yenice, under the supervision of Mahvash Qureshi and David Robinson.

¹ This chapter uses a broad definition of conflict based on the Uppsala Georeferenced Event Dataset, which includes civil wars and terrorist incidents. Criminal activity is usually excluded. See Online Annex 2.1 for data-related details.

² “Conflict trap” refers to the vicious cycle between conflicts and economic performance, whereby conflicts retard economic growth and development, in turn raising the likelihood of a conflict (Collier and Sambanis 2002).

within a country have a larger effect on macroeconomic growth than those located in the periphery. The effect of conflict also appears to be conditional on certain macroeconomic characteristics, with stronger institutions and fiscal fundamentals helping to mitigate the adverse economic impact of conflicts.

Decreased investment, trade, and productivity, along with human and physical capital destruction (including through forced displacement and devastating effects on education and health care), are some of the key channels through which conflict impedes economic growth. Taken together, these factors lead to a persistent decline in the productive capacity of an economy; counterfactual analysis suggests that conflicts imply a drop in real GDP per capita of 15 to 20 percent over five years compared with a no-conflict scenario.

These country-level findings are corroborated by more granular satellite-based data on night lights at the state level, which show a statistically significant reduction in night-light activity in sub-Saharan Africa during conflicts, thereby indicating a strong local impact of conflicts on economic growth. In addition, state-level data indicate strong spillover effects of conflicts, suggesting that growth is lower in nearby regions, with the effect being one-third of the effect in the home state.

In tandem with growth, public finances also deteriorate significantly following conflicts, with real tax revenues falling, on average, by over 10 percent in intensive conflict cases relative to no-conflict cases. While, on average, the findings do not suggest a statistically strong effect of conflicts on total public spending, the composition of spending tilts away from capital expenditures toward military spending. Consequently, the fiscal balance deteriorates and there is a sharp increase in public debt over the conflict period.

The analysis thus highlights the significant costs and formidable challenges faced by countries suffering from conflicts, underscoring the need to prevent

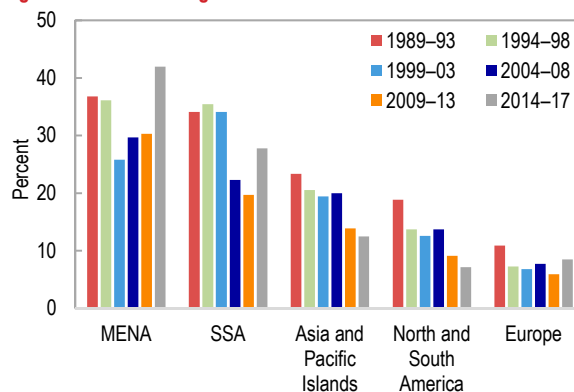
their occurrence—including by promoting inclusive economic development and social cohesion.³

For countries in conflict, efforts should focus on limiting the loss of human and physical capital by protecting social and developmental spending, and on trying to maintain well-functioning institutions to lessen the harmful long-term economic effects of conflict. While this may be especially daunting given fiscal pressures, well-targeted and coordinated humanitarian aid and concessional financial assistance could provide some relief and help to create room to respond to the ravaging effects of conflicts. Moreover, assistance may also be essential for countries suffering from the spillover effects of conflicts to protect the displaced populations and alleviate the economic and social strains often generated in host countries.

PREVALENCE AND INTENSITY OF CONFLICTS

Sub-Saharan Africa has been marred by conflicts during the past several decades, though their intensity, nature, and geographic distribution have varied over time. The region was particularly prone to conflicts in the 1990s, with the number of conflict-ridden countries averaging about 15 during 1990–99 (about 35 percent of the total number of countries in the region; Figure 2.1).⁴ Following the declining global trend, the average number of

Figure 2.1. Selected Regions: Share of Countries in Conflict



Sources: Uppsala Georeferenced Event Dataset; and IMF staff calculations.

Note: The figure shows the share of country-years in conflict in each time period. MENA = Middle East and North Africa, SSA = sub-Saharan Africa.

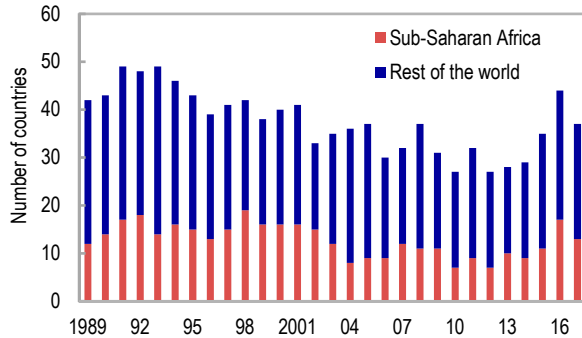
³ Economic development; lack of economic, political, and social inclusiveness; higher resource intensity; and poor state capacity are important drivers of conflict in the literature (Blattman and Miguel 2010; United Nations and World Bank 2018).

⁴ According to the Uppsala Conflict Data Program, a country is defined as being in conflict if it experienced at least 25 conflict-related deaths in a calendar year. See Online Annex 2.1 and Sundberg and Melander (2013) for details.

countries affected by conflict in the region dropped to nine during 2004–12. However, that trend has reversed in recent years, with the number of countries in conflict reaching a peak of 17 in 2016 (Figure 2.2).⁵

Conflicts in sub-Saharan Africa have been particularly deadly. While the exact number of conflict-related deaths is difficult to ascertain, especially for widespread and persistent conflicts, estimates suggest that in the 1990s alone, verified conflict-related deaths totaled at least 825,000 (over two-thirds of global conflict deaths). The high death toll was driven by the genocide against the Tutsi in Rwanda; the Ethiopian-Eritrean war; and protracted violence in Angola, the Democratic Republic of the Congo, Liberia, and Sierra Leone. As several of these conflicts ended in the early 2000s, the number

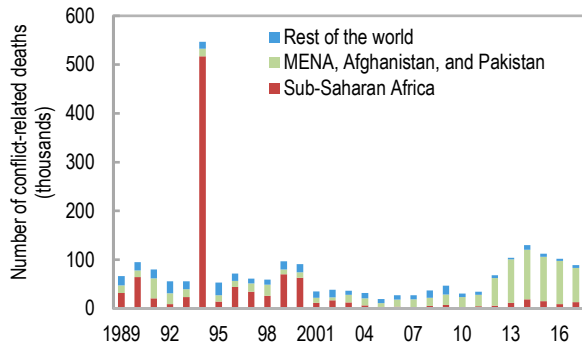
Figure 2.2. Number of Countries in Conflict, 1989–2017



Sources: Uppsala Georeferenced Event Dataset; and IMF staff calculations.

Note: Country classified to be in conflict if it had at least 25 conflict-related deaths.

Figure 2.3. Total Conflict-Related Deaths, 1989–2017



Sources: Uppsala Georeferenced Event Dataset; and IMF staff calculations.

Note: Based on verified fatalities. To the extent that news reports and historical sources miss conflict events, estimates may be a lower bound. MENA = Middle East and North Africa.

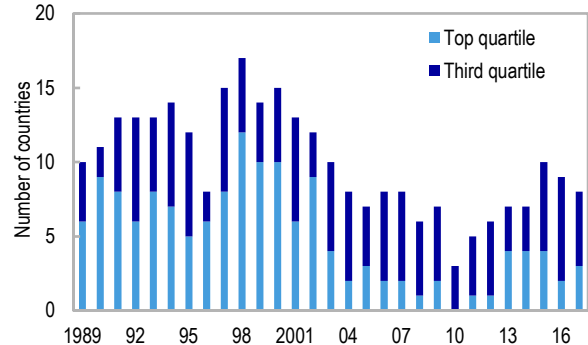
of conflict-related deaths in the region fell sharply, reaching its lowest level of about 2,200 deaths in 2010. A resurgence in violence in recent years, however, implies an increase in conflict-related deaths, which have averaged about 14,000 a year since 2014 (a significant number, though well below the average of 82,000 seen during the 1990s; Figure 2.3). This rise mirrors the global trend of an increase in conflict-related deaths, driven largely by violence in the Middle East, especially in Syria.

The number of conflict-related deaths in relation to total population—a measure of conflict intensity—also shows a varying trend over time. In eight sub-Saharan African countries, on average, the ratio of conflict-related deaths to population was in the top quartile of the world distribution in the 1990s, but the number of countries in the region experiencing such intense conflict had fallen to zero by 2010. Yet deadly conflicts have reemerged recently: since 2013, about four countries have (on average) experienced intense conflict that places them in the top quartile (including Central African Republic, Democratic Republic of the Congo, South Sudan, and several Sahel countries; Figure 2.4).

Distribution of Conflicts

Across the region, there has been some change in the geographic distribution of conflicts over time. Southern Africa has become relatively peaceful since the turn of the century, but conflict

Figure 2.4. Sub-Saharan Africa: Countries in High-Intensity Conflict, 1989–2017



Sources: Uppsala Georeferenced Event Dataset; and IMF staff calculations.

Note: Countries binned into quartiles based on the world distribution of conflict-related deaths as a share of population (among conflict countries). The top quartile correspond to about 29 conflict-related deaths per million.

⁵ The decline in conflict in the region during the 2000s has been attributed to several factors, including the end of the Cold War and stronger conflict-reduction mechanisms, especially international peacekeeping and regional diplomacy (see Straus 2012).

Table 2.1 Sub-Saharan Africa: Share of Countries in Conflict by Geographic Region and Economic Classification

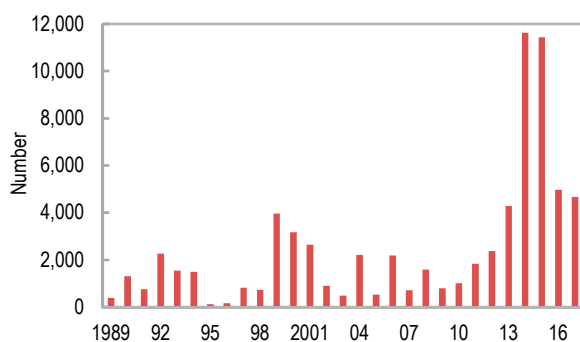
1. Geographic Regions		
	Pre 2000	Post 2000
Central Africa	42.4	36.4
Eastern Africa	35.2	27.4
Western Africa	35.2	24.4
Southern Africa	20.0	1.1
2. By Resource Intensity		
	Pre 2000	Post 2000
Oil exporters	52.0	39.9
Other resource-intensive countries	35.2	25.2
Non-resource-intensive countries	29.3	20.5

Sources: Uppsala Georeferenced Event Dataset; and IMF staff calculations.

Note: Table shows percent of country-years in conflict in a group. See Online Annex Table 2.2. for country classifications.

remains widespread elsewhere (Table 2.1; Online Annex Figure 2.4). Among the different types of countries (resource-intensive and non-resource-intensive countries), conflict continues to be more prevalent among oil exporters and least prevalent among non-resource-intensive countries.

Although the overall prevalence of conflict in the 2000s has declined across regions and country groups compared with the 1990s, the Sahel region has experienced a significant increase in violence in the post-2000 period, especially since 2010 (Figure 2.5). Across the Sahel countries, the Lake Chad Basin (where Nigeria, Cameroon, Chad,

Figure 2.5. Number of Conflict-Related Deaths in Sahel Region, 1989–2017

Sources: Uppsala Georeferenced Event Dataset; and IMF staff calculations.

⁶ In this chapter, the Sahel region is defined as including Burkina Faso, Cameroon, Chad, Mali, Niger, and Nigeria. The states included in the Lake Chad Basin are Yobe, Borno, and Adamawa states in Nigeria; Diffa cercle in Niger; the Lac region in Chad; and Extreme-Nord in Cameroon.

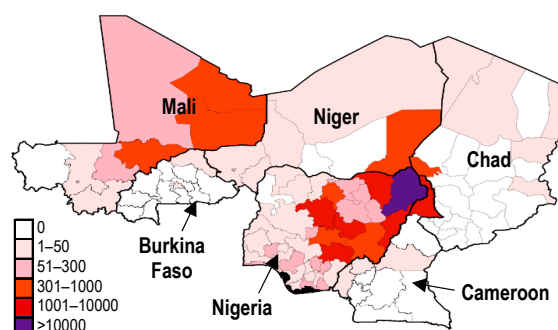
⁷ The Uppsala Georeferenced Dataset defines conflicts as state-based (between two organized groups where at least one party is the government); non-state-based (between two organized groups, neither of which is a government); and one-sided (where an organized group—either a government or nongovernment actor—targets civilians). Since most one-sided conflicts involve nonstate actors, in this chapter the last two categories are jointly referred to as non-state-based conflicts.

and Niger share a border) has seen a particularly significant increase in violence during 2010–17, with the number of deaths in the region accounting for 77 percent of all conflict-related deaths in the Sahel, and about 40 percent of all conflict-related deaths in sub-Saharan Africa (Figure 2.6).⁶

Nature of Conflict

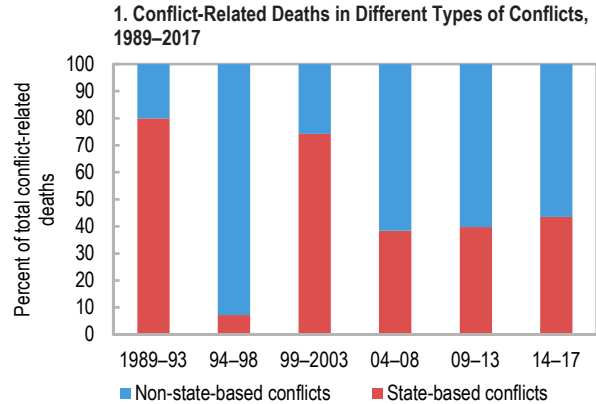
In principle, conflicts can be differentiated along several dimensions—for example, the actors involved (state versus nonstate), motivation (religious, political, ethnic), location (domestic versus international, center versus periphery), and so on. In practice, however, the classifications are often not mutually exclusive and tend to involve some subjective judgment. Moreover, the information needed for classification purposes may also be lacking.

Notwithstanding these limitations, this chapter uses the available information on conflicts involving the state and those not involving the state (but involving other organized armed groups) to differentiate between the types of conflict. It shows that large-scale, state-based conflicts such as those in Angola, Eritrea, Ethiopia, and Sierra Leone largely drove developments in conflict-related deaths in sub-Saharan Africa during the pre-2000 period (Figure 2.7, panel 1).⁷ Since then, however,

Figure 2.6. Distribution of Conflict-Related Deaths in Sahel Region, 2011–17

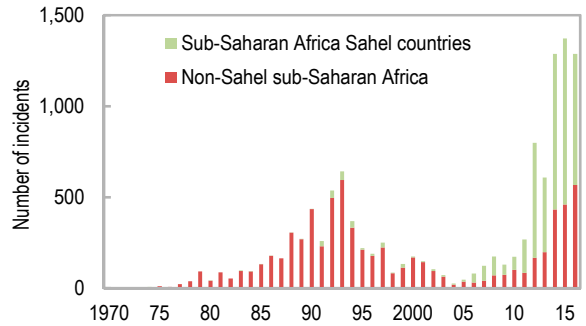
Sources: Uppsala Georeferenced Event Dataset; and IMF staff calculations.

Figure 2.7. Sub-Saharan Africa: Nature of Conflict



Sources: Uppsala Georeferenced Event Dataset; and IMF staff calculations.
 Note: The period 1994–98 includes the genocide of the Tutsi in Rwanda, which is classified as non-state-based as it targeted civilians.

2. Sub-Saharan Africa: Terrorism Incidents, 1970–2016



Sources: Global Terrorism Database; and IMF staff calculations.
 Note: Calculations subject to change in Global Terrorism Database methodology in 2012 (see Online Annex for details).

the share of non-state-based conflict deaths—broadly defined to include conflicts between two nongovernmental armed groups, as well as violent events, such as terrorist attacks in which organized armed groups target civilians—has increased significantly. The number of terrorist incidents has increased not just in the Sahel region, but elsewhere as well, with the Democratic Republic of the Congo, Kenya, and Nigeria affected the most (Figure 2.7, panel 2; Online Annex Figure 2.2).⁸

Persistence of Conflict

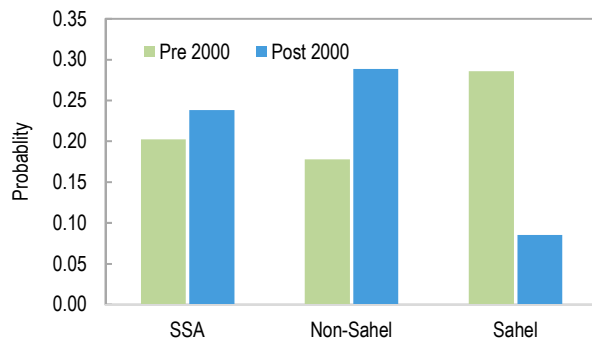
Conflict in sub-Saharan Africa tends to be persistent, although there is considerable variation in the duration of conflicts across the region (Annex Figure 2.7). Although some countries, such as the Democratic Republic of the Congo and Nigeria, have been involved in some form of conflict over most of the sample period (29 years and 27 years, respectively), the median conflict duration in the region is about four years.

However, the persistence of conflicts has generally declined over time: the probability of a country exiting conflict has increased from 20 percent in the pre-2000 period to about 24 percent afterward. This aggregate trend does not hold for the Sahel region though, where conflicts have become substantially more persistent in the post-2000 years (Figure 2.8; Online Annex Table 2.3).

Population Displacement

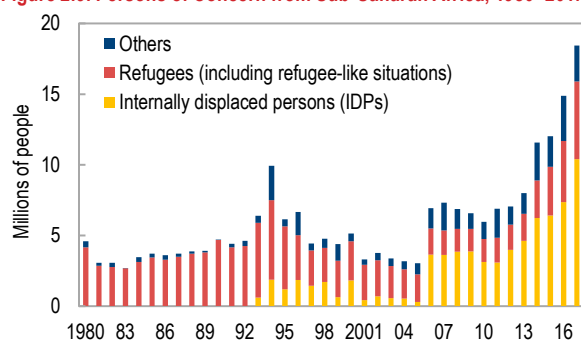
A major consequence of conflicts in sub-Saharan Africa, as well as elsewhere, is the displacement of populations. This carries significant economic, fiscal, and social costs for the region involved in conflict, but often also for the nearby regions that host the displaced people. Over time, the number of (United Nations–recognized) persons of concern from sub-Saharan African countries—including internally displaced persons, asylum seekers, and refugees—has more than tripled, rising from fewer than 5 million in the 1980s to 18 million in 2017 (Figure 2.9), with more intense conflicts generally implying larger displaced populations (Online Annex Figure 2.9).

Figure 2.8. Sub-Saharan Africa: Conflict Exit Probabilities



Sources: Uppsala Georeferenced Event Dataset; and IMF staff calculations.
 Note: Plots the probability of a country not being in conflict the next year, conditional on being in conflict today.

⁸ The data on terrorist incidents from the Global Terrorism Database are subject to a structural break in 2012 as a result of a change in the data collection methodology that likely increased the recorded number of incidents. The period after 2012, however, uses a consistent methodology, implying that the sharp rise in terrorist incidents after 2013 is not a result of the change in methodology but rather represents a genuine increase in terrorist activity (see Online Annex 2.1 for details).

Figure 2.9. Persons of Concern from Sub-Saharan Africa, 1980–2017

Source: United Nations High Commissioner for Refugees database.

Note: Data availability for IDPs prior to 2006 is limited. Others include asylum-seekers, returned refugees, returned IDPs, stateless persons, and others of concern.

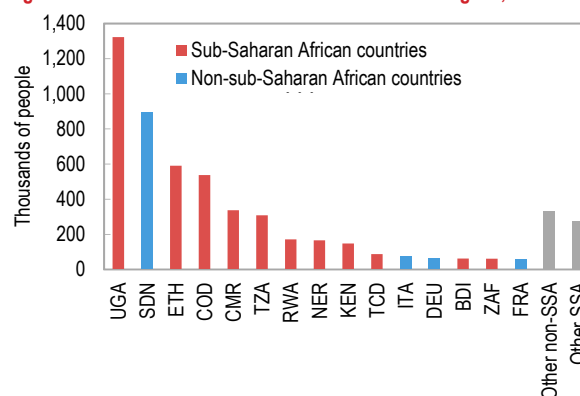
Notably, as of 2017, the majority of the close to 6 million refugees and 1 million asylum seekers who originated in sub-Saharan Africa had resettled within the region; a relatively smaller number have been recorded as refugees in advanced economies (Figure 2.10). Refugees constituted more than 3 percent of the population of Chad and Uganda in 2017 (only Jordan, Lebanon, and Turkey, following the Syrian crisis, have a higher refugee-to-population ratio; see Annex Figure 2.8).⁹ Similarly, the number of internally displaced people in the region is five times higher—rising from fewer than 2 million to 10 million over the past two decades (Annex Figure 2.10). The Democratic Republic of the Congo (4.4 million people), South Sudan (1.9 million), and Nigeria (1.7 million) have the most internally displaced people, comparable to some degree with the numbers for Syria and Iraq in 2017 (6.2 and 2.6 million, respectively; Online Annex Figure 2.11).

CONFLICT AND ECONOMIC GROWTH

How does conflict affect economic growth in sub-Saharan Africa? A simple comparison of economic growth rates in conflict and nonconflict cases suggests that real GDP growth is, on average, about 2.5 percentage points lower where there is conflict (Figure 2.11), and growth is lowest in cases of high-intensity conflict (Annex Figure 2.13). Growth tends to be lower in conflict cases across all

⁹ See World Bank (2016) for a detailed study on the refugee management experience in Uganda, including the role of Uganda's progressive refugee laws regarding freedom of movement and access to labor markets for refugees.

¹⁰ The conflict cases considered are Liberia, 1990; Sierra Leone, 1991; Burundi, 1993; the Democratic Republic of the Congo, 1996; the Republic of Congo, 1997; Ethiopia, 1998; Eritrea, 1998; Guinea-Bissau, 1998; Côte d'Ivoire, 2002; Mali, 2012; and the Central African Republic, 2013. See Annex Table 2.9 for more details.

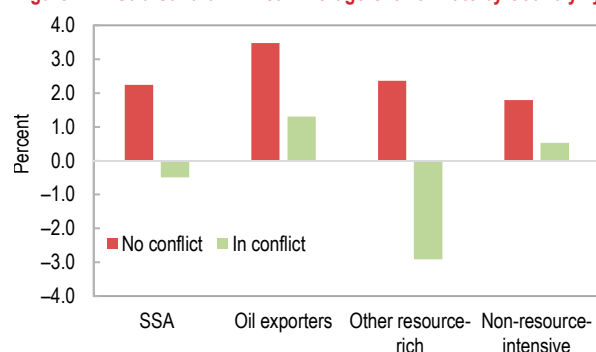
Figure 2.10. Destination of Sub-Saharan African Refugees, 2017

Source: United Nations High Commissioner for Refugees database.

Note: See page vi for country abbreviations table.

country groups, but commodity exporters (especially, non-oil commodity exporters) have suffered the most. This reflects in part the intense conflicts in many of these countries (Central African Republic, Democratic Republic of the Congo, Liberia, and Sierra Leone; see Figure 2.11).

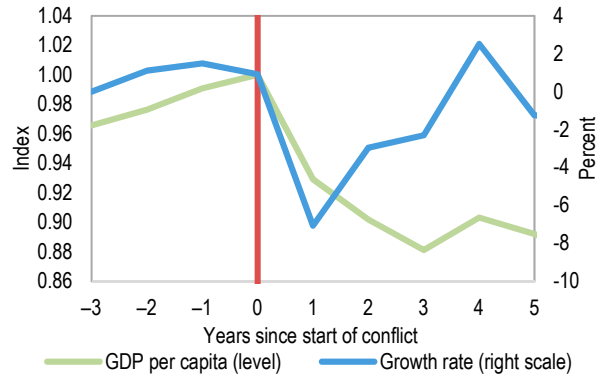
When the onset of intense conflict episodes can be clearly identified, the conflict's effect on growth is, in general, seen to be most pronounced in the first year of the conflict, after which it gradually declines (Figure 2.12).¹⁰ However, as growth rates remain negative on average over an extended period of time, the cumulative effect on output increases, with real GDP per capita being 12 percent lower five years after the onset of the conflict (Figure 2.12).

Figure 2.11. Sub-Saharan Africa: Average Growth Rate by Country Type

Source: IMF staff calculations.

Note: Country defined to be in conflict if it had 25 or more conflict-related deaths in a given year.

Figure 2.12. Sub-Saharan Africa: Conflict Episodes: Growth Rates and Cumulative GDP per Capita Losses



Source: IMF staff calculations.

Note: Based on 11 conflict episodes defined in Online Annex Table 2.9. Median growth rates of 11 conflict episodes at every horizon. Per capita GDP indexed to be 1 the year before the start of conflict, and median growth rate used to construct cumulative losses.

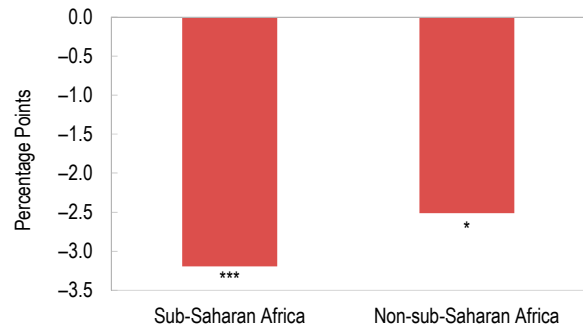
These results are confirmed by more rigorous empirical analysis, which—while controlling for other standard determinants of growth—shows that conflicts have a significantly negative effect on economic growth in sub-Saharan Africa. An increase in the conflict-intensity measure from no conflict to the top quartile of conflict (29 conflict-related deaths per million people) is, on average, associated with a reduction in real GDP per capita growth of 3.2 percentage points a year (Figure 2.13).¹¹ These results generally hold when we address potential reverse causality concerns of growth on conflict using a variety of approaches.¹²

The effect of conflict stems mostly from more intense conflicts (that is, those involving at least five conflict-related deaths per million people; Figure 2.14). This result is similar to that obtained by Rother and others (2016), who also document larger effects for more intensive conflicts in the Middle East and North Africa. In addition, there is evidence that violence in the economic/urban hubs of countries has a more pronounced effect on growth than that occurring in the periphery (Online Annex Table 2.4). In terms of the type of conflict, there is no strong evidence of a differential effect,

¹¹ Given the extreme observations in the measure of the deaths-to-population ratio, the analysis considers the measure in percentile terms in the growth regressions. See the Online Annex for technical details.

¹² Specifically, the results are robust to applying the difference and system generalized method of moments methodology in which conflict is instrumented with lagged values (see Online Annex), as well as to considering individual conflict episodes that were not preceded by economic activity that was particularly weak (see discussion that follows). The results are also robust to using an alternate conflict variable based on the Uppsala Armed Conflict Dataset, which covers state-based conflicts only but provides information dating back to 1946.

Figure 2.13. Emerging Market and Developing Economies: Impact on Growth of Increase in Conflict Intensity



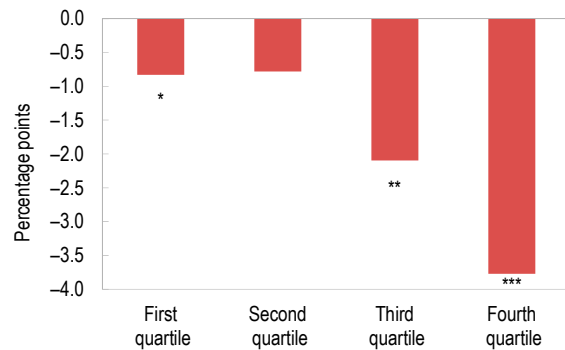
Source: IMF staff calculations.

Note: Based on increase in conflict intensity from no conflict to 75th percentile. See Annex Table 2.4, columns 1 and 2, for details. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent level, respectively.

and both state and nonstate conflicts have a statistically strong impact on growth (Online Annex Figure 2.12; Online Annex Table 2.7).

The effect of conflicts on growth, however, appears to be conditional on some macroeconomic characteristics—notably, institutional quality and fiscal fundamentals—at the onset of the conflict (Figure 2.15). Specifically, an increase in conflict

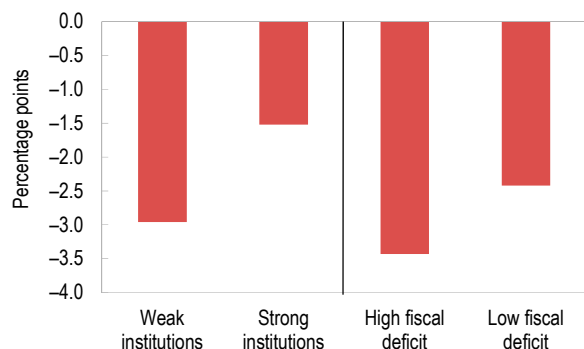
Figure 2.14. Sub-Saharan Africa: Effect on Growth of Different Conflict Intensity Levels



Source: IMF staff calculations.

Note: Quartiles based on the world distribution of conflict-related deaths as a share of population (among countries with at least 1 death). Bars indicate difference relative to no conflict case. Based on regression results in Annex Table 2.6, column 1. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent level, respectively.

Figure 2.15. Impact on Growth of Increase in Conflict Intensity, Role of Institutions and Fiscal Fundamentals



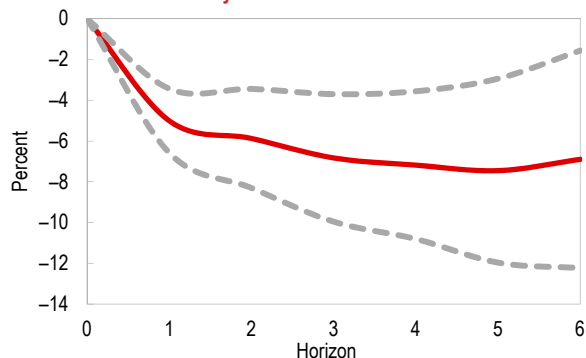
Source: IMF staff calculations.

Note: Based on increase in conflict intensity from no conflict to 75th percentile. “Weak institutions” are defined as countries in the 25th percentile of the ICRG index of institutional quality, while “Strong institutions” are defined as countries in the 75th percentile. High and low deficit are for a fiscal balance of -5 and 0 percent, respectively. See Online Annex Table 2.4, columns 4 and 5, for details.

intensity is associated with about 1.5 percentage points lower growth in countries with relatively strong institutions (defined as falling in the top quartile of the distribution of the Institutional Quality Index) compared with 3 percentage points where institutions are weaker (in the bottom quartile of the distribution).¹³ Similarly, countries with weaker fiscal fundamentals, in terms of higher deficits or debt, experience a larger decline in growth, presumably because there is less room to respond to the destruction caused by conflict. In particular, a country with a negligible fiscal deficit experiences a growth decline of 2.4 percentage points as conflicts break out relative to a decline of 3.4 percentage points for countries with a fiscal deficit of 5 percent of GDP (Figure 2.15; Online Annex Table 2.4).¹⁴

Moreover, the effects of conflicts are dynamic, lasting at least five years after the onset of the conflict (Figure 2.16). The onset of a high-intensity conflict (29 conflict-related deaths per million or 75th percentile of the distribution) is estimated to lower output per capita by 5 percent in the first year, with the effect reaching about 7.5 percent after five years and remaining statistically significant.

Figure 2.16. Impulse Response of per Capita GDP in Response to Shock to Conflict Intensity



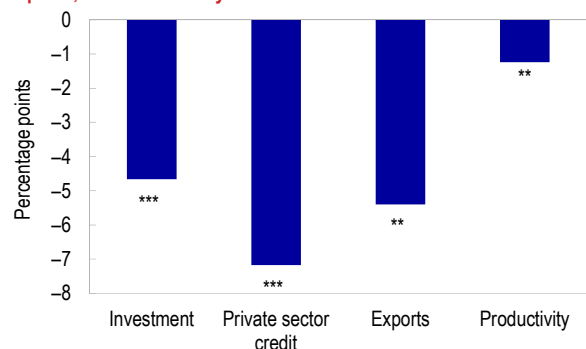
Source: IMF staff calculations.

Note: Based on increase in conflict intensity to the 75th percentile of the world distribution using local projection method (Online Annex 2.1). Gray dashed lines are the 90 percent confidence interval.

Channels of Disruption

What are the key channels through which conflicts tend to have such large and persistent effects? Empirical analysis shows that investment and trade—important drivers of economic growth in sub-Saharan Africa—are both affected significantly by conflict. Increasing conflict intensity from no conflict to the top quartile is associated with lower real investment growth of 4.5 percentage points, driven partly by a decline in private sector credit growth. Furthermore, conflicts also reduce export and productivity growth by 5.5 and 1.3 percentage points, respectively (Figure 2.17).

Figure 2.17. Sub-Saharan Africa: Impact of Conflict on Investment, Exports, and Productivity Growth



Source: IMF staff calculations.

Note: Based on increase in conflict intensity from no conflict to 75th percentile. See Online Annex Table 2.8 for details. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent level, respectively.

¹³ While the effect of conflicts may be conditional on the strength of institutions, conflicts can also undermine institutional quality, further exacerbating their negative consequences.

¹⁴ Among other factors, the results also show a statistically significant association of growth with investment and trade openness. See Online Annex 2.1 for details.

This decline in productivity, investment, and export growth following conflict could be attributed to several factors, including greater security concerns that make normal business operations difficult; disruption of traditional trade routes (as has occurred, for example, around the Lake Chad Basin as a result of the Boko Haram insurgency; see AFD 2018); destruction of human capital and physical infrastructure; displacement of skilled labor; disruption and weakening of institutions; and a rise in general economic and political uncertainty that leads investors to delay long-horizon investment.

Social Well-being

That conflicts destroy human capital is evident from their impact on education and health outcomes. On average, primary school enrollment rates for girls and boys are almost 13 and 9 percentage points lower, respectively, in intense-conflict cases than in nonconflict cases (Figure 2.18, panel 1).

With regard to health outcomes, life expectancy is significantly lower during conflicts, partly due to direct conflict-related deaths. However, other health indicators—such as maternal mortality—also deteriorate (Figure 2.18, panel 2).

Furthermore, women and children are often disproportionately affected by conflicts in terms of higher malnourishment rates among children and increased

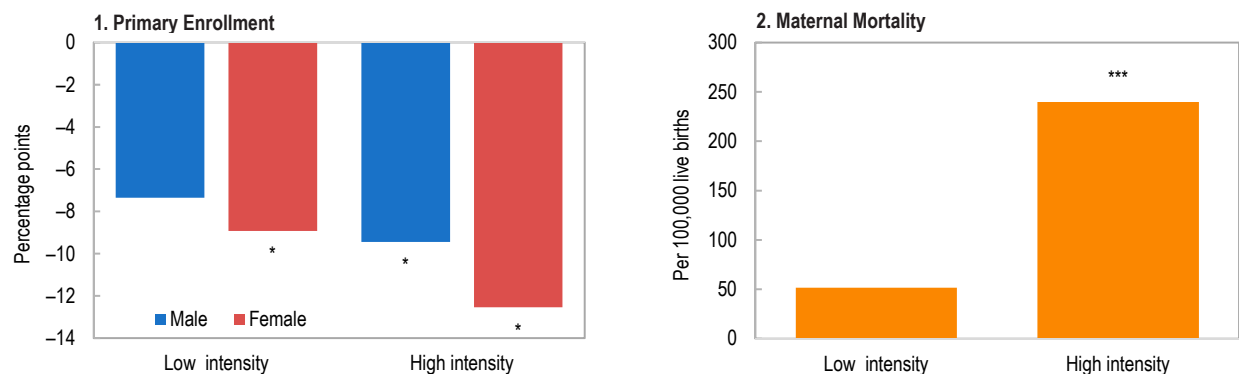
gender-based violence that makes it difficult for women to access education and job opportunities (Box 2.1). These social consequences of conflicts, often far-reaching and long-lasting, help to explain the persistent effect of conflicts on growth.

Permanent Output Losses

Given the adverse impact of conflict on economic growth and social well-being, how large is the output loss in the long term? While it is difficult to predict the counterfactual of output if conflict had not occurred, comparing projected real GDP per capita before the start of a conflict with the actual outcome following the onset of conflict can be illustrative. Using forecasts from the IMF World Economic Outlook database, a comparison of 10 major conflicts in sub-Saharan Africa reveals that at conflict onset ($t = 1$), the actual median growth rate plummets to minus 6 percent, compared with the projected growth rate of almost 1 percent—implying a decline in real GDP per capita of about 7 percent (Figure 2.19).¹⁵ Five years after the conflict began, per capita GDP is, on average, 8 percent below its preconflict level compared with a projected increase of 7 percent, suggesting a decline in per capita GDP of about 15 percent as a result of the conflict.

These findings are similar to those obtained from the synthetic control approach in which for each

Figure 2.18. Sub-Saharan Africa: Impact of Conflict on Social Indicators

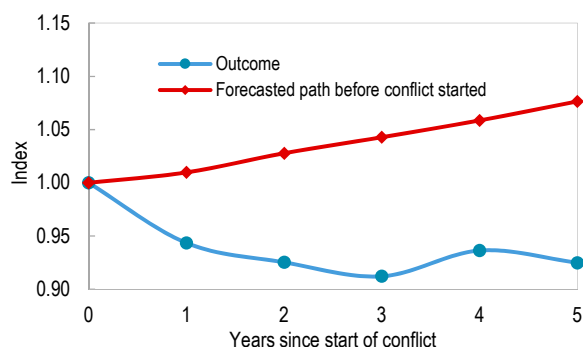


Sources: World Development Indicators database; and IMF staff calculations.

Note: Bars show difference between primary enrollment and maternal mortality relative to the no conflict case, controlling for (lag) income levels and time fixed effects. "Low intensity" refers to conflicts below the median, while "High intensity" refers to conflicts above the median in the world distribution of conflict-related deaths as a share of population. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent level, respectively.

¹⁵ To account for any optimism bias, WEO forecasts for each country are adjusted by the average bias in growth forecasts. See Online Annex 2.1 for details. The 10 cases include all the episodes listed in Annex Table 2.9 except Liberia (1990), as WEO projections are only available starting in 1991. See Annex Figure 2.17 for individual country cases.

Figure 2.19. Sub-Saharan Africa: Index of Real GDP per Capita, Actual versus Forecast



Source: IMF staff calculations.

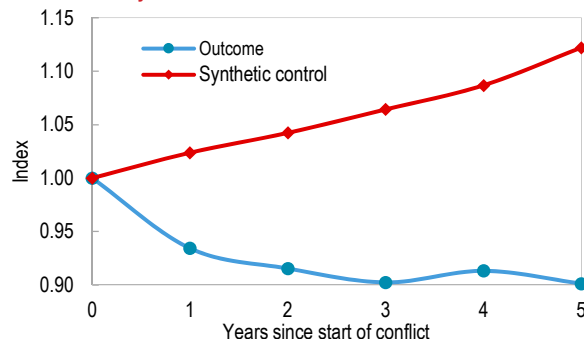
Note: Based on 10 conflict episodes listed in Annex Table 2.9.

conflict episode, a synthetic control group (a weighted average of nonconflict countries) is constructed with characteristics similar to those of the conflict country before the onset of violence. The results show that five years into the conflict, the synthetic group saw an increase in per capita GDP of 12 percent on average, compared with a decline of 10 percent in the conflict cases (Figure 2.20).¹⁶

SPATIAL IMPACT OF CONFLICT

Conflicts in sub-Saharan Africa are often localized and concentrated in particular regions within a country—in fact, conditional on a country being in conflict, on average only 40 percent of states within the country experience conflict-related deaths (Annex Figure 2.14). Thus, the impact of conflicts is unlikely to be uniform across the country. However, lack of data availability on economic activity at a

Figure 2.20. Sub-Saharan Africa: Index of Real GDP per Capita, Actual versus Synthetic Control



Source: IMF staff calculations.

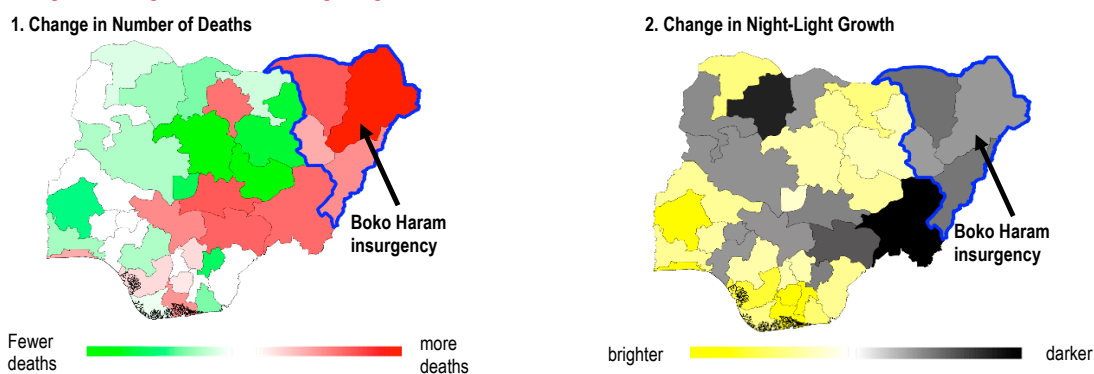
Note: Based on 10 conflict episodes listed in Annex Table 2.9. Details on methodology of synthetic control in Online Annex 2.1, Section III.

spatially disaggregated level makes it difficult to investigate the impact of conflict at the local level, or its potential spillover effects to nearby regions within (or across) countries.

To analyze the localized and spillover effects of conflicts, satellite-recorded night-light data are used as a proxy for real economic activity. Using this data, it is apparent that economic activity in northeast Nigeria, for example, declined after 2010, when the Boko Haram insurgency became more violent (Figure 2.21).

Econometric analysis confirms that there is a statistically and economically strong adverse effect of conflict on night-light growth at the state level. Conflicts that result in 100 fatalities (around the median of the distribution of conflict-related deaths at the state level) are associated with, on average,

Figure 2.21. Nigeria: Change in Conflict and Night-Light Growth, 2008–10 versus 2011–13



Source: IMF staff calculations.

Note: For each state, panel 1 plots the difference in number of deaths in the period 2011–13 compared with 2008–10, while panel 2 plots the difference in average night-light growth between the same two periods.

¹⁶ The cases include all episodes in Annex Table 2.9 except Eritrea, for which data on control variables were not available.

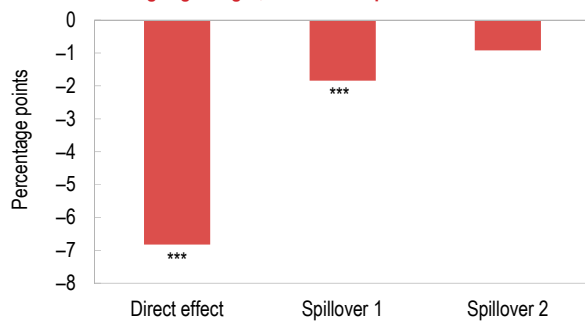
17 percentage point lower growth in night-light activity in sub-Saharan Africa—which translates into about 6.5 percent lower real GDP growth at the state level (Figure 2.22).

In addition to the direct effect of conflict in sub-Saharan Africa, there is also evidence of significant spillover effects of conflict to neighboring states, though the effect declines with the distance of the neighbor. Specifically, controlling for state and time fixed effects, 100 fatalities in neighboring states within 500 kilometers are associated with about a 2 percentage point reduction in growth; the effect is statistically insignificant for more distant states (Figure 2.22).¹⁷

FISCAL IMPLICATIONS OF CONFLICT

Conflict can have substantial effects both on the revenue and expenditure sides of a country's public finances. This limits the government's ability to respond to conflicts in an effective way, thereby aggravating their economic and social costs. On the revenue side, conflicts can reduce collections by disrupting economic activity, destroying part of the tax base, and lowering the efficiency of tax administration. There is evidence of these channels being potentially important for sub-Saharan Africa, where an increase in conflict intensity from no conflict to the top quartile is associated with a decline in total

Figure 2.22. Sub-Saharan Africa: Conflict and Economic Activity at State Level Using Night-Light, Direct and Spillover Effects



Source: IMF staff calculations.

Note: Impact of 100 conflict-related deaths at state level. Assumes an elasticity of 2.5 between night-light and GDP. Direct effect = effect of deaths in state itself; Spillover 1 = effect of deaths in states within a 500 km radius; Spillover 2 = effect of deaths in states between 500 and 1,000 kms away. Bars are based on results in Online Annex Table 2.11, column 1.

¹⁷ A burgeoning literature shows that night-light activity is a good proxy for real GDP (Henderson, Storeygard, and Weil 2012; Online Annex Figure 2.15). The independent nature of night-light activity means that this measure of real economic activity is less susceptible to systematic measurement error. It is also a useful variable for conflict cases, when data on economic activity tend to be unavailable or unreliable. See Online Annex 2.1 for technical details on the data and estimation methodology.

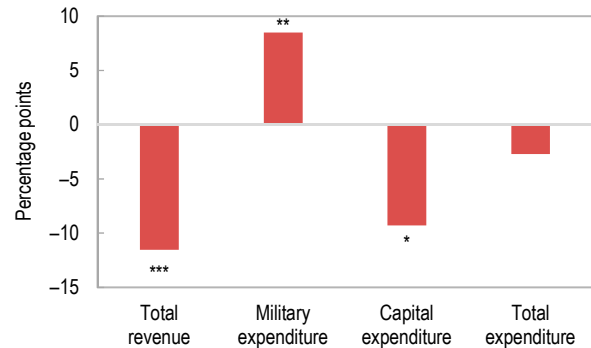
revenue of about 12 percent in real terms or about 2 percent as a share of GDP (Figure 2.23; Online Annex Table 2.17).

On the expenditure side, an increase in conflict intensity is associated with, on average, 9 percent higher real budgetary military spending (or about 0.6 percent of GDP), while real capital expenditures decrease by about 9 percent. Total public spending, therefore, does not increase significantly during conflicts. This suggests that security concerns lead to a shift in spending from growth-friendly capital expenditures to military spending (Figure 2.23). Moreover, the net effect of an increase in conflict intensity is thus an increase in the fiscal deficit of about 1.7 percent of GDP (Online Annex Table 2.17).

As with economic growth, the fiscal effects of conflict stem mainly from high-intensity conflicts. Both real revenue and real capital expenditures fall significantly when conflict intensity is in the top quartiles, whereas military spending increases (Figure 2.24).

Looking at the impact of conflict on public debt, the deterioration in the fiscal balance, combined with lower growth, translates into higher debt levels. The ratio of public debt to GDP increases by an average of 9 percentage points during intense

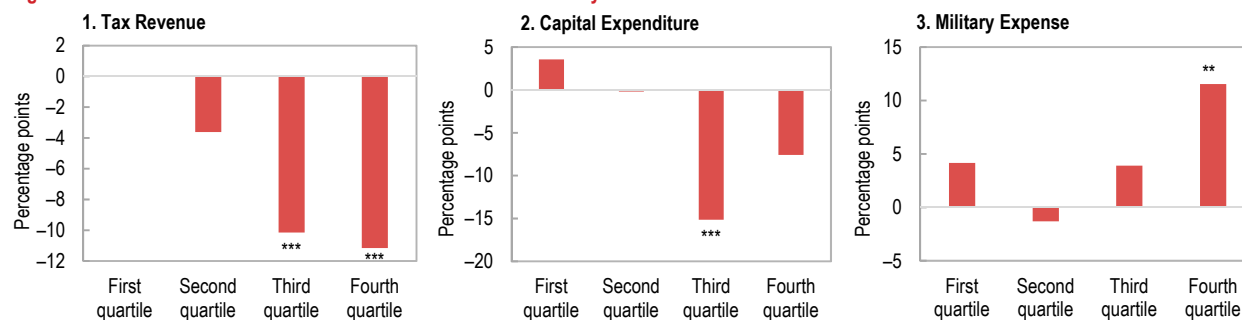
Figure 2.23. Sub-Saharan Africa: Impact of Increase in Conflict on Real Growth of Fiscal Variables



Source: IMF staff calculations.

Note: Based on increase in conflict intensity from no conflict to the 75th percentile. Based on regression results from Online Annex Table 2.13, columns 1, 3, 4, and 6, respectively. The variables are adjusted for inflation.

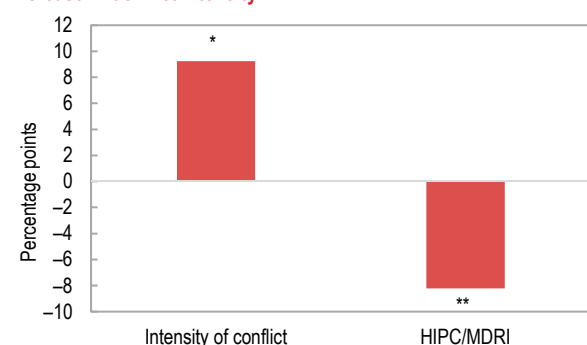
Figure 2.24. Sub-Saharan Africa: Effect of Different Conflict Intensity Levels on Real Growth of Selected Fiscal Variables



Source: IMF staff calculations.

Note: Quartiles based on the world distribution of conflict-related deaths as a share of population (among countries with at least one death). Bars indicate difference relative to no conflict case. Based on results from Annex Table 2.15, columns 1, 3, and 4. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent level, respectively. The variables are adjusted for inflation.

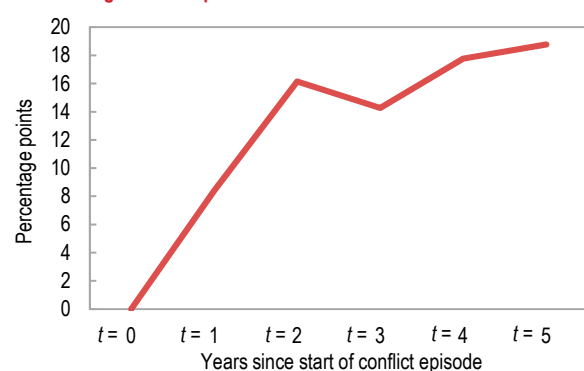
Figure 2.25. Sub-Saharan Africa: Impact on Debt-to-GDP Ratio of Increase in Conflict Intensity



Source: IMF staff calculations.

Note: Based on increase in conflict intensity from no conflict to the 75th percentile. See Annex Table 2.16 for details. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent level, respectively. HIPC = Heavily Indebted Poor Country, MDRI = Multilateral Debt Relief Initiative.

Figure 2.26. Sub-Saharan Africa: Cumulative Change in Debt-to-GDP Ratio during Conflict Episodes



Source: IMF staff calculations.

Note: Starting years of conflict episodes are defined based on Online Annex Table 2.9.

conflicts, which is about equal in magnitude to the average annual decline in debt during the Heavily Indebted Poor Countries and Multilateral Debt Relief Initiatives (Figure 2.25). Focusing on intense-conflict episodes in sub-Saharan Africa, as in Figure 2.12, the public-debt-to-GDP ratio increases 16 percentage points of GDP in the first two years, with the effect increasing to almost 20 percent of GDP by the fifth year (Figure 2.26).

CONCLUSION

After declining in the early 2000s, there has been an uptick in conflicts in recent years in sub-Saharan Africa. The analysis highlights the large economic costs imposed by conflict, both in the country involved in conflict and in neighboring states. Notably, the impact of conflict depends on its intensity, with more intense conflicts leading to greater destruction of human and physical capital and implying larger and more persistent economic costs as a result of reduced investment, trade, and productivity. Counterfactual analysis suggests that real GDP per capita may be as much as 20 percent lower five years after the start of a conflict compared with a no-conflict scenario. In addition, conflicts put pressure on public finances by reducing revenue, shifting the composition away from capital to military spending, and increasing public debt—further jeopardizing socioeconomic stability and increasing the risk of prolonged conflict.

Given these large costs, it is imperative to prevent the occurrence of conflicts. As earlier literature has shown, several economic and structural factors, such as low income levels, poor growth outcomes, weak state capacity, and inequality of opportunity—especially across ethnic, religious, and regional groups—are associated with a higher likelihood of conflict. Addressing these challenges will help to prevent conflicts (United Nations and World Bank 2018). For countries in conflict, efforts should focus on limiting the loss of human and physical capital, including by protecting social and

development spending, and on trying to maintain well-functioning institutions to lessen the harmful long-term economic effects of conflict. While this may be especially challenging given fiscal pressures, well-targeted and coordinated humanitarian aid and concessional external assistance can help to create room to respond to the ravaging effects of conflicts. Moreover, external assistance may also be essential for countries suffering from the spillover effects of conflicts, in order to protect displaced populations and alleviate the economic and social strains often generated in host countries.

Box 2.1. The Impact of Conflict on Women and Children

Children from conflict-afflicted regions suffer significant health setbacks. Malnutrition rates are higher by approximately 8 percentage points for children in major-conflict countries compared with nonconflict countries, often because of increased food insecurity driven by the destruction of livelihoods and agricultural supply chains (World Food Programme 2018). In Burundi, Côte d’Ivoire, and Nigeria, for instance, exposure to conflict has been shown to affect children’s height (Bundervoet, Verwimp, and Akresh 2009; Akresh and others 2012; Minoiu and Shemyakina 2014). The long-term effects of such malnutrition, in turn, include lower cognitive performance, school enrollment, and lifetime earnings. Surviving child soldiers tend to be affected long after a conflict ends. In Uganda, for example, they were found to attend school for one year less than children who were not soldiers, with a significant impact on earnings later in life (Blattman and Annan 2010).

Women are more likely to experience gender-based violence during conflicts. While men are more likely to suffer from combat-related deaths, women have a higher likelihood of being victims of gender-based violence and trafficking during conflicts, which is used as a tactic to subjugate civilian populations (Buvinic and others 2012). Furthermore, insecurity often constrains the movement of girls and women, limiting their access to schools and employment opportunities (UN Women 2015). Women in refugee camps are particularly vulnerable to displacement (World Bank 2017). One in six women in refugee camps and among irregular women migrants is a survivor of gender-based violence (ILO 2003; World Bank 2017).

Given the insecurity faced by these vulnerable groups, the United Nations Security Council has passed several resolutions that stress the necessity of protecting children and women during conflicts. Protecting these vulnerable groups could help mitigate the long-term adverse economic effects of conflicts.

REFERENCES

- Agence Française de Développement (AFD). 2018. “Crisis and Development: The Lake Chad Region and Boko Haram.” August 15, Paris. https://issuu.com/objectif-developpement/docs/web-lac_tchad_va-20180809_465c23d2fc5934.
- Akresh, R., S. Bhalotra, M. Lene, and U. O. Osili. 2012. “War and Stature: Growing up during the Nigerian Civil War.” *American Economic Review: Papers and Proceedings* 102 (3): 273–77.
- Blattman, C., and J. Annan. 2010. “The Consequences of Child Soldiering.” *Review of Economics and Statistics* 92 (4): 882–98.
- Blattman, C., and E. Miguel. 2010. “Civil War.” *Journal of Economic Literature* 48 (1): 3–57.
- Bundervoet, T., R. Verwimp, and R. Akresh. 2009. “Health and Civil War in Rural Burundi.” *Journal of Human Resources* 44:536–63.
- Buvinic, M., M. Das Gupta, U. Casabonne, and P. Verwimp. 2012. “Violent Conflict and Gender Inequality: An Overview.” Policy Research Working Paper 6371, World Bank, Washington, DC.
- Collier, P., and N. Sambanis. 2002. “Understanding Civil War: A New Agenda.” *Journal of Conflict Resolution* 46 (1): 3–12.
- Gomez, M., A. Christensen, Y. Araya, and N. Harild. 2010. “The Impacts of Refugees on Neighboring Countries: A Development Challenge.” *World Development Report 2011* Background Note, World Bank, Washington, DC.
- Hegre, H., and N. Sambanis. 2006. “Sensitivity Analysis of Empirical Results on Civil War Onset.” *Journal of Conflict Resolution* 50 (4): 508–35.
- Henderson, J. V., A. Storeygard, and D. N. Weil. 2012. “Measuring Economic Growth from Outer Space.” *American Economic Review* 102 (2): 994–1028.
- International Labour Organization (ILO). 2003. “Preventing Discrimination, Exploitation and Abuse of Women Migrant Workers: An Information Guide.” Geneva.
- International Monetary Fund (IMF). 2019. “Online Annex—The Economic Consequences of Conflicts” Background Paper: <https://www.imf.org/-/media/Files/Publications/REO/AFR/2019/April/English/backgroundpapers.ashx?la=en>
- Minoiu, C., and O. N. Shemyakina. 2014. “Armed Conflict, Household Victimization, and Child Health in Côte d’Ivoire.” *Journal of Development Economics* 108:237–255.
- Murdoch, J. C., and T. Sandler. 2002. “Economic Growth, Civil Wars and Spatial Spillovers.” *Journal of Conflict Resolution* 46 (1): 91–110.
- Qureshi, M. S. 2013. “Trade and Thy Neighbor’s War.” *Journal of Development Economics* 105 (C): 178–95.
- Rother, B., G. Pierre, D. Lombardo, R. Herrala, P. Toffano, E., Roos, A. G. Auclair, and K. Manasseh. 2016. “The Economic Impact of Conflicts and the Refugee Crisis in the Middle East and North Africa.” IMF Staff Discussion Note 16/8, International Monetary Fund, Washington, DC.
- Straus, S. 2012. “Wars Do End! Changing Patterns of Political Violence in Sub-Saharan Africa.” *African Affairs* 111/443: 179–201.
- Sundberg, R., and E. Melander. 2013. “Introducing the UCDP Georeferenced Event Dataset.” *Journal of Peace Research* 50 (4): 523–32.
- United Nations and World Bank. 2018. “Pathways for Peace: Inclusive Approaches to Preventing Violent Conflict.” <https://openknowledge.worldbank.org/handle/10986/28337>.
- UN Women. 2015. “Preventing Conflict, Transforming Justice, Securing the Peace: Global Study on the Implementation of United Nations Security Council Resolution 1325.” New York.
- World Bank. 2016. “An Assessment of Uganda’s Progressive Approach to Refugee Management.” World Bank, Washington, DC.
- . 2017. “Forcibly Displaced: Toward a Development Approach Supporting Refugees, the Internally Displaced, and their Hosts.” Washington, DC.
- World Food Programme. 2018. “Global Report on Food Crises.” Food Security Information Network. <https://www.wfp.org/content/global-report-food-crisis-2018>.

3. Is the African Continental Free Trade Area a Game Changer for the Continent?

In 2018, member countries of the African Union took a major step to boost regional trade and economic integration by establishing the African Continental Free Trade Area (AfCFTA). They agreed to eliminate tariffs on most goods, liberalize trade of key services, address nontariff obstacles to intraregional trade, and eventually create a continental single market with free movement of labor and capital. The AfCFTA has been ratified by 22 countries and is likely to take effect in 2019, although negotiations on specific features of the agreement are ongoing. Once operational, the AfCFTA will establish a market of 1.2 billion people with a combined GDP of US\$2.5 trillion. This could be an economic game changer for the continent.¹

Trade integration can help propel development and has prompted spectacular success stories on other continents (see IMF 2018a). Trade integration allows countries to specialize in the production of goods and services for which they have comparative advantage and to exploit economies of scale, thereby improving productivity and growth. Trade integration can also foster structural transformation by spreading knowledge and technology and spurring the development of new products (see IMF 2016). A large free trade area in Africa will amplify the potential for economic transformation in the region. It will not only boost intraregional trade, it will also attract foreign direct investment and facilitate the development of regional supply chains, which have been key engines of economic transformation in other regions.

However, while trade supports growth, it may also entail costs, and its benefits may not be evenly distributed across and within countries. Policymakers are often rightly concerned that further integrating their economies with those of other countries may

benefit some industries and hurt others, negatively affect earnings and employment opportunities in certain sectors and for certain skill levels, and reduce fiscal revenue.

This chapter examines the potential benefits and challenges of implementing the AfCFTA for African countries. It focuses on three questions:

- How has intraregional trade in Africa evolved over time and how does it differ from Africa's international trade? What does the experience of the African subregional economic communities suggest about the continent's potential to integrate further?
- What is the potential impact of the AfCFTA on intraregional trade, and what policies are needed to foster further regional trade integration?
- How will the AfCFTA affect welfare, income distribution, and the fiscal revenue of African countries?

The analysis shows that:

- Intraregional trade in Africa has expanded rapidly, and a few regional hubs dominate relatively well diversified trade flows. Intraregional imports, as a share of total imports, almost tripled over the past two decades to 12–14 percent, or about US\$100 billion, as several new subregional economic communities (RECs) boosted trade in the region. In 2017, three-quarters of African intraregional trade took place within the main subregional communities. In the process, regional trade hubs emerged, such as Côte d'Ivoire, Kenya, Senegal, and South Africa (see IMF 2015). Unlike exports to the rest of the world, intraregional trade

This chapter was prepared by a team led by Geremia Palomba, coordinated by Reda Cherif and by Yunhui Zhao and comprising Russell Green, Salifou Issoufou, Thomas McGregor, Adrian Peralta-Alva, Amadou Sy, Bruno Versailles, and Jason Weiss. Research assistance was provided by Hilary Devine and Miguel Pereira Mendes.

¹ As of April 2019, 22 countries ratified the AfCFTA fulfilling the requirement for the agreement to take effect. The AfCFTA envisages agreement on specific tariff reductions, liberalization procedures for trade of services, and rules of origin during 2019. Negotiations are ongoing. In addition, countries envision a second round of negotiations to start in 2020 on intellectual property rights and competition policy (Online Annex 3.1).

flows are relatively diversified, contain higher value-added goods than exports to the rest of the world, and include a sizable share of manufactured products (for example, motor vehicles and clothing).

- Despite this expansion, significant opportunities for further regional trade integration lie ahead. After controlling for lower levels of income and economic size and generally longer distances compared with other regions, African countries' particular features appear to limit their ability to trade (compared with countries in other regions). Some of these features are structural and would require a long-term commitment to change. Others are the result of policy, such as tariffs, trade regulations, and regulatory requirements, and their removal would boost regional integration. Opportunities to expand intraregional trade are particularly sizable for some agriculture-related commodities (for example, food products) and manufacturing industries, as well as in some African subregional economic communities that trade significantly less than their peers.
- Tariffs and, more important, nontariff bottlenecks are currently limiting intraregional trade integration. The experience of the subregional economic communities suggests that reducing tariffs alone is not sufficient to boost intraregional trade. Poor trade logistics and, to a lesser extent, infrastructure are major obstacles to further trade integration in the region. These bottlenecks are particularly important for landlocked and low-income countries.
- Removing trade barriers to foster intraregional trade may unevenly affect countries in the region. Fiscal revenue losses from lower tariffs are likely to be limited, on average, but they may be significant in a few countries that still apply high export tariffs. Moreover, deeper trade integration can have adverse effects on countries' income distribution, particularly in countries with more diversified economies and large shares of skilled labor. However, these effects are limited in size as large informality in the economy, while increasing overall inequality, isolates some segments of the population from the short-term effects of trade flows.

Moreover, these effects tend to fade away over time. Finally, small countries, more diversified economies, and established regional trade hubs, already open to international competition, are likely to benefit more from deeper regional integration than economies dominated by agriculture and natural resources.

The key findings in this chapter imply that the AfCFTA could significantly boost intraregional trade in Africa if both tariffs and nontariff policy levers are used. Tariff reductions should be comprehensive in order to have significant effects on intraregional trade flows. Eliminating tariffs on 90 percent of existing intraregional trade flows—the most ambitious target under the AfCFTA—would increase regional trade by about 16 percent, or US\$16 billion, over time. Tariff reductions should be complemented with policies addressing nontariff bottlenecks. Even small improvements in addressing such bottlenecks are likely to have sizable effects. Improving trade logistics, such as customs services, and addressing poor infrastructure could be up to four times more effective in boosting trade than tariff reductions. Moreover, reducing nontariff obstacles to trade would improve the effectiveness of tariff reductions in boosting trade, especially in landlocked and low-income countries. Therefore, policies to reduce nontariff bottlenecks, particularly poor trade logistics and infrastructure, should be at the center of the effort to foster deeper trade integration in Africa.

To ensure that the benefits of regional trade integration are shared by all, policies should be put in place to address the adjustment costs that integration may entail. For less-diversified and agriculture-based economies, trade policies should be combined with structural reforms to improve agricultural productivity and strengthen the competitive advantage of these economies. In some countries, measures to mobilize domestic revenues are needed to mitigate the expected revenue losses from tariff reductions (IMF 2018b). The temporary adverse effects of trade liberalization on income distribution need to be tempered—particularly in countries with more diversified economies—through targeted social (for example, income support) and training programs to ease worker mobility across firms and industries and promote employment (IMF 2017a).

REGIONAL TRADE INTEGRATION IN AFRICA: KEY PATTERNS

Increased Openness and Potential for Further Regional Trade Integration

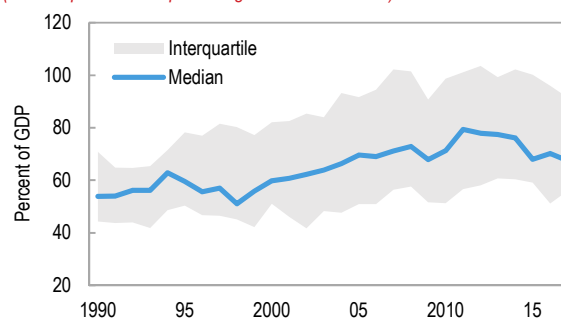
Over the past two decades, intraregional trade flows have expanded rapidly in tandem with Africa's fast integration with the international trade system (Online Annex 3.2).

- Africa's trade has grown rapidly in recent decades. During 1990–2017, the region's trade openness (imports and exports of goods and services) increased from about 53 percent of GDP to 67 percent, after peaking around 2011 as commodity prices surged. The expansion reflected an increase in trade volumes as well as favorable price developments. In the process, the landscape of Africa's trading partners has changed. New partnerships have been forged with emerging market economies such as China. Africa's trade in services also rose over this period. Total imports (and exports) of services more than tripled from US\$27 billion (US\$20 billion) in 1990 to about US\$90 billion (US\$89 billion) in 2017 (Figure 3.1).
- In parallel, Africa's intraregional trade increased substantially. As a share of total African imports, intraregional trade rose from approximately 5 percent in 1990 to about 12 percent in 2017. These statistics underestimate actual intraregional trade flows though, as they do not capture widespread informal cross-border trade.² Nevertheless, the share of trade with African countries by 2017 was surpassed only by trade with the European Union and with China, which has been rising fast in the past decade, (Figure 3.2).
- On average, the size of intraregional trade in Africa is broadly in line with patterns observed in other emerging market and developing regions, but much lower than in more advanced

regions. Measured as a share of total imports originating from the region, intraregional trade in Africa is similar to or exceeds regional trade in areas such as the Pan-Arab Free Trade Area, (PAFTA) and the Latin American Integration Association (LAIA). However, it is much lower than in the free trade areas of the Association of Southeast Asian Nations (ASEAN) and the North America Free Trade Agreement (NAFTA)³ (Figure 3.3).

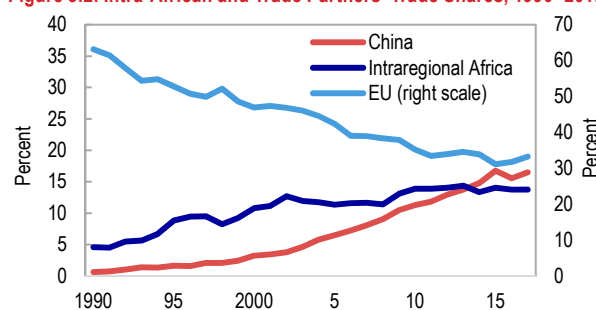
However, the region's substantial degree of regional trade integration belies large heterogeneity across countries and subregions. As regional trade has expanded, trade hubs have emerged, including (measured as a share of total regional imports) Côte d'Ivoire, Kenya, Senegal, and South Africa. South Africa alone is the source of about 35 percent

Figure 3.1. Africa: Trade Openness, 1990–2017
(Total imports and exports of goods and services)



Source: World Bank, World Development Indicators database.

Figure 3.2. Intra-African and Trade Partners' Trade Shares, 1990–2017



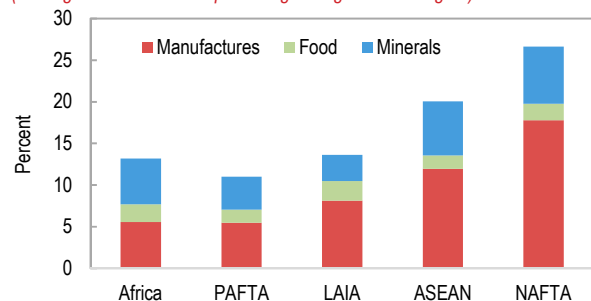
Sources: United Nations COMTRADE database; and IMF staff calculations.

Note: Trade shares are defined as the average of two ratios: (1) share in total African exports and (2) share in total African imports. EU = European Union.

² Survey data suggest that informal cross-border trade in Africa is significant. In eastern Africa, early in the decade, informal exports from Uganda to other countries in the region were as high as a third of formal trade. In the Southern African Development Community area (SADC), informal trade in certain food items in the early 2000s reached 30–40 percent of official trade (AfDB 2012).

³ It is worth noting that reexports, which are sizable in some subregions, such as the Southern African Customs Union (SACU), may contribute to increased intraregional trade integration indicators and make comparisons uneven. However, lack of data prevents investigating the role of reexports in import trends.

Figure 3.3. Intra-regional Trade in Selected Regions, 2007–17
(Average share of total imports originating from the region)



Sources: United Nations COMTRADE database; and IMF staff calculations.

Note: ASEAN = Association of Southeast Asian Nations; LAIA = Latin American Integration Association; NAFTA = North American Free Trade Agreement; PAFTA = Pan-Arab Free Trade Area.

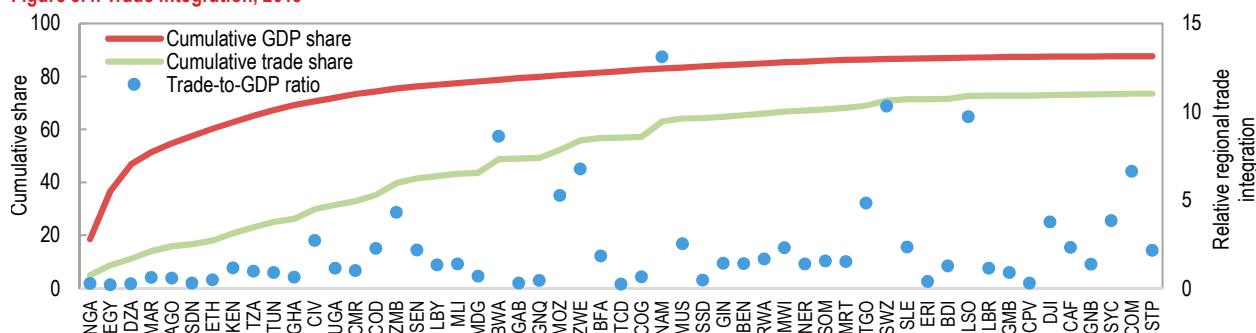
of all intra-regional imports in Africa (and about 40 percent of intra-regional manufacturing imports). The smaller economies of the continent, particularly within the SACU, are also very well integrated (Figure 3.4). In contrast, some of the largest African economies remain poorly integrated with the region. Algeria, Egypt, and Nigeria, which

collectively represent about half of the region’s total GDP, account for a limited share of regional trade (about 11 percent).

Intra-regional Trade in Africa Differs from Trade with the Rest of the World and Offers Opportunities for More Sophisticated Exports

A key feature of intra-regional exports in Africa is that they are more diversified and have higher technological content than Africa’s exports to the rest of the world. The latter remain heavily oriented toward minerals, which (for example, crude oil, copper) on average accounted for about 75 percent of total exports during 2007–17, compared with 16 percent for manufactured goods. In contrast, intra-regional exports include higher-value-added products, with manufactured goods accounting, on average, for about 40 percent of intra-regional trade (for example, trucks, motor vehicles), minerals for 44 percent (for example, copper), and agricultural products for 16 percent (for example, maize) over the same period (Figure 3.5).

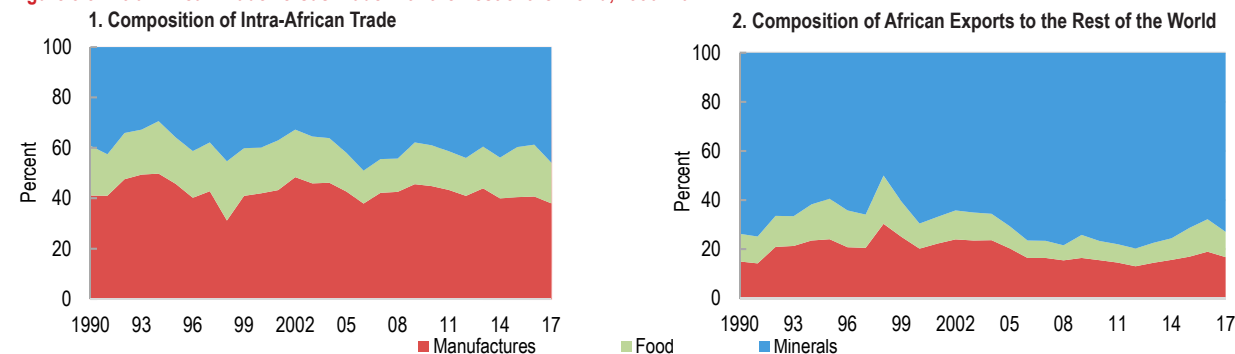
Figure 3.4. Trade Integration, 2015



Sources: United Nations COMTRADE Database; and IMF, World Economic Outlook database.

Note: Countries ranked from largest to smallest GDP, excluding South Africa (appearing as a residual). For each country, trade share is the average of exports and imports as a share of total African regional trade. Relative regional trade integration defined as the ratio of the share of regional trade over the share of regional GDP. See page vi for country abbreviations table.

Figure 3.5. Intra-African Trade versus Trade with the Rest of the World, 1990–2017



Sources: United Nations COMTRADE database; and IMF staff calculations.

Against this backdrop, countries with more diversified economies tend to trade relatively more within the region. Even within Africa's RECs, countries' structural export sophistication is associated with more intraregional exports (Figure 3.6).

Trade in Africa nevertheless remains concentrated in less processed and low-technology goods than trade in other regions of the world and shows limited signs of value-chain creation. Compared with other regions, intraregional trade in Africa is more focused on minerals and less on manufacturing (Figure 3.3). Moreover, intra-industry trade in Africa is lower than in other regions, signaling less regional value-chain integration (Figure 3.7).

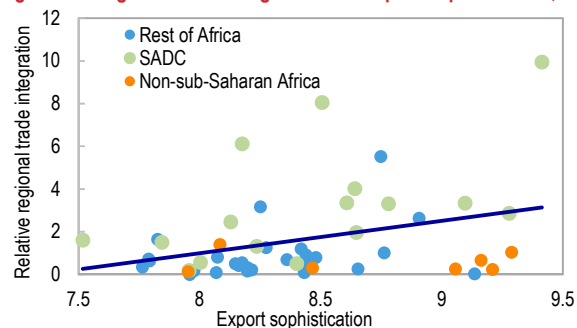
The Experience of Subregional Economic Communities and the Role of Tariffs and Nontariff Trade Costs

The experience with Africa's RECs offers some insights into the factors that may affect intraregional trade on the continent. The expansion of regional trade flows within Africa in recent decades occurred along with the creation and expansion of several RECs, several of which apply near-zero preferential tariffs to trade within the community (Figure 3.8). Today, most African countries are part of such communities, and 75 percent of intraregional trade took place in five RECs in 2017, with the SADC alone accounting for half of such trade flows.⁴

The reduction in tariffs on trade within African RECs has, however, had uneven effects on trade flows within subregions, which points to the presence of significant nontariff bottlenecks. In some RECs, trade flows spiked after the reduction in tariffs (for example, SADC), and the share of trade within the community rose significantly. In other RECs, however, tariff reductions were not associated with larger subregional trade flows (for example, Central African Economic and Monetary Community [CEMAC]), which suggests that factors other than tariffs constrain trade, including high nontariff trade costs and limited export diversification. Countries in these latter RECs indeed have some of the highest nontariff trade costs in the region (Figure 3.9) and relatively undiversified exports (Online Annex 3.2).

⁴ The analysis focuses on five major RECs covering most of Africa with minimal overlap. It is a subsample of many intertwined African RECs including free trade areas, customs unions, and monetary unions (Online Annex 3.2).

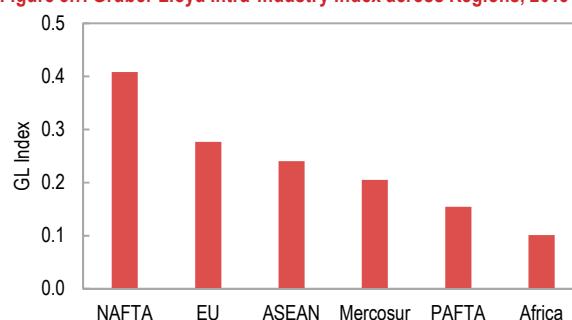
Figure 3.6. Regional Trade Integration and Export Sophistication, 2015



Sources: United Nations COMTRADE database; Cherif, Hasanov, and Wang (2018); and IMF staff calculations.

Note: Export Sophistication is based on the structural index in Cherif, Hasanov, and Wang (2018). Relative regional trade integration is defined as the ratio of the share of regional trade to the share of regional GDP. SADC = Southern African Development Community.

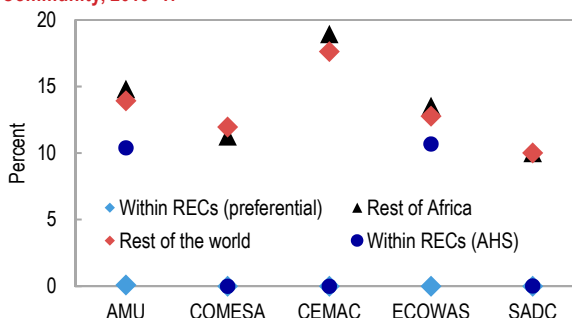
Figure 3.7. Grubel-Lloyd Intra-Industry Index across Regions, 2015



Source: IMF staff calculations.

Note: Index (between 0–1) measures propensity of two countries to trade in the same 4-digit-level industry. Higher index indicates larger intra-industry trade (Online Annex 3.2). ASEAN = Association of Southeast Asian Nations; EU = European Union; NAFTA = North American Free Trade Agreement; PAFTA = Pan-Arab Free Trade Area.

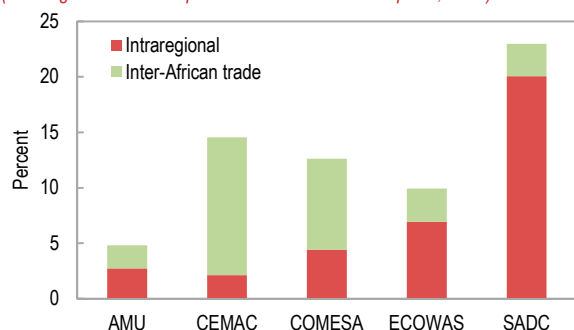
Figure 3.8. Africa: Average Tariff Rates by Regional Economic Community, 2010–17



Sources: UNCTAD Trade Analysis Information System; and IMF staff estimates.

Note: Near-zero preferential tariff rates in RECs do not necessarily imply the absence of tariffs as in some RECs not all members are part of the associated free trade agreement. AHS = effectively applied. Rest of Africa and rest of the world refer to AHS. AMU = Arab Maghreb Union; CEMAC = Central African Economic and Monetary Community; COMESA = Common Market for Eastern and Southern Africa; ECOWAS = Economic Community of West African States; RECs = regional economic communities; SADC = Southern African Development Community.

Figure 3.9. Africa: Trade Integration in RECs
(Intraregional RECs' imports as a share of total imports, 2015)



Sources: United Nations COMTRADE database; World Bank; and IMF staff calculations.

Note: Inter-African trade excludes trade with countries from the same regional economic community (REC). AMU = Arab Maghreb Union; CEMAC = Central African Economic and Monetary Community; COMESA = Common Market for Eastern and Southern Africa; ECOWAS = Economic Community of West African States; SADC = Southern African Development Community.

Moreover, trade between countries belonging to different RECs remains limited (Online Annex 3.2). This likely reflects the still relatively high tariffs on trade between countries from different RECs, which, on average, are about 12–15 percent (Figure 3.8). Limited trade between some countries may also reflect a long-standing problem: many countries are part of different RECs and agreements, which apply different trade rules (for example, rules of origin), raising the cost of trading within the continent. Addressing these issues is both an objective and a challenge for the AfCFTA.

HOW CAN THE AfCFTA SUPPORT REGIONAL TRADE INTEGRATION IN AFRICA?

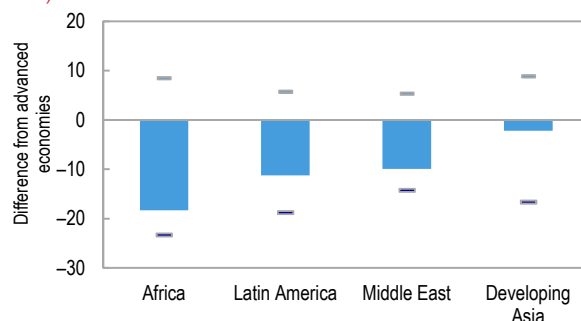
Expanded international and regional trade flows have played a significant role in Africa's rapid growth in recent years (IMF 2015, 2018c). The 2018 AfCFTA marks another milestone toward deeper regional integration and the quest for stronger and sustained growth. However, the range of outcomes from Africa's RECs suggests that regional integration is a complex process with several factors at play beyond tariffs. This section examines the potential for the AfCFTA to further expand regional trade and identifies policy levers to deepen trade integration within Africa.

Potential for Further Regional Trade Integration

A key issue when assessing the AfCFTA is to evaluate the potential to expand intraregional trade further. A central tenet of trade theory is that trade flows increase along with countries' size, level of development, and geographic and cultural proximity. This section assesses the degree of regional integration in Africa by gauging the impact of these features on trade flows. In so doing, it follows the empirical literature and estimates gravity equations covering 148 countries during 2000–15, using data on trade in goods disaggregated by industry.

Estimates suggest that African countries are, on average, expected to trade less than countries in other regions (Figure 3.10). In other words, particular features of African economies, besides size and level of development, imply less trade compared with other regions. These features include structural factors of African economies and policy-related factors such as tariffs, poor logistics and infrastructure quality, and limited credit (Online Annex 3.3). Empirical analysis also suggests that there is significant room for further trade integration in certain subregions and industries. Several RECs—such as CEMAC, the Arab Maghreb Union (AMU), the Common Market for Eastern and Southern Africa (COMESA), and the Economic Community of West African States (ECOWAS)—cover a large share of African countries and trade less than the top-performing RECs on the continent, which suggests the potential for additional trade integration within these subregions (Figure 3.11).

Figure 3.10. Role of Country Features in Regions' Trade
(Median and interquartile range of country fixed effects from the gravity model)



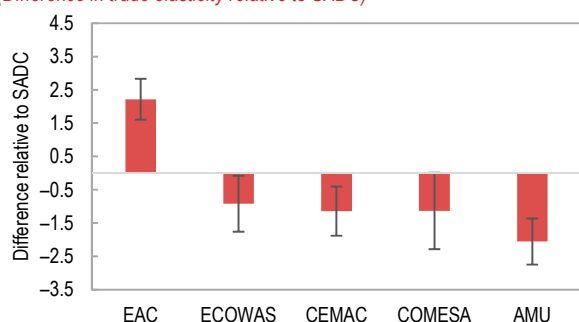
Source: IMF staff estimates.

Note: Contribution of country characteristics is measured using the pooled importer-industry and exporter-industry fixed effects for each region from a gravity regression (Online Annex 3.3). The lines above and below indicate the 25 percent and 75 percent quartiles of the fixed effects.

Empirical estimates also show that intraregional trade in goods such as food, forestry products, other primary products, and manufactured products is lower than predicted by the gravity model, signaling room for further trade expansion in these industries. (Figure 3.12)

Intraregional trade exhibits such gaps despite the positive effect on trade of the RECs and their near-zero preferential tariffs. This may reflect the persistence of significant nontariff bottlenecks within these communities, along with hurdles such as differing trade regimes that hinder trade between the communities.

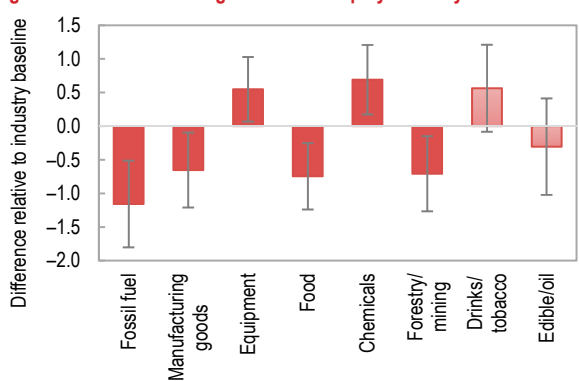
Figure 3.11. Trade Gaps in African Subregional Economic Communities
(Difference in trade elasticity relative to SADC)



Source: IMF staff estimates.

Note: Whisker lines indicate 95 percent confidence intervals. See Online Annex 3.3 for details of the gravity regression. AMU = Arab Maghreb Union; CEMAC = Central African Economic and Monetary Union; COMESA = Common Market for Eastern and Southern Africa; EAC = East African Community; ECOWAS = Economic Community of West African States; SADC = Southern African Development Community.

Figure 3.12. Africa: Intraregional Trade Gap by Industry



Source: IMF staff estimates.

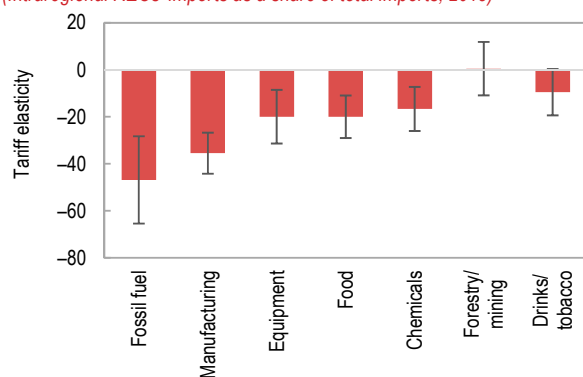
Note: Industries ordered from highest to lowest share of intra-Africa trade. Bars indicate gap within each industry relative to intra-Africa trade from gravity model (Online Annex 3.3). Whisker lines indicate 95 percent confidence intervals. Light red = nonsignificant coefficient.

Benefits from the AfCFTA and Significant Scope for Policies to Foster Regional Trade Integration

Understanding the drivers of the substantial gaps in intraregional trade and identifying policies to help boost the region's trade will be key to the success of the AfCFTA.

The most observable and measurable form of trade barrier—and one of the AfCFTA's focal points—is the tariff level. Do tariffs represent a significant obstacle to intraregional trade in Africa? Empirical analysis using a gravity model for African countries shows that tariff reductions may boost intraregional trade in the region, particularly for the mineral, manufacturing, and agriculture-related sectors (Figure 3.13). While the estimated elasticity of trade flows to tariffs in Africa is somewhat limited, the overall effect of an extensive reduction in tariffs, as planned under the AfCFTA, may be sizable. Eliminating tariffs on 90 percent of currently taxed intraregional trade flows would increase intraregional trade by about US\$16 billion or about 16 percent over recent average levels (Online Annex 3.3). More limited tariff reductions would of course have smaller overall effects on trade.⁵

Figure 3.13. Elasticity of Intraregional Trade to Tariffs by Industry
(Intraregional RECs' imports as a share of total imports, 2015)



Sources: UNCTAD Trade Analysis Information System; and IMF staff estimates.

Note: Industries ordered from highest to lowest share of intra-Africa trade. Bars indicate the tariff sensitivity of trade from gravity model (Online Annex 3.3). Whisker lines indicate 95 percent confidence intervals.

⁵ Under the AfCFTA, countries are expected to eliminate tariffs on 90 percent of products, leaving open the possibility of applying the reduction to either tariff lines or import values. The potential impact of these two options on the extent of trade liberalization is quite different. Targeting tariff lines could yield tariff reductions as low as 15 percent only in terms of import values (UNECA 2018).

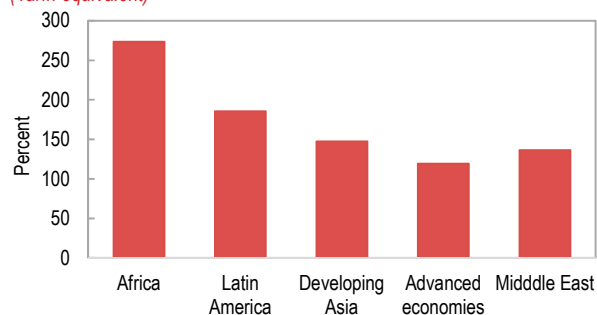
Beyond tariffs, distance appears to be a greater barrier to intraregional trade in Africa than in other regions of the world (Online Annex 3.3). This indicates that factors other than tariffs make trading goods particularly costly for African countries and likely contribute to regional trade gaps. A key factor is the poor trade facilitation services, including logistics and transportation infrastructure, border processes, and customs practices. Typical nontariff barriers such as quotas, licenses, and complex or dissimilar rules of origin—as well as sanitary, phytosanitary, and technical barriers—also play a key role along with an inadequate business and regulatory environment. In this respect, African countries have among the highest nontariff trade costs in the world (Figure 3.14).

Which nontariff factors help explain intraregional trade gaps in Africa? To shed light on this question, the gravity model is augmented to include determinants such as quality of infrastructure and logistics. In line with the literature, the augmented gravity model also considers factors indirectly affecting trade, such as the level of credit available to the private sector and indicators of the business climate and education.⁶ These factors are found to play a significant and stronger role than tariffs in hindering intraregional trade in Africa. All else equal, better logistics and infrastructure, along with easier access to credit and a more supportive business environment, are associated with higher intraregional trade flows (Figure 3.15). Looking at logistics, customs-related services—including clearance procedures and, to some extent, activities of typically regulated sectors such as brokerage services—are particularly important (Online Annex 3.3).

Although nontariff factors are key bottlenecks to intraregional trade, an important question for policymaking is which factors matter most. To address this issue, this chapter relies on principal component analysis and machine-learning techniques to capture the complex nature of the various trade-facilitating factors and the nonlinear interactions between these factors and trade flows, which are usually ignored in standard gravity models.

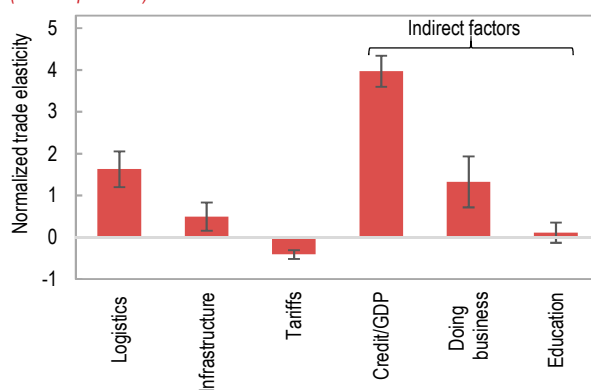
⁶ Nontariff factors are broadly defined to include factors that make trade difficult or costly, such as typical nontariff barriers (for example, quotas, subsidies, licenses, and restrictive application of nontariff measures such as rules of origin and sanitary and phytosanitary measures); logistics and transportation infrastructure; and other factors that may indirectly affect trade (for example, credit, human capital, business climate).

Figure 3.14. Nontariff Trade Costs, 2015
(Tariff equivalent)



Sources: ESCAP - World Bank Trade Cost database.

Figure 3.15. Elasticity of Intraregional Trade
(Tariff equivalent)



Sources: UNCTAD Trade Analysis Information System; and IMF staff estimates.

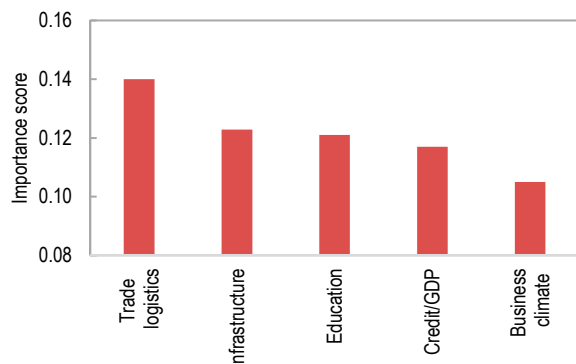
Note: Bars indicate coefficients normalized by the standard deviation of each variable. The whisker lines indicate 95 percent confidence intervals. Tariffs elasticity refers to the non-augmented model.

Results based on world trade patterns confirm that trade logistics are the most important nontariff factor in predicting international trade, followed by infrastructure and other factors such as credit, education, and the business climate (Figure 3.16; see also Online Annex 3.4).

Focusing on intraregional trade, results from the gravity model confirm that, for Africa (Figure 3.17)

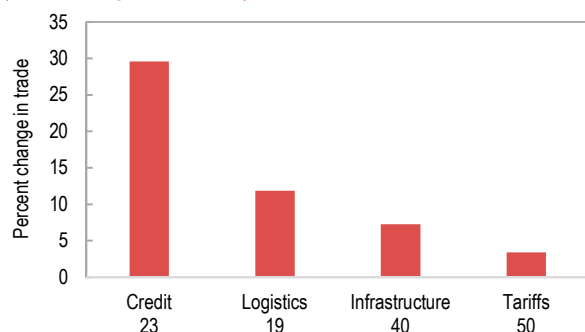
- Trade logistics are the most significant direct impediment to intraregional trade. Bringing the quality of logistics to the global average level (an improvement of about 19 percent) would lower the cost of cross-border movement of goods and increase intraregional trade by

Figure 3.16. Importance of Nontariff Bottlenecks
(Optimized random forest importance ranking)



Sources: World Bank, Logistics Performance Index database; World Economic Forum; and IMF staff calculations.

Figure 3.17. Africa: Potential Increase in Regional Trade
(Percent change in trade flows)



Source: IMF staff estimates.

Note: Numbers on the horizontal axis indicate percent change in each indicator to reach the world mean.

over 12 percent. Improving customs services, including clearance procedures and to some extent the quality of operating and brokerage services, is particularly important for intraregional trade flows in Africa (Online Annex 3.3).

- Infrastructure is another important nontariff bottleneck to trade flows, although its impact is more limited. Gravity estimates for Africa suggest that bringing the quality of infrastructure to the global average (an improvement in infrastructure quality of about 40 percent) would spur a 7 percent increase in intraregional trade flows. In this respect, the recent efforts by many African countries to close the infrastructure gap can help countries reap the benefits of the AfCFTA.

- Access to credit for the private sector, the business climate, and human capital also have important roles in supporting intraregional trade. Further financial deepening to a level comparable to the global aggregate would support a significant expansion in trade. To support trade, financial integration should focus on developing the regional financial infrastructure. This includes developing and harmonizing regional payment systems to further facilitate cross-border payments; creating swap arrangements across central banks and a multicurrency clearing center in the region to reduce risks from trading in several different regional currencies; and further coordinating the supervision of pan-African banks that can facilitate intraregional trade (Online Annex 3.9). Such an expansion would need to be accompanied by adequate prudential frameworks to manage the corresponding risks. Further efforts to improve the business climate and human capital would also have a favorable effect. This requires medium-term policies to address the continent's education and skills gaps and obstacles to business.

The Importance of Tackling Nontariff Bottlenecks to Reap the Benefits of Tariff Reductions

Nontariff factors may also shape the effectiveness of tariff policies. For example, reducing tariffs may have limited effects on trade flows if there are significant logistical bottlenecks. To gauge the extent to which nontariff bottlenecks reduce the effectiveness of tariff policies, this chapter relies on empirical analysis using a global panel threshold model covering more than 120 countries during 1990–2017 (Online Annex 3.4).

Empirical analysis shows that nontariff factors, such as infrastructure and trade logistics, undermine tariff policies' potential to promote trade, possibly reducing the impact of the AfCFTA on intraregional trade.⁷ Specifically, lower tariffs would have relatively limited effects on trade flows if the quality of infrastructure is low (for example, below some minimum threshold). For countries with poor

⁷ All indices are synthetic measures of existing indicators, for example, the infrastructure index covers eight indicators, including road and railroad quality and access to electricity.

infrastructure, improvements in this area could potentially double the trade-increasing effect of tariff reductions. This effect is particularly strong in landlocked countries. These results are relevant for Africa. Most African countries rank relatively low in terms of infrastructure quality (Figure 3.18), and about a third of countries are landlocked, suggesting that poor infrastructure in Africa lowers the effectiveness of tariff reductions in boosting trade on the continent. For landlocked countries, logistics also play an important role. It has a greater effect on their ability to trade than in other countries, and basic logistical services greatly enhance the impact of tariff reductions on trade. Overall, improvements in infrastructure and basic trade logistics are particularly important for landlocked countries to reap the benefits of tariff reductions.

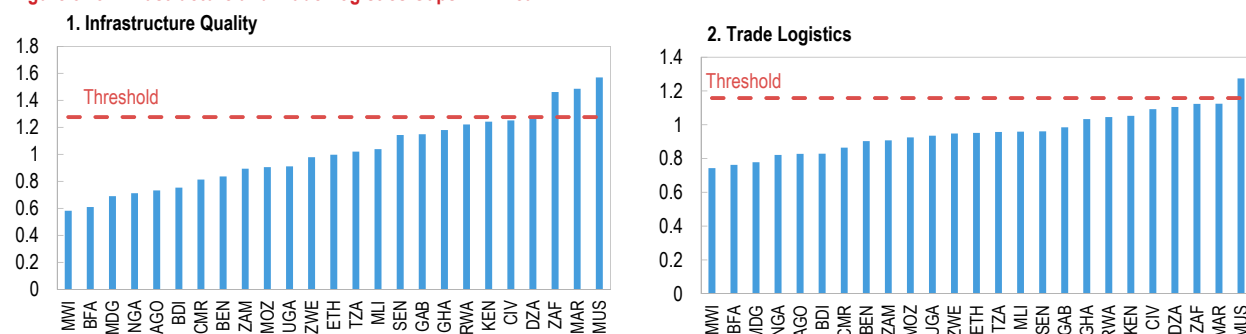
For low-income countries, several nontariff factors influence the effectiveness of tariff reductions. In these countries, both the low quality of infrastructure and level of human capital hinder the effectiveness of tariff reductions in boosting trade integration.

Overall, the empirical investigation suggests that policies to reduce nontariff bottlenecks are central to boosting intraregional trade in Africa. The analysis so far relies on partial equilibrium approaches and does not allow for feedback effects. Computable general equilibrium (CGE) models

allow for trade-diverting and trade-creating effects in response to tariff and nontariff shocks by exploiting countries' comparative advantage and wage and price adjustments worldwide.⁸ When applied to intraregional trade in Africa, CGE models uniformly confirm that reducing nontariff trade costs has a much larger impact on trade flows than eliminating tariffs. The elimination of tariffs on intraregional trade is estimated to increase trade in the region by about 15–25 percent over the medium term, whereas reducing nontariff barriers by half would more than double such effects. Models also show that tariff reductions have a limited effect on welfare, and only simultaneous reductions in tariffs and nontariff bottlenecks can have significant beneficial effects on countries' welfare and GDP (Online Annex 3.5).⁹

The AfCFTA debate has mainly focused on trade in goods, but liberalization of trade in services, including financial services, is just as important for countries' welfare. Lack of data, however, often hinders in-depth analysis. In most African countries, the services sector is the largest part of the economy (IMF 2017b), and trade in services can therefore play a key role in countries' development. In addition, it may have a positive impact on trade in goods as it allows countries to better exploit their comparative advantage (World Bank 2012). Barriers to trade in services in Africa, however, remain relatively high (AfDB 2019), and services often

Figure 3.18. Infrastructure and Trade Logistics Gaps in Africa



Sources: World Bank, Logistics Performance Index database; World Economic Forum; and IMF staff calculations.

Note: Thresholds are estimated using the fixed-effect panel threshold model by Hansen (1999). The thresholds identify structural breaks that divide the estimation equation into two regimes with different tariff-trade elasticities. See page vi for country abbreviations table.

⁸ While capturing various economic interactions, these models still do not account for the potential transformative effect of trade on countries' economies.

⁹ A review of recent studies suggests that eliminating tariffs on intraregional trade would increase welfare up to 0.5 percent over the medium term. Combining the elimination of tariffs with reducing nontariff barriers by half would increase welfare over the medium term up to 0.6–3.8 percent, and GDP by about 1 percent (Online Annex 3.5).

cover activities that are typically regulated. Therefore, further liberalizing trade in services requires coordinating trade policies and domestic regulatory reforms. This process may be complex because it entails detailed information on regulations and trade restrictions in each sector and considerable technical capacity, which is often lacking in many countries.

IMPLICATIONS OF THE AfCFTA FOR AFRICAN COUNTRIES: WELFARE, INCOME DISTRIBUTION, AND FISCAL REVENUE

While there is ample room to expand trade in Africa, benefits and costs from trade expansion may not be evenly distributed across and within countries. The trade integration agenda for the continent will succeed if it benefits all and if it considers the adjustment costs that trade openness entails. This section assesses the AfCFTA's potentially differential effects on African countries, as well as the impact on income distribution within countries and on countries' fiscal revenue. It also identifies complementary policies to ensure that trade integration works for all.

Strengthening the Impact of the AfCFTA Using Structural Reforms

A key question for policymakers is whether the AfCFTA will improve countries' welfare. Several studies based on CGE models conclude that the ability of African economies to benefit from the AfCFTA depends on their economic structure. More diversified and manufacturing-oriented economies, existing regional trade hubs, and small economies—already relatively more open to international competition—are likely to benefit more from regional trade integration than agriculture-oriented and natural-resource-based economies (Online Annex 3.5).

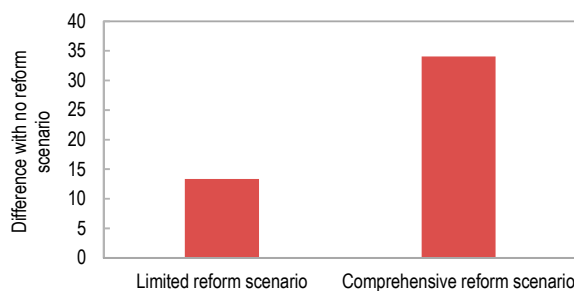
What can countries do to take full advantage of the opportunities offered by the AfCFTA? The trade literature suggests that greater trade can trigger deep structural change by increasing production efficiency and spreading knowledge and technologies across countries (IMF 2016). In this context, complementary structural reforms that boost

efficiency in sectors where developing economies have competitive advantage (for example, agriculture) may amplify the positive effect of deeper trade and increase GDP more than trade alone. While structural reforms may be helpful for all countries, the question is whether they may help agriculture-oriented and less-diversified economies benefit more from trade liberalization.

To examine this question, a stochastic general equilibrium model with multiple sectors and different sectoral productivities is used. The model is calibrated for a stylized African agriculture-exporting economy. The model baseline is modified by reducing tariffs, reflecting the impact of the AfCFTA, and by increasing the productivity of the agriculture sector, where the economy already has a competitive advantage, while allowing the workforce to shift across sectors. Such an increase in productivity can reflect structural reforms that, for example, increase yields in key agricultural exports (Online Annex 3.6),

The analysis suggests that complementing the AfCFTA with structural reforms would significantly increase the impact of the AfCFTA on the GDP of developing and agriculture-based economies. The additional effect of trade on GDP through complementary structural reforms increases with the effectiveness of the reforms. Effective structural reforms can raise the impact on GDP of expanded trade by as much as one-third (Figure 3.19). Hence, even developing and agriculture-based economies can get substantial gains from trade integration if the appropriate structural reforms are implemented.

Figure 3.19. Additional GDP Impact of Trade Expansion under Structural Reform Scenarios, Agricultural Exporter (Percent)



Source: IMF staff estimates.

Note: Trade expansion is defined as the increase in openness (exports plus imports to GDP). "Limited reform scenario" implies a 3 percent additional long-term effect on GDP levels, while "comprehensive reform scenario" implies a 7 percent additional increase in GDP.

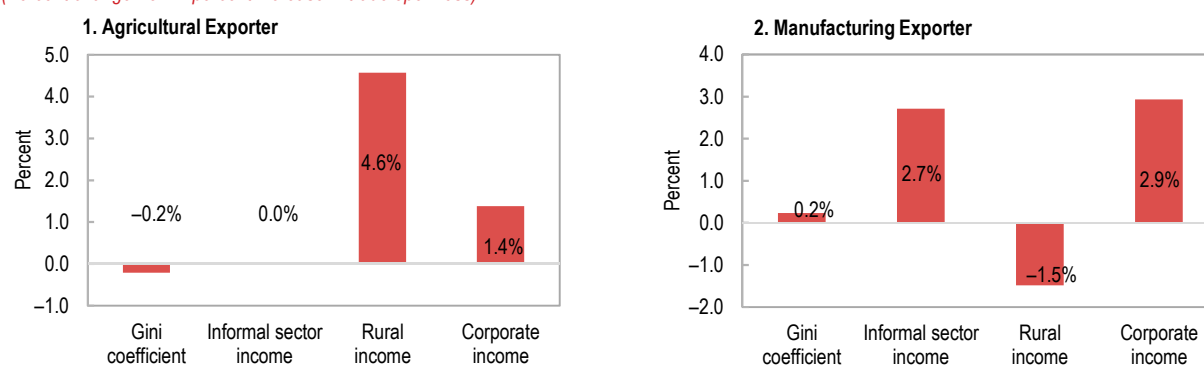
Regional Trade Integration Affects Income Distribution

Inequality in Africa is very high, and it is worth examining the possible impact on the region's inequality of expanded trade flows associated with the AfCFTA.¹⁰

The entry of many developing economies into the world market in recent decades coincided with significant changes in income inequality. While on a global level inequality decreased as millions of workers were lifted out of poverty, particularly in Asia, inequality within countries often increased. Although globalization was expected to help the less skilled and improve income distribution, the wage gap between skilled and unskilled labor has widened, and the share of labor income in total value added has declined, contributing to higher inequality in several countries (Ravallion 2017).

To gauge the effects of increased trade openness from the AfCFTA on income inequality, this section reexamines this critical issue using a two-pronged approach. It employs the stochastic general equilibrium model of the previous section, calibrated on stylized African economies (for example, agriculture- and natural-resource-based economies) to lay out the channels through which trade integration may affect inequality. It then empirically tests

Figure 3.20. Change in Gini Coefficients and Income Shares
(Percent change from 1 percent increase in trade openness)



Source: IMF staff estimates.

¹⁰ Seven of the ten most unequal countries in the world are in Africa. www.indexmundi.com/facts/indicators/si.pov.gini/rankings.

¹¹ The Gini coefficient is estimated to decline by 0.2 percent for each 1 percent increase in trade flows. Hence, if the AfCFTA is expected to increase trade flows by 16 percent (see previous sections), the Gini coefficient could decline by as much as 3 percent from its initial level.

¹² In natural resource exporters, inequality decreases less than in the case of an agricultural exporter. While natural resource activities are capital intensive and favor richer capital owners, these activities are also taxed more heavily, providing additional resources for redistribution.

the model predictions using cross-country panel regressions covering more than 100 countries during 2000–14.

Model estimates suggest that the impact of increased trade on income inequality over the medium term is in general limited, but the effects differ across economies (Figure 3.20):

- In agriculture-oriented and, to some extent, natural-resource-exporting economies, trade openness decreases income inequality slightly.¹¹ More agricultural exports translate into higher incomes in rural areas where a large share of the poor live. The effect is larger if tariffs on intermediate inputs for agricultural production (for example, fertilizers and equipment) are reduced because this lowers production costs and further increases rural incomes.¹²
- In manufacturing exporters, trade openness somewhat increases inequality. Increased manufacturing exports tend to benefit firms that hire high-skilled and better-paid workers, thus increasing income inequality. Reducing tariffs on intermediate inputs would amplify this income effect.

One of the reasons the effect of increased trade integration on inequality is limited is the presence,

in African countries, of large informal sectors. By nature, the informal sector is associated with higher inequality (if concentrated in low-skill activities), but it is also concentrated in nontradable goods and services and is therefore relatively insensitive to the effects of trade integration, thus insulating a large share of the population from the impact of trade (Online Annex 3.6).¹³

The empirical analysis largely confirms model predictions, with some important insights. In aggregate, greater trade integration is not associated with increased income inequality over the medium term. But greater trade integration does come with higher inequality in the short term, with a possible decline in the share of income accruing to the poorest.¹⁴ This suggests that the initial adverse distributional effect of trade openness fades away as economies adjust over time. In this respect, African economies do not substantially differ from other countries. Moreover, there is some indication that increased trade integration is not associated with higher poverty. As with the model, empirical estimates confirm that trade liberalization is associated with better income distribution in economies with relatively larger agricultural sectors and that while informality is associated with greater income inequality, it tends to mitigate the short-term effects of trade liberalization on income distribution (Online Annex 3.7).¹⁵

Limited Reductions in Fiscal Revenue with a Few Exceptions

One of the concerns with the AfCFTA is that tariff reductions may lead to fiscal revenue losses and budget pressures. Will the AfCFTA carry significant revenue losses, and what can countries do to preserve fiscal sustainability?

The investigation of African countries' fiscal revenue and trade data suggests that, on average, fiscal revenue losses due to the AfCFTA are likely to be limited. Overall customs revenues in Africa are relatively low, and only a small portion of such revenue depends on regional trade (Figure 3.21). During 2010–15, customs revenue averaged about 2.5 percent of GDP (16 percent of total tax revenue), and overall regional imports, including zero-rated imports within RECs, averaged about 17 percent of total imports. The picture was radically different only two decades ago before many African countries joined the World Trade Organization (WTO) and signed several trade agreements (Online Annex 3.8).

However, low averages mask considerable heterogeneity and important exceptions across countries. During 2010–15, most countries' customs revenues averaged less than 2 percent of GDP, but in a few countries they exceeded 5 percent of GDP. Moreover, for some countries, imports from the region exceed 35 percent of total imports (for example, Côte d'Ivoire, Malawi, Zambia, Zimbabwe), suggesting risks of large revenue losses.

To gauge the direct impact of the AfCFTA on fiscal revenue, this chapter applies the effective average tariff rate to countries' import data by individual product.¹⁶ Assuming the elimination of all tariffs on intraregional imports, and accounting for VAT losses as a result of smaller tax bases, the average estimated revenue loss is low, at about 0.3 percent of GDP (Online Annex 3.8).¹⁷ However, given existing tariffs and regional trade links, revenue losses in some countries could be large, exceeding 1 to 2 percent of GDP (for example, Democratic Republic of the Congo, Sierra Leone, Zimbabwe).

¹³ The informal sector is assumed to produce mainly nontradable goods and services, which are not affected by trade. For an analysis of informality in Africa, and its large size in sub-Saharan Africa, see Medina, Jonelis, and Cangul (2017).

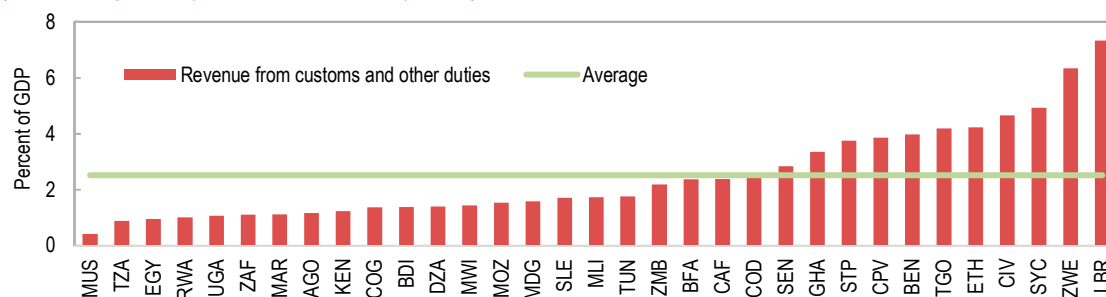
¹⁴ Some recent studies have found that trade openness is associated with low inequality (Jaumotte, Lall, and Papageorgiou 2013). However, these studies cover data only up to the early 2000s, and the use of more recent data explains the different conclusion (Online Annex 3.7).

¹⁵ It is worth noting that although the analysis focuses on aggregate measures of income inequality, inequality across regions and social groups—such as women and young people—in countries may change substantially, depending on countries' circumstances.

¹⁶ For each country i , total customs revenue is calculated as the sum (over all types of products and all countries) of the average effective tariff imposed by country i on good Z imported from country y^* multiplied by the value of such imports. This process takes into account tariff differences due to bilateral or subregional economic communities.

¹⁷ This represents an upper bound for possible revenue losses since the AfCFTA requires elimination of tariffs on only 90 percent of trade items. Results are confirmed by using most-favored-nation (MFN) effective rates; that is, the maximum tariff a country can impose on other countries under the WTO. In this case, the average loss is estimated at about 0.5 percent of GDP.

Figure 3.21. Customs Revenue in African Countries, 2010–15
(Percent change from 1 percent increase in trade openness)

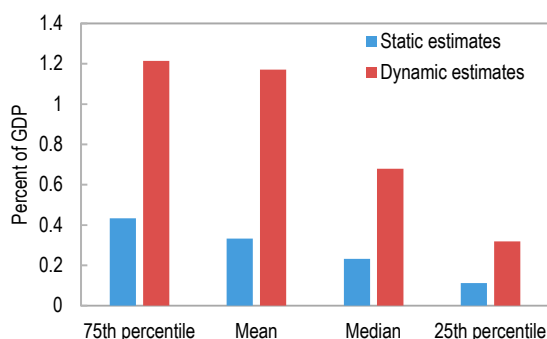


Source: IMF, Fiscal Affairs Department Tax Revenue Indicators database.

Note: Excluding Southern African Customs Union (SACU) countries, except South Africa as SACU countries' customs revenue is pooled. See page vi for country abbreviations table.

The static revenue losses estimated above do not account for the possibility that AfCFTA countries may find it convenient to divert trade and substitute imports from high-tariff countries with imports from AfCFTA members and that the AfCFTA may increase countries' GDP. Using conservative growth and trade diversion elasticities to tariffs estimated in the literature, the analysis shows that these dynamic effects may imply larger, although still somewhat limited, revenue losses. On average, the revenue loss would amount to about 0.5–0.8 percent of GDP, depending on the assumed elasticities. However, in a few countries revenue losses may be as large as 3–5 percent of GDP (Figure 3.22; Online Annex 3.8 for details). For these countries, authorities should define clear domestic revenue mobilization policies on entering the AfCFTA.

Figure 3.22. Estimated Static and Dynamic Revenue Losses from Tariff Reductions



Sources: UNCTAD Trade Analysis Information System database; and IMF staff estimates.

Note: Losses include losses from tariff reduction and value-added tax. Dynamic losses account for trade diversion and GDP changes.

SUMMARY AND POLICY IMPLICATIONS

This chapter suggests that Africa's fast-growing intraregional trade has significant room for further expansion. Reducing tariffs and, more important, addressing nontariff bottlenecks would support further regional trade integration. Poor trade logistics and, to a lesser extent, infrastructure have the largest potential to boost regional trade integration, especially for landlocked and low-income countries. RECs' experience in Africa confirms that reducing tariffs alone may not suffice to boost intraregional trade since nontariff factors also hamper trade flows.

What does this mean for the AfCFTA, and what can countries do to foster and take advantage of regional integration and help promote productivity and growth in Africa? The findings presented in this chapter suggest that tariff reductions can play a significant role in fostering intraregional trade if applied to a large proportion of trade flows. However, tariff reductions should be complemented with policies to reduce nontariff bottlenecks to trade. Such policies should take center stage in the effort to foster regional trade integration in Africa. Trade within many RECs is already virtually tariff-free, so addressing poor infrastructure and trade logistics, including customs services and clearance procedures, would provide much-needed support for intraregional trade growth. Addressing these bottlenecks would be particularly beneficial for landlocked and low-income countries. Moreover, establishing a mechanism to identify and monitor the removal of other nontariff barriers,

such as quotas, licenses, subsidies, and restrictive application of nontariff measures such as rules of origin and sanitary and phytosanitary measures, would greatly enhance the effectiveness of the AfCFTA. Further developing regional payment systems and introducing swap arrangements across central banks and a multicurrency clearing center could support trade integration. More generally, liberalizing trade in services may require coordinating trade policies and domestic regulatory reforms. In this context, the AfCFTA could be the catalyst that will spur efforts to tackle such bottlenecks and coordination issues at both the national and subregional levels.

To ensure that the economic and welfare benefits of deeper regional trade integration are shared by all, policies should address the adjustment costs

that integration may entail. The analysis in this chapter suggests that for agriculture-based and less diversified countries to reap the benefits of trade integration, trade policies should be combined with structural reforms that boost agricultural productivity to better leverage existing comparative advantage. Deeper regional trade integration is also likely to adversely affect fiscal revenues in a few countries, which will need to design domestic tax revenue-raising strategies while being mindful of possible growth and distributional effects (IMF 2018c). To be successful, regional trade integration policies should mitigate the possible adverse effects of trade integration on income distribution, particularly in the more diversified economies, through targeted social programs (for example, income support) and training programs to ease worker mobility across industries and promote employment.

REFERENCES

- African Development Bank (AfDB). 2012. “Informal Cross Border Trade in Africa: Implications and Policy Recommendations.” *Africa Economic Brief* 3 (November).
- . 2019. *African Economic Outlook 2019*. Abidjan.
- Cherif, R., F. Hasanov, and L. Wang. 2018. “Sharp Instrument: A Stab at Identifying the Causes of Economic Growth.” IMF Working Paper 18/117, International Monetary Fund, Washington, DC.
- Hansen, B. 1999. “Threshold Effects in Non-Dynamic Panels: Estimation, Testing, and Inference.” *Journal of Econometrics* 93 (2): 345–68.
- International Monetary Fund (IMF). 2015. “Global Value Chains: Where Are You? The Missing Link in Sub-Saharan Africa’s Trade Integration.” *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, April.
- . 2016. “Global Trade, What’s behind the Slowdown?” *World Economic Outlook*. Washington, DC, October.
- . 2017a. “Restarting the Growth Engine.” *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, April.
- . 2017b. “Fiscal Adjustment and Economic Diversification.” *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, October.
- . 2018a. “Growth Challenges for the Next Decade and Beyond.” *Regional Economic Outlook: Asia Pacific*. Washington, DC, October.
- . 2018b. “Domestic Revenue Mobilization and Private Investment.” *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, May.
- . 2018c. “Regional Spillovers in Sub-Saharan Africa.” IMF Spillover Note 18/01, Washington, DC.
- . 2019. “Online Annexes— Opportunities and Challenges of the AfCFTA” Background Paper: <https://www.imf.org/-/media/Files/Publications/REO/AFR/2019/April/English/backgroundpapers.ashx?la=en>
- Jaumotte F., S. Lall, and C. Papageorgiou. 2013. “Rising Income Inequality: Technology, or Trade and Financial Globalization?” *IMF Economic Review* 61 (2): 271–309.
- Medina, L., A. W. Jonelis, and M. Cangul. 2017. “The Informal Economy in Sub-Saharan Africa: Size and Determinants.” IMF Working Paper 17/156. International Monetary Fund, Washington, DC.
- Ravallion M. 2017. “Inequality and Globalization: A Review Essay.” ECINEX Working Paper 2017/435. Society for the Study of Economic Inequality, Milan.
- United Nations Economic Commission for Africa (UNECA). 2018. “African Continental Free Trade Area: Towards the Finalization of Modalities on Goods.” Addis Ababa.
- World Bank. 2012. “De-Fragmenting Africa.” Washington, DC.

Statistical Appendix

Unless noted otherwise, data and projections presented in this *Regional Economic Outlook* are IMF staff estimates as of March 30, 2019, consistent with the projections underlying the April 2019 *World Economic Outlook*.

The data and projections cover 45 sub-Saharan African countries in the IMF's African Department. Data definitions follow established international statistical methodologies to the extent possible. However, in some cases, data limitations limit comparability across countries.

Additional tables for historical and forecasts for key macroeconomic variables are posted online in the Background Paper and Expanded Statistical Appendix.

<https://www.imf.org/~media/Files/Publications/REO/AFR/2019/April/English/backgroundpapers.ashx?la=en>

Country Groupings

Countries are aggregated into three (non-overlapping) groups: oil exporters, other resource-intensive countries, and non-resource-intensive countries (see table on page 56 for the country groupings).

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

Countries are also aggregated into four (overlapping) groups: oil exporters, middle-income, low-income, and countries in fragile situations (see table on page 56 for the country groupings).

The membership of these groups reflects the most recent data on per capita gross national income (averaged over three years) and the World Bank, Country Policy and Institutional Assessment (CPIA) score (averaged over three years).

- The middle-income countries had per capita gross national income in the years 2015–17

of more than US\$995.00 (World Bank, using the Atlas method).

- The low-income countries had average per capita gross national income in the years 2015–17 equal to or lower than US\$995.00 (World Bank, Atlas method).
- The countries in fragile situations had average CPIA scores of 3.2 or less in the years 2015–17 and/or had the presence of a peace-keeping or peace-building mission within the last three years.
- The membership of sub-Saharan African countries in the major regional cooperation bodies is shown on page 56: CFA franc zone, comprising the West African Economic and Monetary Union (WAEMU) and CEMAC; the Common Market for Eastern and Southern Africa (COMESA); the East Africa Community (EAC-5); the Economic Community of West African States (ECOWAS); the Southern African Development Community (SADC); and the Southern Africa Customs Union (SACU). EAC-5 aggregates include data for Rwanda and Burundi, which joined the group only in 2007.

Methods of Aggregation

In Tables SA1 and SA3, country group composites for real GDP growth and broad money are calculated as the arithmetic average of data for individual countries, weighted by GDP valued at purchasing power parity as a share of total group GDP. The source of purchasing power parity weights is the World Economic Outlook (WEO) database.

In Table SA1, country group composites for consumer prices are calculated as the geometric average of data for individual countries, weighted by GDP valued at purchasing power parity as a share of total group GDP. The source of purchasing power parity weights is the WEO database.

In Tables SA2–SA4, country group composites except for broad money, are calculated as the arithmetic average of data for individual countries, weighted by GDP in US dollars at market exchange rates as a share of total group GDP.

Sub-Saharan Africa: Member Countries of Groupings

Oil exporters	Other resource-intensive countries	Non-resource-intensive countries	Middle-income countries	Low-income countries	Countries in fragile situations	
Angola	Botswana	Benin	Angola	Benin	Malawi	Burundi
Cameroon	Burkina Faso	Burundi	Botswana	Burkina Faso	Mali	Central African Rep.
Chad	Central African Rep.	Cabo Verde	Cabo Verde	Burundi	Mozambique	Chad
Congo, Republic of	Congo, Dem. Rep. of	Comoros	Cameroon	Central African Rep.	Niger	Comoros
Equatorial Guinea	Ghana	Côte d'Ivoire	Congo, Republic of	Rep.	Rwanda	Congo, Dem. Rep. of
Gabon	Guinea	Eritrea	Côte d'Ivoire	Chad	Sierra Leone	Congo, Republic of
Nigeria	Liberia	Eswatini	Equatorial Guinea	Comoros	South Sudan	Côte d'Ivoire
South Sudan	Mali	Ethiopia	Eswatini	Congo, Dem. Rep. of	Tanzania	Eritrea
	Namibia	Gambia, The	Gabon	Eritrea	Togo	Gambia, The
	Niger	Guinea-Bissau	Ghana	Ethiopia	Uganda	Guinea
	Sierra Leone	Kenya	Kenya	Gambia, The	Zimbabwe	Guinea-Bissau
	South Africa	Lesotho	Lesotho	Guinea		Liberia
	Tanzania	Madagascar	Mauritius	Guinea-Bissau		Malawi
	Zambia	Malawi	Namibia	Liberia		Mali
	Zimbabwe	Mauritius	Nigeria	Madagascar		São Tomé & Príncipe
		Mozambique	São Tomé & Príncipe			South Sudan
		Rwanda	Senegal			Togo
		São Tomé & Príncipe	Seychelles			Zimbabwe
		Senegal	South Africa			
		Seychelles	Zambia			
		Togo				
		Uganda				

Sub-Saharan Africa: Member Countries of Regional Groupings

The West African Economic and Monetary Union (WAEMU)	Economic and Monetary Community of Central African States (CEMAC)	Common Market for Eastern and Southern Africa (COMESA)	East Africa Community (EAC-5)	Southern African Development Community (SADC)	Southern Africa Customs Union (SACU)	Economic Community of West African States (ECOWAS)
Benin	Cameroon	Burundi	Burundi	Angola	Botswana	Benin
Burkina Faso	Central African Rep.	Comoros	Kenya	Botswana	Eswatini	Burkina Faso
Côte d'Ivoire	Chad	Congo, Dem. Rep. of	Rwanda	Congo, Dem. Rep. of	Lesotho	Cabo Verde
Guinea-Bissau	Congo, Republic of	Eritrea	Tanzania	Eswatini	Namibia	Côte d'Ivoire
Mali	Equatorial Guinea	Eswatini	Uganda	Lesotho	South Africa	Gambia, The
Niger	Gabon	Ethiopia		Madagascar		Ghana
Senegal		Kenya		Malawi		Guinea
Togo		Madagascar		Mauritius		Guinea-Bissau
		Malawi		Mozambique		Liberia
		Mauritius		Namibia		Mali
		Rwanda		Seychelles		Niger
		Seychelles		South Africa		Nigeria
		Uganda		Tanzania		Senegal
		Zambia		Zambia		Sierra Leone
		Zimbabwe		Zimbabwe		Togo

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List of Sources and Footnotes for Appendix Tables SA1—SA4:**Tables SA1.–SA3.**

Sources: IMF, Common Surveillance database and IMF, World Economic Outlook database, April 2019.

¹ Fiscal year data.

² In February, 2019, Zimbabwe adopted a new local currency unit, the RTGS dollar, which has become the official unit of account. Efforts are underway to revise and update all national accounts series to the new RTGS dollar. Current data are based on IMF staff estimates of price and exchange rate developments in US (and RTGS) dollars. Staff estimates of US dollar values may differ from authorities' estimates.

Note: “...” denotes data not available.

Table SA4.

Sources: IMF, Common Surveillance database, and IMF, World Economic Outlook database, April 2019

¹ As a member of the West African Economic and Monetary Union (WAEMU), see WAEMU aggregate for reserves data.

² As a member of the Central African Economic and Monetary Community (CEMAC), see CEMAC aggregate for reserves data.

³ Fiscal year data.

⁴ In February, 2019, Zimbabwe adopted a new local currency unit, the RTGS dollar, which has become the official unit of account. Efforts are underway to revise and update all national accounts series to the new RTGS dollar. Current data are based on IMF staff estimates of price and exchange rate developments in US (and RTGS) dollars. Staff estimates of US dollar values may differ from authorities' estimate.

Note: “...” denotes data not available.

Table SA1. Real GDP Growth and Consumer Prices

	Real GDP						Consumer Prices, Annual Average					
	<i>(Annual percent change)</i>						<i>(Annual percent change)</i>					
	2010–15	2016	2017	2018	2019	2020	2010–15	2016	2017	2018	2019	2020
Angola	4.6	-2.6	-0.2	-1.7	0.4	2.9	10.6	30.7	29.8	19.6	17.5	11.1
Benin	4.3	4.0	5.8	6.5	6.5	6.5	2.0	-0.8	0.1	1.0	2.0	2.0
Botswana	5.5	4.3	2.9	4.6	3.9	4.1	6.1	2.8	3.3	3.2	3.6	3.8
Burkina Faso	5.9	5.9	6.3	6.0	6.0	6.0	1.2	-0.2	0.4	2.0	2.0	2.0
Burundi	3.3	-1.0	0.0	0.1	0.4	0.5	8.7	5.5	16.6	1.2	7.3	9.0
Cabo Verde	1.5	4.7	4.0	4.7	5.0	5.0	1.7	-1.4	0.8	1.3	1.6	2.0
Cameroon	4.8	4.6	3.5	4.0	4.3	4.7	2.2	0.9	0.6	0.9	1.2	1.5
Central African Rep.	-3.4	4.5	4.3	4.3	5.0	5.0	5.2	4.6	4.1	3.0	3.0	2.5
Chad	6.2	-6.4	-3.1	3.1	4.5	6.0	2.7	-1.1	-0.9	2.5	2.9	3.0
Comoros	2.3	2.2	2.7	2.8	2.8	2.9	2.8	1.8	1.0	2.0	2.0	2.0
Congo, Dem. Rep. of	7.7	2.4	3.4	3.9	4.3	4.4	7.1	18.2	41.5	29.3	8.4	6.7
Congo, Rep. of	4.8	-2.8	-3.1	0.8	5.4	1.5	2.6	3.2	0.4	1.2	1.5	1.8
Côte d'Ivoire	5.8	8.0	7.7	7.4	7.5	7.2	2.0	0.7	0.8	0.3	2.0	2.0
Equatorial Guinea	-1.2	-8.8	-4.7	-5.7	-4.0	-4.7	3.8	1.4	0.7	1.3	2.6	2.7
Eritrea	4.7	1.9	5.0	4.2	3.8	4.1	7.8	9.0	9.0	9.0	9.0	9.0
Eswatini	3.3	3.2	1.9	0.2	-0.4	0.2	6.0	7.8	6.2	4.8	5.6	5.5
Ethiopia ¹	10.2	8.0	10.1	7.7	7.7	7.5	15.1	6.6	10.7	13.8	9.3	8.0
Gabon	5.4	2.1	0.5	1.2	3.1	3.9	1.7	2.1	2.7	4.8	3.0	2.5
Gambia, The	2.9	0.4	4.6	6.6	5.4	5.2	5.5	7.2	8.0	6.5	6.3	6.0
Ghana	7.9	3.4	8.1	5.6	8.8	5.8	11.0	17.5	12.4	9.8	9.1	8.4
Guinea	4.5	10.5	9.9	5.8	5.9	6.0	13.6	8.2	8.9	9.7	8.9	8.3
Guinea-Bissau	3.6	6.3	5.9	3.8	5.0	5.0	1.6	1.5	1.1	1.4	2.0	2.1
Kenya	6.0	5.9	4.9	6.0	5.8	5.9	7.8	6.3	8.0	4.7	4.4	5.0
Lesotho	4.2	3.1	-1.6	1.5	3.9	0.3	4.8	6.2	4.5	5.2	5.4	5.6
Liberia	5.3	-1.6	2.5	1.2	0.4	1.6	8.0	8.8	12.4	23.4	22.3	20.5
Madagascar	2.2	4.2	4.3	5.2	5.2	5.3	7.3	6.7	8.3	7.3	6.7	6.3
Malawi	4.6	2.3	4.0	3.2	4.0	5.0	18.4	21.7	11.5	9.2	8.7	8.2
Mali	3.9	5.8	5.4	4.9	5.0	4.9	1.9	-1.8	1.8	1.7	1.7	2.2
Mauritius	3.8	3.8	3.8	3.8	3.9	3.9	3.6	1.0	3.7	3.2	2.1	3.7
Mozambique	7.0	3.8	3.7	3.3	4.0	4.0	6.1	19.9	15.1	3.9	4.2	5.5
Namibia	5.7	0.6	-0.9	-0.1	1.4	2.0	5.2	6.7	6.1	4.3	5.2	5.5
Niger	6.6	4.9	4.9	5.2	6.5	6.0	0.5	0.2	2.4	3.0	2.4	2.1
Nigeria	5.8	-1.6	0.8	1.9	2.1	2.5	10.4	15.7	16.5	12.1	11.7	11.7
Rwanda	7.5	6.0	6.2	8.6	7.8	8.1	3.8	5.7	4.8	1.4	3.5	5.0
São Tomé & Príncipe	4.9	4.2	3.9	3.0	4.0	4.5	9.8	5.4	5.7	7.9	7.8	5.5
Senegal	4.3	6.2	7.2	6.2	6.9	7.5	1.0	0.8	1.3	0.5	1.3	1.5
Seychelles	5.1	4.5	5.3	3.6	3.4	3.3	2.8	-1.0	2.9	3.7	3.4	3.0
Sierra Leone	5.3	6.4	3.8	3.7	5.4	5.4	6.2	10.9	18.2	16.9	15.8	13.0
South Africa	2.3	0.4	1.4	0.8	1.2	1.5	5.2	6.3	5.3	4.6	5.0	5.4
South Sudan	-5.1	-16.7	-5.5	-1.2	8.8	5.2	24.9	379.8	187.9	83.5	24.5	16.9
Tanzania	6.5	6.9	6.8	6.6	4.0	4.2	9.2	5.2	5.3	3.5	3.5	4.5
Togo	6.1	5.6	4.4	4.7	5.0	5.3	1.9	0.9	-0.7	0.7	1.8	2.0
Uganda	5.3	2.3	5.0	6.2	6.3	6.2	7.5	5.5	5.6	2.6	3.6	4.4
Zambia	6.0	3.8	3.4	3.5	3.1	2.9	8.1	17.9	6.6	7.0	10.7	12.0
Zimbabwe ²	9.4	0.7	4.7	3.4	-5.2	3.3	1.5	-1.6	0.9	10.6	73.4	9.4
Sub-Saharan Africa	5.1	1.4	2.9	3.0	3.5	3.7	7.7	11.2	11.0	8.5	8.1	7.4
<i>Median</i>	5.0	3.8	4.0	3.8	4.3	4.7	4.9	5.5	5.3	3.9	4.2	5.0
Excluding Nigeria and South Africa	5.8	3.4	4.7	4.5	5.0	5.1	7.3	10.6	10.3	8.0	7.4	6.0
Oil-exporting countries	5.3	-1.8	0.5	1.4	2.2	2.7	9.4	17.5	17.1	12.2	11.1	10.3
Excluding Nigeria	4.1	-2.2	-0.3	0.0	2.3	3.2	6.9	22.4	18.6	12.4	9.6	6.7
Oil-importing countries	4.9	3.5	4.6	4.1	4.3	4.3	6.6	7.0	7.2	6.2	6.3	5.7
Excluding South Africa	6.4	5.1	6.1	5.6	5.7	5.5	7.4	7.3	8.1	6.9	6.9	5.8
Middle-income countries	4.7	0.4	2.0	2.2	2.9	3.1	7.7	11.6	11.0	8.2	8.1	7.9
Excluding Nigeria and South Africa	5.3	2.7	3.7	3.4	4.7	4.6	6.7	11.1	9.6	6.9	6.8	5.9
Low-income countries	6.5	4.4	5.9	5.7	5.3	5.6	8.0	10.0	11.0	9.2	8.1	6.0
Excluding low-income countries in fragile situations	7.0	5.9	7.0	6.6	6.0	6.0	8.7	5.9	7.3	6.7	5.6	5.6
Countries in fragile situations	5.5	2.3	3.9	4.4	4.6	5.1	5.5	13.4	13.5	10.4	10.1	5.4
CFA franc zone	4.6	3.4	3.8	4.4	5.2	5.2	2.0	0.6	0.9	1.4	1.9	2.0
CEMAC	3.9	-0.3	0.1	1.7	3.3	3.3	2.6	1.3	0.8	1.9	2.0	2.1
WAEMU	5.2	6.4	6.6	6.3	6.6	6.5	1.5	0.1	1.0	1.0	1.8	1.9
COMESA (SSA members)	6.8	4.8	5.8	5.6	5.3	5.7	8.7	8.1	10.4	9.3	9.2	6.8
EAC-5	6.1	5.4	5.6	6.3	5.3	5.4	8.0	5.7	6.5	3.6	3.9	4.8
ECOWAS	5.9	0.5	2.8	3.2	3.8	3.8	9.0	12.8	12.9	9.7	9.4	9.3
SACU	2.6	0.6	1.4	0.9	1.3	1.6	5.3	6.2	5.2	4.6	4.9	5.3
SADC	3.9	1.3	2.3	1.8	1.9	2.6	6.6	10.3	9.9	7.7	8.0	6.5

See sources and footnotes on page 57.

Table SA2. Overall Fiscal Balance, Including Grants and Government Debt

	Overall Fiscal Balance, Including Grants (Percent of GDP)						Government Debt (Percent of GDP)					
	2010–15	2016	2017	2018	2019	2020	2010–15	2016	2017	2018	2019	2020
Angola	1.1	-4.5	-6.3	2.4	0.1	-0.1	37.2	75.7	68.5	88.1	90.5	82.8
Benin	-0.6	-5.9	-5.8	-4.7	-2.7	-1.8	30.6	49.7	54.4	54.6	54.0	51.5
Botswana	4.5	0.7	-1.0	-3.1	-3.5	-2.6	18.6	15.6	14.1	12.9	12.8	13.4
Burkina Faso	-0.8	-3.6	-7.9	-4.7	-3.0	-3.0	30.3	39.2	38.4	43.0	42.5	42.1
Burundi	-8.2	-6.2	-7.8	-8.6	-9.1	-10.0	41.4	48.4	51.7	58.4	63.5	69.1
Cabo Verde	-3.4	-3.0	-3.1	-2.7	-2.3	-2.6	97.8	127.6	124.6	127.7	125.3	120.8
Cameroon	7.9	-6.1	-4.9	-2.7	-2.2	-1.7	19.6	32.5	36.9	37.7	38.1	37.4
Central African Rep.	0.5	1.6	-1.1	0.7	0.7	-0.1	39.7	56.0	52.9	48.5	42.2	39.2
Chad	1.2	-2.0	-0.1	1.4	-0.2	1.5	34.1	51.8	52.4	46.6	42.9	38.4
Comoros	-1.7	-7.4	0.6	-1.8	-2.6	-2.8	33.9	27.8	31.8	31.2	35.1	36.3
Congo, Dem. Rep. of	0.1	-1.0	-1.5	-0.5	-0.5	-0.5	22.3	19.3	18.1	15.7	14.0	13.2
Congo, Rep. of	14.6	-20.4	-7.5	5.4	7.2	9.6	60.3	127.8	125.4	98.5	90.2	83.7
Côte d'Ivoire	-1.0	-4.0	-4.5	-4.0	-3.0	-3.0	52.1	48.4	49.8	52.2	50.9	49.1
Equatorial Guinea	16.3	-10.9	-2.6	2.8	2.1	2.2	12.4	43.4	38.0	35.9	37.5	37.0
Eritrea	-17.9	-14.7	-14.5	-13.2	-13.0	-14.4	132.2	132.8	131.2	129.4	127.3	136.2
Eswatini	1.4	-10.8	-6.5	-10.1	-8.8	-5.1	15.1	26.0	29.2	34.9	41.1	43.1
Ethiopia ¹	-3.4	-2.3	-3.3	-3.0	-3.0	-3.0	46.3	56.1	59.0	61.1	57.4	56.3
Gabon	8.5	-4.7	-1.7	1.5	0.3	-0.0	29.0	64.2	62.6	58.2	58.5	55.7
Gambia, The	-1.6	-6.5	-5.4	-6.6	-0.2	-3.5	56.0	82.3	87.9	83.2	78.7	75.2
Ghana	-3.8	-6.9	-4.1	-7.0	-5.6	-4.4	41.8	57.1	57.3	59.6	62.0	60.0
Guinea	-1.1	-0.1	-2.0	-2.0	-2.3	-1.7	44.2	42.0	40.4	38.7	46.0	45.3
Guinea-Bissau	-5.4	-5.6	-1.4	-5.1	-2.8	-3.1	53.8	57.9	53.9	56.1	54.9	51.8
Kenya	-1.9	-8.3	-7.8	-7.3	-5.2	-4.0	45.9	53.2	54.8	57.2	55.5	52.8
Lesotho	7.6	-6.3	-3.1	-4.9	-5.4	-5.2	37.3	37.2	36.8	39.0	37.9	37.3
Liberia	0.5	-3.7	-5.1	-5.6	-6.0	-6.5	20.7	28.3	34.1	40.5	46.7	52.6
Madagascar	-2.6	-1.3	-2.4	-2.2	-2.5	-4.1	35.3	41.9	40.3	39.7	41.0	42.1
Malawi	-2.3	-7.3	-7.3	-5.1	-0.9	-2.7	46.6	61.3	61.9	61.3	59.0	58.5
Mali	3.6	-3.9	-2.9	-4.7	-3.0	-3.0	26.5	35.9	35.4	36.6	36.9	37.6
Mauritius	-3.6	-3.5	-2.4	-2.4	-2.8	-2.7	59.6	66.2	63.7	65.2	67.5	67.8
Mozambique	-2.9	-6.3	-3.4	-5.3	-5.4	-6.0	54.2	121.6	103.2	100.4	124.5	119.9
Namibia	1.9	-8.7	-4.8	-5.9	-8.0	-7.2	25.6	39.5	41.5	47.1	51.6	55.9
Niger	7.1	-6.1	-5.7	-4.9	-4.5	-3.0	27.8	43.7	49.0	55.1	55.6	54.1
Nigeria	4.7	-4.0	-5.4	-4.5	-5.1	-4.6	16.9	23.4	25.3	28.4	30.1	31.4
Rwanda	0.6	-2.3	-2.5	-2.6	-3.2	-3.4	22.0	32.9	36.5	40.7	50.0	51.3
São Tomé & Príncipe	31.5	-4.2	-2.6	-2.1	-1.9	-1.8	77.6	92.0	88.6	81.3	74.1	67.3
Senegal	-2.0	-3.3	-2.9	-3.4	-3.0	-3.0	36.5	47.7	60.6	64.4	62.0	60.4
Seychelles	-0.7	0.2	0.4	0.5	0.6	1.2	75.5	69.0	63.6	58.2	54.5	49.5
Sierra Leone	2.2	-8.5	-8.7	-6.8	-4.3	-5.0	39.8	55.5	57.6	71.3	72.4	72.0
South Africa	0.1	-4.1	-4.4	-4.4	-5.1	-5.1	42.4	51.5	53.0	56.7	57.8	59.8
South Sudan	...	-22.0	3.9	-1.0	0.0	-6.9	26.8	89.3	65.2	43.8	37.8	34.2
Tanzania	-2.5	-2.1	-1.2	-1.8	-2.6	-3.1	30.4	36.4	36.6	36.0	36.6	37.2
Togo	-1.5	-9.5	-0.3	-3.1	-1.5	-1.2	55.6	81.1	75.6	74.6	70.4	65.8
Uganda	-0.8	-4.8	-3.8	-4.8	-6.7	-8.4	27.2	37.1	39.7	42.2	44.8	48.1
Zambia	2.1	-5.8	-7.7	-6.5	-5.0	-5.9	31.8	60.7	62.7	72.4	80.5	83.5
Zimbabwe ²	-3.0	-6.5	-8.4	-3.8	-2.0	-2.5	41.5	54.2	52.9	29.8	21.0	20.5
Sub-Saharan Africa	1.7	-4.5	-4.7	-3.7	-4.0	-3.8	31.9	44.4	46.4	49.2	49.2	48.9
Median	-0.7	-4.8	-3.4	-3.8	-2.8	-3.0	36.0	51.5	52.9	54.6	54.0	51.8
Excluding Nigeria and South Africa	1.1	-4.9	-4.5	-3.1	-3.0	-2.9	36.4	53.0	53.1	55.4	55.2	53.4
Oil-exporting countries	5.3	-4.6	-5.3	-2.5	-3.5	-3.3	21.7	36.5	38.5	42.4	41.6	40.6
Excluding Nigeria	6.6	-6.0	-5.1	1.4	0.2	0.3	32.4	66.1	62.6	69.9	69.2	64.2
Oil-importing countries	-0.5	-4.4	-4.3	-4.4	-4.3	-4.1	40.0	49.8	51.1	53.0	53.7	53.7
Excluding South Africa	-1.2	-4.6	-4.3	-4.4	-3.8	-3.7	38.4	48.9	50.0	51.0	51.5	50.7
Middle-income countries	2.2	-4.7	-5.1	-3.9	-4.3	-4.0	31.1	43.5	45.9	49.9	49.9	49.5
Excluding Nigeria and South Africa	2.5	-6.0	-5.3	-3.0	-3.0	-2.5	37.0	57.4	57.1	62.0	61.7	59.0
Low-income countries	-1.3	-3.6	-3.5	-3.2	-3.0	-3.4	35.7	47.5	47.8	46.9	47.2	46.8
Excluding low-income countries in fragile situations	-1.6	-3.2	-3.3	-3.3	-3.5	-3.9	36.0	49.2	50.2	51.9	53.1	52.8
Countries in fragile situations	0.6	-5.0	-4.1	-2.7	-1.9	-1.9	40.1	49.4	49.2	45.1	43.0	41.6
CFA franc zone	4.7	-5.6	-4.0	-2.2	-1.7	-1.3	32.9	49.3	51.6	51.5	50.4	48.6
CEMAC	9.3	-7.3	-3.6	0.4	0.3	0.9	27.3	52.4	53.5	49.7	48.6	46.2
WAEMU	-0.1	-4.4	-4.3	-4.2	-3.0	-2.8	39.0	46.9	50.1	52.8	51.7	50.3
COMESA (SSA members)	-1.6	-4.8	-5.1	-4.5	-3.9	-3.9	39.3	49.3	50.8	51.3	50.6	50.0
EAC-5	-1.9	-5.4	-4.8	-5.0	-4.6	-4.5	35.9	44.2	45.8	47.6	48.1	47.7
ECOWAS	2.8	-4.3	-5.0	-4.7	-4.7	-4.2	23.0	31.6	34.5	37.7	38.6	38.8
SACU	0.3	-4.1	-4.3	-4.5	-5.1	-5.0	40.6	49.0	50.5	54.0	55.1	57.1
SADC	0.3	-3.9	-4.4	-3.0	-3.7	-3.8	38.8	52.8	52.4	56.1	56.7	56.5

See sources and footnotes on page 57.

Table SA3. Broad Money and External Current Account, Including Grants

	Broad Money (Percent of GDP)						External Current Account, Including Grants (Percent of GDP)					
	2010–15	2016	2017	2018	2019	2020	2010–15	2016	2017	2018	2019	2020
Angola	35.2	39.5	32.2	29.9	31.4	31.5	4.4	-4.8	-0.3	1.3	-3.8	-1.9
Benin	37.5	41.0	39.2	39.0	39.0	43.7	-8.5	-9.4	-9.9	-8.9	-8.4	-7.4
Botswana	43.9	41.4	40.2	40.9	41.4	41.7	5.4	13.7	12.3	9.6	8.6	8.0
Burkina Faso	30.5	40.4	44.2	46.1	48.8	51.7	-6.9	-7.6	-9.4	-7.5	-5.8	-4.8
Burundi	24.6	21.7	22.9	25.8	26.4	26.3	-16.8	-13.1	-12.3	-13.4	-12.6	-11.9
Cabo Verde	87.4	102.6	104.5	103.5	103.5	102.8	-9.7	-2.4	-6.2	-7.1	-7.3	-6.5
Cameroon	21.6	22.5	22.6	23.3	23.4	23.3	-3.3	-3.2	-2.7	-4.0	-3.7	-3.4
Central African Rep.	23.4	26.2	26.7	25.5	28.4	29.2	-8.7	-5.5	-8.3	-8.6	-6.1	-6.0
Chad	13.4	15.8	15.8	15.7	16.1	16.0	-9.0	-9.2	-5.7	-4.8	-6.1	-4.3
Comoros	37.7	46.1	45.2	45.2	45.2	45.2	-4.3	-6.5	-4.0	-9.1	-8.9	-8.8
Congo, Dem. Rep. of	11.3	12.5	11.4	13.2	13.4	13.3	-5.6	-3.1	-0.5	-0.5	-1.8	-2.9
Congo, Rep. of	33.5	42.7	33.8	28.6	28.8	29.2	-0.0	-46.2	-3.9	5.5	4.7	5.9
Côte d'Ivoire	15.6	14.6	13.6	13.7	16.4	16.4	1.8	-1.2	-2.8	-3.4	-3.0	-2.8
Equatorial Guinea	14.5	17.4	16.4	14.3	15.2	15.9	-8.4	-13.0	-5.8	-3.6	-4.7	-5.7
Eritrea	112.1	100.8	101.4	101.7	101.6	110.7	1.0	-2.1	-2.4	-1.6	-2.0	-2.0
Eswatini	25.1	29.8	29.3	28.9	28.9	28.7	9.5	14.3	12.5	9.9	10.0	11.6
Ethiopia ¹	27.3	28.9	31.7	33.6	34.3	35.8	-5.7	-9.3	-8.6	-6.5	-6.0	-5.4
Gabon	23.0	24.7	22.7	23.8	26.9	29.5	11.0	-9.9	-4.4	-1.9	-3.6	-1.2
Gambia, The	35.0	36.7	40.5	43.1	44.5	44.9	-7.5	-9.4	-7.1	-11.5	-9.8	-12.7
Ghana	23.1	26.4	25.8	26.1	27.0	27.7	-7.3	-5.2	-3.4	-3.2	-3.0	-3.5
Guinea	24.5	24.9	23.8	22.9	22.4	22.1	-13.8	-31.6	-6.8	-16.1	-20.1	-17.3
Guinea-Bissau	35.9	47.9	44.7	44.2	44.6	45.5	-3.4	1.3	-0.6	-1.6	-3.9	-3.3
Kenya	41.5	38.4	36.9	36.9	37.2	37.6	-8.2	-5.2	-6.3	-5.4	-5.0	-4.9
Lesotho	32.7	31.1	35.3	35.1	33.4	32.4	-7.4	-8.4	-4.6	-5.8	-12.6	-4.3
Liberia	23.3	20.5	19.9	22.5	23.6	24.5	-21.7	-18.6	-23.4	-23.3	-23.4	-23.6
Madagascar	25.6	28.5	29.7	29.3	30.4	30.2	-5.9	0.6	-0.5	0.3	-1.4	-3.5
Malawi	24.6	22.8	23.6	23.6	23.6	23.6	-8.6	-12.9	-11.0	-9.2	-6.8	-7.6
Mali	26.8	28.9	29.0	29.0	29.1	30.0	-5.1	-7.2	-5.9	-7.3	-5.6	-6.1
Mauritius	99.9	109.9	114.1	113.7	113.7	113.7	-7.6	-4.0	-5.6	-6.2	-7.4	-6.7
Mozambique	32.8	37.1	35.8	34.2	34.2	34.2	-34.6	-39.3	-20.2	-34.4	-51.1	-63.8
Namibia	58.4	51.8	53.4	54.1	54.1	54.1	-6.6	-12.8	-6.2	-4.3	-3.9	-3.2
Niger	22.6	26.8	24.4	22.0	21.6	21.6	-18.0	-15.5	-15.7	-16.3	-21.0	-23.1
Nigeria	20.5	25.4	24.7	25.4	26.2	27.1	1.8	0.7	2.8	2.1	-0.4	-0.2
Rwanda	21.0	23.9	23.6	25.3	25.6	25.9	-9.7	-14.3	-6.8	-7.8	-9.2	-8.7
São Tomé & Príncipe	38.9	34.3	31.4	32.9	32.8	32.8	-20.4	-6.5	-12.7	-10.6	-9.4	-8.2
Senegal	30.3	37.4	37.5	36.5	37.7	37.7	-6.6	-4.0	-7.3	-7.2	-7.3	-10.2
Seychelles	61.4	71.8	77.7	78.1	77.4	77.9	-19.5	-20.1	-20.5	-16.3	-16.0	-15.7
Sierra Leone	22.4	25.1	23.6	23.9	24.4	24.0	-27.0	-2.3	-10.9	-13.8	-10.9	-9.7
South Africa	73.1	72.4	72.4	72.4	72.4	72.4	-4.1	-2.8	-2.4	-3.4	-3.4	-3.7
South Sudan	19.9	29.8	16.6	16.1	13.7	13.2	-2.1	0.1	-6.6	-12.5	-12.0	-19.3
Tanzania	23.6	21.4	20.7	20.2	20.7	21.0	-9.7	-4.4	-3.3	-3.7	-3.9	-4.2
Togo	45.1	53.4	56.1	56.1	56.1	56.1	-9.2	-9.7	-7.9	-7.9	-6.2	-5.2
Uganda	20.6	21.7	22.3	21.9	19.3	19.7	-7.9	-3.4	-5.0	-6.8	-8.2	-9.1
Zambia	20.7	20.6	22.0	22.1	22.4	22.6	2.5	-4.5	-3.9	-5.0	-2.9	-2.7
Zimbabwe ²	21.2	27.1	29.6	18.9	15.1	15.3	-12.1	-3.6	-1.3	-4.0	-3.0	-4.6
Sub-Saharan Africa	35.8	37.3	36.6	36.5	36.8	37.2	-2.5	-3.7	-2.1	-2.6	-3.7	-3.7
<i>Median</i>	26.8	28.9	29.6	28.9	28.9	29.5	-7.2	-5.5	-5.8	-6.2	-6.0	-5.2
Excluding Nigeria and South Africa	28.7	30.5	29.6	29.3	29.8	30.3	-4.4	-6.4	-4.3	-4.4	-5.5	-5.5
Oil-exporting countries	22.5	27.1	25.3	25.4	26.2	26.9	1.8	-1.8	1.1	1.2	-1.3	-0.8
Excluding Nigeria	27.3	31.3	26.6	25.2	26.1	26.4	1.6	-7.4	-1.8	-0.7	-3.6	-2.3
Oil-importing countries	45.4	44.4	44.1	43.7	43.5	43.6	-5.8	-5.0	-4.1	-4.8	-5.1	-5.5
Excluding South Africa	29.2	30.2	30.4	30.3	30.7	31.3	-7.3	-6.1	-5.1	-5.5	-5.9	-6.3
Middle-income countries	38.8	40.6	39.6	39.5	40.0	40.3	-0.9	-2.4	-0.9	-1.2	-2.4	-2.2
Excluding Nigeria and South Africa	31.9	33.6	31.6	31.1	32.0	32.3	-1.0	-5.0	-2.8	-2.3	-3.4	-3.1
Low-income countries	25.0	26.9	27.3	27.3	27.4	28.2	-9.5	-8.3	-6.3	-7.1	-7.9	-8.5
Excluding low-income countries in fragile situations	25.7	27.3	28.1	28.4	28.7	29.7	-10.9	-8.7	-7.5	-7.9	-9.1	-9.8
Countries in fragile situations	22.9	24.8	23.4	22.4	22.7	22.9	-4.9	-8.0	-3.9	-4.6	-4.7	-4.8
CFA franc zone	23.6	27.0	26.3	26.1	27.3	28.1	-3.2	-7.8	-5.5	-5.0	-5.1	-5.1
CEMAC	21.0	24.1	22.4	21.9	22.8	23.4	-1.8	-11.0	-4.0	-2.6	-3.2	-2.4
WAEMU	26.1	29.4	29.2	29.1	30.4	31.3	-4.9	-5.4	-6.6	-6.7	-6.5	-6.9
COMESA (SSA members)	30.8	31.4	32.3	32.4	32.3	33.0	-6.2	-5.6	-5.2	-4.9	-4.8	-5.0
EAC-5	29.4	27.9	27.1	27.0	26.9	27.2	-8.9	-5.3	-5.3	-5.3	-5.5	-5.7
ECOWAS	21.9	26.4	25.9	26.3	27.3	28.1	-0.5	-1.6	-0.2	-0.9	-2.4	-2.4
SACU	70.5	69.4	69.4	69.4	69.4	69.4	-3.6	-2.2	-1.7	-2.7	-2.8	-3.0
SADC	53.7	52.9	51.9	51.0	51.1	50.9	-3.5	-3.8	-2.1	-2.9	-4.1	-4.5

See sources and footnotes on page 57.

Table SA4. External Debt, Official Debt, Debtor Based and Reserves

	External Debt, Official Debt, Debtor Based						Reserves					
	(Percent of GDP)						(Months of imports of goods and services)					
	2010-15	2016	2017	2018	2019	2020	2010-15	2016	2017	2018	2019	2020
Angola	22.0	44.4	37.5	45.7	54.2	51.3	7.8	10.3	6.9	6.7	6.2	6.7
Benin ¹	17.5	21.4	23.1	26.5	27.3	26.7	...	...	...	...	...	...
Botswana	12.5	10.0	13.9	11.2	10.4	8.8	11.6	14.6	13.4	12.5	11.9	11.9
Burkina Faso ¹	23.4	26.5	25.3	23.8	24.0	23.0	...	...	...	...	...	...
Burundi	21.2	16.7	15.3	14.9	14.1	13.5	3.4	1.4	1.4	1.3	1.3	1.3
Cabo Verde	72.2	91.4	96.5	91.1	92.8	89.0	4.8	6.1	5.3	5.4	5.2	5.1
Cameroon ²	11.0	19.6	22.5	23.6	26.1	25.9	...	...	...	...	...	...
Central African Rep. ²	18.3	28.2	29.1	25.5	24.9	23.2	...	...	...	...	...	...
Chad ²	23.2	25.8	28.7	26.5	26.8	24.3	...	...	...	...	...	...
Comoros	32.5	26.4	29.5	28.7	32.6	33.6	7.1	6.7	6.5	7.3	6.4	6.0
Congo, Dem. Rep. of	17.4	13.8	13.1	12.9	11.7	11.3	1.4	0.5	0.5	0.7	0.7	0.7
Congo, Rep. of ²	24.0	49.3	39.9	31.6	31.6	32.5	...	...	...	...	...	...
Côte d'Ivoire ¹	34.2	27.7	32.4	35.9	37.0	34.1	...	...	...	...	...	...
Equatorial Guinea ²	7.1	9.1	9.2	9.0	12.0	13.9	...	...	...	...	...	...
Eritrea	30.2	20.5	20.1	20.1	19.9	20.3	2.2	2.0	1.5	1.5	1.5	1.5
Eswatini	7.8	9.2	10.2	11.7	13.4	14.8	4.2	3.5	3.3	2.8	3.1	3.9
Ethiopia ³	25.5	34.9	35.8	31.8	29.8	28.0	2.0	2.1	2.0	1.6	1.9	2.3
Gabon ²	21.9	35.6	40.6	36.8	41.7	41.8	...	...	...	...	...	...
Gambia, The	30.3	40.9	46.2	44.2	42.3	40.7	4.5	1.2	2.5	2.4	3.0	3.1
Ghana	20.4	29.9	29.1	27.9	29.9	27.8	2.8	2.6	2.8	2.7	2.7	2.9
Guinea	29.7	22.2	20.4	21.1	30.7	32.0	2.4	1.4	1.4	1.8	2.1	2.4
Guinea-Bissau ¹	27.0	22.8	20.8	22.7	23.4	22.7	...	...	...	...	...	...
Kenya	21.9	26.1	26.9	28.4	28.9	27.2	4.1	4.7	4.1	4.3	4.3	4.6
Lesotho	31.0	34.8	32.9	32.9	33.8	34.2	5.2	4.4	4.5	3.4	3.2	2.6
Liberia	9.3	20.1	24.3	28.7	33.5	38.3	2.0	2.8	3.0	2.7	2.1	1.4
Madagascar	25.7	28.6	28.4	29.0	30.9	32.9	2.8	3.0	3.8	3.9	4.1	4.1
Malawi	20.3	31.3	32.8	30.3	29.8	30.0	2.0	2.8	3.4	3.1	3.7	4.0
Mali ¹	21.1	23.8	25.6	23.3	23.8	23.5	...	...	...	...	...	...
Mauritius	14.1	14.6	12.9	11.5	16.4	17.4	5.7	8.3	9.3	9.3	9.2	9.1
Mozambique	45.2	92.4	94.3	84.4	106.7	102.6	3.1	2.8	3.9	2.8	2.3	2.3
Namibia	7.9	16.6	15.5	15.8	16.6	16.2	2.6	2.6	1.7	1.5	1.7	1.9
Niger ¹	19.2	29.4	32.8	32.6	34.8	35.9	...	...	...	...	...	...
Nigeria	3.1	4.0	6.3	8.8	8.7	8.6	5.8	6.5	7.2	7.1	6.3	5.7
Rwanda	18.9	33.6	36.9	40.1	40.6	39.9	5.0	4.1	4.5	4.6	4.6	4.5
São Tomé & Príncipe	77.6	78.8	74.7	66.7	64.0	59.0	4.0	3.9	3.6	2.6	2.5	2.8
Senegal ¹	25.9	31.2	41.0	43.6	44.9	42.6	...	...	...	...	...	...
Seychelles	42.8	31.8	30.0	28.1	26.5	24.1	3.2	3.7	3.8	3.7	3.4	3.3
Sierra Leone	26.9	36.7	40.3	42.9	44.4	44.6	2.6	3.5	3.7	3.2	3.2	3.5
South Africa	12.7	18.9	21.3	18.8	20.6	20.8	5.2	5.7	5.6	5.5	5.2	4.9
South Sudan	...	...	...	...	...	...	2.8	0.3	0.1	0.2	0.6	0.5
Tanzania	22.2	27.6	27.5	27.0	27.0	27.0	4.0	5.4	6.1	6.1	5.5	4.6
Togo ¹	15.8	19.2	20.7	23.6	25.9	25.1	...	...	...	...	...	...
Uganda	16.0	21.8	25.4	27.3	29.3	31.2	4.6	5.0	4.8	4.3	4.1	4.1
Zambia	16.2	38.2	36.7	44.5	51.2	56.3	3.0	2.4	2.1	1.6	0.9	0.6
Zimbabwe ⁴	37.0	33.8	31.1	27.0	32.2	27.7	0.5	0.6	0.4	0.2	0.6	0.9
Sub-Saharan Africa	13.8	20.5	22.4	22.8	23.8	23.2	5.1	5.6	5.4	5.2	4.9	4.7
Median	21.5	27.1	28.5	27.6	29.5	27.8	3.5	3.5	3.7	3.1	3.2	3.3
Excluding Nigeria and South Africa	21.5	30.1	30.2	30.8	32.7	31.6	4.4	4.8	4.2	4.0	3.8	3.9
Oil-exporting countries	8.1	13.8	15.7	18.0	18.1	17.3	6.2	7.2	7.1	7.0	6.2	5.9
Excluding Nigeria	19.2	36.1	33.1	36.3	41.1	39.6	7.3	10.1	6.7	6.5	6.0	6.5
Oil-importing countries	18.3	25.0	26.4	25.5	27.1	26.7	4.3	4.5	4.4	4.3	4.1	4.0
Excluding South Africa	22.6	28.2	29.3	29.2	30.5	29.6	3.4	3.6	3.6	3.4	3.4	3.5
Middle-income countries	11.6	18.0	20.2	21.0	22.0	21.3	5.6	6.3	6.1	5.9	5.5	5.3
Excluding Nigeria and South Africa	20.2	30.8	30.4	32.4	35.0	33.6	5.7	6.7	5.3	5.1	4.8	5.0
Low-income countries	23.7	29.1	29.9	28.7	29.9	29.1	2.8	2.8	2.9	2.7	2.7	2.7
Excluding low-income countries in fragile situations	24.1	33.1	34.4	33.0	34.1	33.4	3.3	3.6	3.9	3.6	3.5	3.4
Countries in fragile situations	25.3	24.9	25.4	25.2	26.2	25.0	1.8	1.0	1.0	1.0	1.2	1.3
CFA franc zone	20.6	26.0	29.1	29.4	31.2	30.3	5.3	3.2	3.2	3.7	3.9	4.1
CEMAC	15.6	25.0	26.6	25.2	27.7	27.8	5.2	2.3	2.4	2.8	3.4	3.9
WAEMU	25.7	26.8	30.9	32.5	33.6	32.1	5.3	3.9	3.9	4.3	4.4	4.3
COMESA (SSA members)	21.4	27.1	27.6	27.5	28.0	27.3	3.0	3.1	2.9	2.8	2.9	3.1
EAC-5	20.7	26.1	27.2	28.2	28.7	28.1	4.2	4.9	4.8	4.8	4.6	4.5
ECOWAS	8.6	11.4	14.4	16.6	16.8	16.2	5.4	5.9	6.4	6.3	5.7	5.2
SACU	12.6	18.4	20.7	18.4	20.0	20.1	5.3	6.0	5.8	5.7	5.4	5.1
SADC	16.7	26.0	26.1	25.6	28.0	27.7	5.2	5.9	5.4	5.2	4.8	4.7

See sources and footnotes on page 57.