INTERNATIONAL MONETARY FUND

REGIONAL ECONOMIC OUTLOOK

SUB-SAHARAN AFRICA

Navigating Uncertainty

2019
OCT

World Economic and Financial Surveys

Regional Economic Outlook

Sub-Saharan Africa
Navigating Uncertainty

19

I N T E R N A T I O N A L M O N E T A R Y F U N D

©2019 International Monetary Fund

Cataloging-in-Publication Data
IMF Library

Names: International Monetary Fund, publisher.

Title: Regional economic outlook. Sub-Saharan Africa : navigating uncertainty.

Other titles: Sub-Saharan Africa : navigating uncertainty. | World economic and financial surveys.

Description: [Washington, DC] : International Monetary Fund, 2019. | World economic and financial surveys, 0258-7440. | Oct. 19. | Includes bibliographical references.

Identifiers: ISBN 9781513514055 (paper)

ISBN 9781513515731 (Web PDF)

LCSH: Africa, Sub-Saharan—Economic conditions. | Economic development—Africa, Sub-Saharan. | Africa, Sub-Saharan—Economic policy.

Classification: LCC HC800.R4 2019

The *Regional Economic Outlook: Sub-Saharan Africa* is published twice a year, in the spring and fall, to review developments in sub-Saharan Africa. Both projections and policy considerations are those of the IMF staff and do not necessarily represent the views of the IMF, its Executive Board, or IMF Management.

Publication orders may be placed online, by fax, or through the mail:

International Monetary Fund, Publication Services
P.O. Box 92780, Washington, DC 20090 (U.S.A.)

Tel.: (202) 623-7430 Fax: (202) 623-7201

E-mail : publications@imf.org

www.imf.org

www.elibrary.imf.org

Contents

Abbreviations	vi
Acknowledgments	vii
Executive Summary	ix
1. Navigating Uncertainty	1
Macroeconomic Developments and Prospects	2
Risks to the Outlook	9
Policies	10
References	21
2. Competition, Competitiveness, and Growth in Sub-Saharan Africa.....	23
Product Market Competition: Some Stylized Facts	25
Competition and Macroeconomic Performance	29
Firm Dynamics and Competition	31
Boosting Competition in Domestic Markets.....	32
Conclusions.....	35
References	38
3. Domestic Arrears in Sub-Saharan Africa: Causes, Symptoms, and Cures.....	41
The Size, Composition, and Evolution of Domestic Arrears in Sub-Saharan Africa.....	42
Causes of Domestic Arrears Accumulation	45
Symptoms: Macroeconomic Effects of Domestic Payment Arrears	47
Cures: Clearance and Prevention of Arrears.....	50
Conclusion.....	54
References	58
Statistical Appendix	59
Background Paper and Expanded Statistical Appendix.....	Online
https://www.imf.org/~media/Files/Publications/REO/AFR/2019/October/English/backgroundpapers.ashx?la=en	
Online Expanded Statistical Appendix Tables;	
Online Annex Chapter 2—Competition, Competitiveness, and Growth in Sub-Saharan Africa;	
Online Annex Chapter 3—Domestic Arrears in Sub-Saharan Africa: Causes, Symptoms, and Cures;	
Publications of the IMF African Department 2013–19	
Boxes	
1.1. Improving Governance in Sub-Saharan Africa	18
1.2. Lessons from Other Regional Trade Arrangements for the African Continental Free Trade Agreement	19
2.1. Firm Markups and Trade Liberalization	37
3.1. Domestic Arrears Data Collection Exercise.....	56
3.2. Arrears Accumulation and Fiscal Multipliers.....	56
Table	
2.1. Sub-Saharan Africa: Firm Markup and Profitability	27

Figures**Chapter 1**

1.1. Global Import Volume Growth and Global Economic Policy Uncertainty Index, July 2017–July 2019.....	2
1.2. Projected Change in Commodity Prices: Expected Changes, Average 2019–20 versus 2018	3
1.3. Sub-Saharan Africa: Eurobond Issuances, 2010–19	3
1.4. Sahel Countries: Conflicts with Fatalities, 2018	3
1.5. Sub-Saharan Africa: Real GDP per Capita, 1990–2023	4
1.6. Sub-Saharan Africa: Real GDP Growth versus Merchandise Exports Concentration Index	4
1.7. Sub-Saharan Africa: Histogram of GDP Growth, 2022	5
1.8. Sub-Saharan Africa: Nominal Effective Exchange Rate Depreciation and Consumer Price Index Inflation, 2019	5
1.9. Sub-Saharan Africa: Fiscal Deficit and Consumer Price Index Inflation, 2019 Projections	6
1.10. Sub-Saharan Africa: Public Debt, 2011–23	6
1.11. Sub-Saharan Africa: Change in Noncommodity Primary Fiscal Deficit, 2013 versus 2018	6
1.12. Sub-Saharan Africa: Debt Risk Status for PRGT Eligible Low-Income Developing Countries, 2008–19.....	7
1.13. Sub-Saharan Africa: Composition of Public Debt, 2000–17	7
1.14. Sub-Saharan Africa: Contributions to Current Account Adjustment	8
1.15. Sub-Saharan Africa: Reserve Buffers	8
1.16. Sub-Saharan Africa: Domestic Arrears and Nonperforming Loan Ratio, 2018	8
1.17. Sub-Saharan Africa: Change in Credit to the Private Sector and Domestic Currency Public Debt, 2014–18.....	8
1.18. Sub-Saharan Africa: Export Growth, Jan. 2014–Jun. 2019.....	9
1.19. Sub-Saharan Africa: Foreign Currency Share in Total Debt, Median, 2010–19	9
1.20. Downside Risk Scenario: Impact of Escalating Trade Tensions, Global Slowdown, and Tightening Global Financial Conditions on Sub-Saharan African Growth	10
1.21. Incidence of Natural Disasters, 1980s–2000s.....	10
1.22. Sub-Saharan Africa: Net Job Creation, 2010–30	11
1.23. Sub-Saharan Africa: Changes in Monetary Policy Rates since December 2018	11
1.24. Sub-Saharan Africa: Primary Fiscal Balance and Debt-Stabilizing Balance, 2014–18	12
1.25. Sub-Saharan Africa: Change in Noncommodity Primary Fiscal Deficit, 2018 versus 2023	12
1.26. Sub-Saharan Africa: Bank Credit to Private Sector, 2006–18.....	14
1.27. Number of Available Macprudential Measures per Country, 2016	15
1.28. Sub-Saharan Africa and Selected Regions: Value Chain Related Trade, 1990s–2010s	16
1.29. Gender Inequality Index and Gini Coefficient, Average 2010–17.....	17

Chapter 2

2.1. Selected Groups of Countries: Product Market Competition, 2007–17.....	25
2.2. Sub-Saharan Africa: Product Market Competition, 2007–17.....	26
2.3. Selected Groups of Countries: Firm-Level Competition Indicators	26
2.4. Selected Groups of Countries: Competition Indicators and Number of Competitors	27
2.5. Sub-Saharan Africa: Firm Markups, 2002–17	28
2.6. Selected Groups of Countries: Firm Markups by Sector	28
2.7. Sub-Saharan Africa: Competition and Macroeconomic Performance	30
2.8. Sub-Saharan Africa: Price Differentials with Other Country Groups	30
2.9. Sub-Saharan Africa: Impact of Increased Local Competition on Prices	31
2.10. Estimated Impact of Markups on Firm Performance	32
2.11. Sub-Saharan Africa: Structural Reforms, 1973–2014	33
2.12. Sub-Saharan Africa: Anti-Monopoly Enforcement	34

Chapter 3

3.1. Sub-Saharan Africa: Share of Countries with Recorded Domestic Arrears, 2018.....	42
3.2. Sub-Saharan Africa: Stock of Domestic Arrears by Country Group, 2018	42
3.3. Sub-Saharan Africa: Level of Stock of Domestic Arrears and Debt Sustainability Analysis Rating, 2017	43
3.4. PEFA Scores for Domestic Arrears Stock	43
3.5. Sub-Saharan Africa: Share of Countries with Unrecorded Domestic Arrears, 2018	43
3.6. Sub-Saharan Africa: Stock of Domestic Arrears, 2005–17.....	44
3.7. Sub-Saharan Africa: Frequency of Domestic Arrears-Related Terms in IMF Staff Reports, 2005–17.....	44
3.8. Sub-Saharan Africa: Domestic Arrears Breakdown, Number of Countries	44
3.9. Sub-Saharan Africa: Domestic Arrears Related to Conditionality in IMF Arrangements, 2002–18	45
3.10. Sub-Saharan Africa: Causes of Domestic Arrears Accumulation	45
3.11. Sub-Saharan Africa: Selected Governance Indicators and Stock of Domestic Arrears, 2005–18	46
3.12. Sub-Saharan Africa: Selected Fiscal Variables and Stock of Domestic Arrears, 2005–18.....	46
3.13. Accumulation of Domestic Arrears Following Fiscal Shocks.....	47
3.14. Causes of Domestic Arrears Accumulation Regression Output	47
3.15. Transmission Channels of Domestic Arrears Buildup to the Economy	48
3.16. Sub-Saharan Africa: The Macroeconomic Impact of Domestic Payment Arrears	49
3.17. Sub-Saharan Africa: The Heterogenous Effect of Domestic Payment Arrears on Private Sector Performance.....	50
3.18. Sub-Saharan Africa: Government Payment Discipline and Public Attitudes toward Trust, 2005–18.....	51
3.19. Repaying Arrears—Stylized Decision Tree	52

Abbreviations

AfCFTA	African Continental Free Trade Area	MENAP	Middle East, North Africa, Afghanistan, and Pakistan
AfDB	African Development Bank	MFN	most-favored-nation
AML/CFT	Anti-Money Laundering and Combating the Financing of Terrorism	NAFTA	North American Free Trade Agreement
ASEAN	Association of Southeast Asian Nations	NEER	nominal effective exchange rate
AFTA	ASEAN Free Trade Area	NPLs	nonperforming loans
CCSA	Competition Commission of South Africa	OECD	Organisation for Economic Co-operation and Development
CET	common external tariff	PEFA	public expenditure and financial accountability
CEMAC	Central African Economic and Monetary Community	PFM	public financial management
COMESA	Common Market for Eastern and Southern Africa	PRGT	Poverty Reduction and Growth Trust
CPI	consumer price index	RTAs	Regional Trade Agreements
DSA	Debt Sustainability Analysis	REO	Regional Economic Outlook (IMF)
DSGE	dynamic stochastic general equilibrium	SACU	Southern African Customs Union
GDP	gross domestic product	SDGs	Sustainable Development Goals
GVC	global value chain	SOEs	state-owned enterprises
EAC	East African Community	SSA	sub-Saharan Africa
ECOWAS	Economic Community of West African States	UNDP	United Nations Development Programme
EPU	economic policy uncertainty	VAT	value-added tax
FDI	foreign direct investment	WAEMU	West African Economic and Monetary Union
IMF	International Monetary Fund	WBES	World Bank Enterprise Survey
LAC	Latin America and the Caribbean	WEO	World Economic Outlook (IMF)
		WTO	World Trade Organization

Sub-Saharan Africa: Country Abbreviations

AGO	Angola	CIV	Côte d'Ivoire	LSO	Lesotho	STP	São Tomé & Príncipe
BEN	Benin	GNQ	Equatorial Guinea	LBR	Liberia	SEN	Senegal
BWA	Botswana	ERI	Eritrea	MDG	Madagascar	SLE	Sierra Leone
BFA	Burkina Faso	SWZ	Eswatini	MWI	Malawi	ZAF	South Africa
BDI	Burundi	ETH	Ethiopia	MLI	Mali	SSD	South Sudan
CPV	Cabo Verde	GAB	Gabon	MUS	Mauritius	SYC	Seychelles
CMR	Cameroon	GMB	Gambia, The	MOZ	Mozambique	TZA	Tanzania
CAF	Central African Republic	GHA	Ghana	NAM	Namibia	TGO	Togo
TCD	Chad	GIN	Guinea	NER	Niger	UGA	Uganda
COM	Comoros	GNB	Guinea-Bissau	NGA	Nigeria	ZMB	Zambia
COD	Congo, Democratic Republic of	KEN	Kenya	RWA	Rwanda	ZWE	Zimbabwe
COG	Congo, Republic of						

Acknowledgments

The October 2019 issue of the *Regional Economic Outlook: Sub-Saharan Africa* (REO) was prepared by a team led by Papa N'Diaye under the direction of Catriona Purfield and David Robinson.

The team included Said Bakhache, Reda Cherif, Seung Mo Choi, Samuel Delepierre, Sandesh Dhungana, Xiangming Fang, Krisztina Fabo, Jesus Gonzalez-Garcia, Michael Gorbanyov, Cleary Haines, Moez Ben Hassine, Yanki Kalfa, Siddharth Kothari, Andresa Lagerborg, Alexander Massara, Miguel Pereira Mendes, Nkunde Mwase, Garth Peron Nicholls, Malika Pant, Hector Perez-Saiz, Jean Portier, Mahvash S. Qureshi, Samuele Rosa, José Nicolás Rosas Garcia, Hoda Selim, David Stenzel, Vimal Thakoor, Torsten Wezel, Martha Woldemichael, Yuanchen Yang, Mustafa Yenice, and Jung Eun Yoon.

Charlotte Vazquez was responsible for document production, with assistance from Maria Ines Canales. The editing and production were overseen by Cheryl Toksoz of the Communications Department.

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).

This page intentionally left blank

Executive Summary

1. NAVIGATING UNCERTAINTY

Growth in sub-Saharan Africa is projected to remain at 3.2 percent in 2019 and rise to 3.6 percent in 2020. Growth is forecast to be slower than previously envisaged for about two-thirds of the countries in the region. The downward revision reflects a more challenging external environment, continued output disruptions in oil-exporting countries, and weaker-than-anticipated growth in South Africa.

Growth prospects vary considerably across countries in the region in 2019 and beyond. Growth is projected to remain strong in non-resource-intensive countries, averaging about 6 percent. As a result, 24 countries, home to about 500 million people, will see their per capita income rise faster than the rest of the world. In contrast, growth is expected to move in slow gear in resource-intensive countries (2½ percent). Hence, 21 countries are projected to have per capita growth lower than the world average.

Inflation is expected to ease going forward. While the average sub-Saharan African-wide debt burden is stabilizing, elevated public debt vulnerabilities and low external buffers will continue to limit policy space in several countries.

The outlook faces further downside risks. External headwinds have intensified compared to April and include the threat of rising protectionism, a sharp increase in risk premiums or reversal in capital inflows owing to tightening global financial conditions, and a faster-than-anticipated slowdown in China and in the euro area. Regionally, near-term downside risks include climate shocks, intensification of security challenges, and the potential spread of the Ebola outbreak beyond the Democratic Republic of the Congo. In addition, fiscal slippages, including those ahead of elections in some countries, and a lack of reform in key countries could add to deficit and debt pressures. Over the medium term, a successful implementation of reforms, including in the context of the African Continental Free Trade Area (AfCFTA), could pose significant upside risks.

A three-pronged strategy that reduces risks and promotes sustained growth across all countries in the region requires:

- **Carefully calibrating the near-term policy mix:** Amid limited buffers and elevated debt vulnerabilities in some countries, policymakers have limited room for maneuver to counter external headwinds. The room for supporting growth remains mainly on the monetary policy side and is restricted to countries where inflation pressures are muted and growth is below potential. In the event downside risks materialize, fiscal and monetary policy could be carefully recalibrated to support growth, in a manner consistent with debt sustainability and available financing, and as part of a credible medium-term adjustment plan. In countries that are growing slowly, the pace of adjustment could be made more gradual, provided financing is available, or its composition fine-tuned to minimize the impact on growth. In fast-growing countries that are facing elevated debt vulnerabilities, the priority remains rebuilding buffers.

- **Building resilience:** This would help the region sustain longer episodes of strong growth. Building resilience, including to weather-related, health, and security challenges, would require mobilizing domestic revenue, streamlining inefficient subsidies, and improving public financial management (Chapter 3) to strengthen sovereign balance sheets and create fiscal space for development needs. Promoting economic diversification, improving macroeconomic policy frameworks, and reducing nonperforming loans (NPLs) would also reduce countries' vulnerability to shocks.
- **Raising medium-term growth:** Raising per capita growth rates, especially for resource-intensive countries, is essential to sustain improved social outcomes and create jobs for the 20 million (net) new entrants poised to join labor markets every year. Comprehensively tackling tariff and nontariff barriers in the context of the AfCFTA, developing regional value chains, and implementing reforms to boost investment and competitiveness (Chapter 2) could lift the region's medium-term growth.

2. COMPETITION, COMPETITIVENESS, AND GROWTH IN SUB-SAHARAN AFRICA

Chapter 2 studies the state of product market competition in sub-Saharan Africa. Although there is considerable heterogeneity across countries, more than 70 percent of the countries in the region are in the bottom half of countries globally in terms of competition indicators. Firm markups are about 11 percent higher in sub-Saharan African countries relative to other emerging market economies and developing countries and are more persistent. State-owned firms are also more prevalent. Empirical analysis suggests that increased competition can boost real per capita GDP growth rate by about 1 percentage point through improved export competitiveness, productivity growth, and investment. It can also substantially improve the purchasing power of consumers by lowering prices of goods and services, especially of food and other essential items. In addition, competition helps to increase labor's share in output, potentially having important distributional consequences as well. To improve product market competition, a holistic reform strategy would encompass steps to reduce structural and regulatory barriers; an effective competition policy framework that comprises a strong competition law backed by an independent and adequately resourced competition authority; trade and investment policies that encourage foreign competition; and supportive fiscal and procurement policies.

3. DOMESTIC ARREARS IN SUB-SAHARAN AFRICA: CAUSES, SYMPTOMS, AND CURES

Based on a database of domestic arrears in sub-Saharan African countries, Chapter 3 finds that domestic arrears have been pervasive in many countries, reflecting weak public financial management. Furthermore, arrears have increased in recent years (to about 3.3 percent of GDP in 2018), following the 2014 commodity price shock. However, despite the prevalence of arrears, their causes, effects, and consequences are not well understood. The chapter finds that domestic arrears negatively impact private sector activity and the delivery of social services while increasing banking sector vulnerabilities and undermining citizens' trust in the government. Arrears also weaken the ability of fiscal policy to support growth, casting doubt on the merit of relying on arrears financing to avoid spending cuts. The chapter then discusses approaches to clear arrears (verification, prioritization, liquidation) and to prevent their accumulation, including through public financial management reforms, building buffers, and timely external supports.

1. Navigating Uncertainty

Growth in sub-Saharan Africa is projected to remain at 3.2 percent in 2019 and rise to 3.6 percent in 2020. Growth is forecast to be slower than previously envisaged for about two-thirds of the countries in the region. The downward revision reflects a more challenging external environment, continued output disruptions in oil-exporting countries, and weaker-than-anticipated growth in South Africa.

Growth prospects vary considerably across countries in the region in 2019 and beyond. Growth is projected to remain strong in non-resource-intensive countries, averaging about 6 percent. As a result, 24 countries, home to about 500 million people, will see their per capita income rise faster than the rest of the world. In contrast, growth is expected to move in slow gear in resource-intensive countries (2½ percent). Hence, 21 countries are projected to have per capita growth lower than the world average.

Inflation is expected to ease going forward. While the average sub-Saharan African-wide debt burden is stabilizing, elevated public debt vulnerabilities and low external buffers will continue to limit policy space in several countries.

The outlook faces further downside risks. External headwinds have intensified compared to April and include the threat of rising protectionism, a sharp increase in risk premiums or reversal in capital inflows owing to tightening global financial conditions, and a faster-than-anticipated slowdown in China and in the euro area. Regionally, near-term downside risks include climate shocks, intensification of security challenges, and the potential spread of the Ebola outbreak beyond the Democratic Republic of the Congo. In addition, fiscal slippages, including those ahead of elections in some countries, and a lack of reform in key countries could add to deficit and debt pressures. Over the medium term, a successful implementation of reforms, including in the context of the African Continental Free Trade Area (AfCFTA), could pose significant upside risks.

A three-pronged strategy that reduces risks and promotes sustained growth across all countries in the region requires:

- **Carefully calibrating the near-term policy mix:** Amid limited buffers and elevated debt vulnerabilities in some countries, policymakers have limited room for maneuver to counter external headwinds. The room for supporting growth remains mainly on the monetary policy side and restricted to countries where inflation pressures are muted and growth is below potential. In the event downside risks materialize, fiscal and monetary policy could be carefully recalibrated to support growth, in a manner consistent with debt sustainability and available financing, and as part of a credible medium-term adjustment plan. In countries that are growing slowly, the pace of adjustment could be more gradual, provided financing is available, or its composition fine-tuned to minimize the impact on growth. In fast-growing countries that are facing elevated debt vulnerabilities, the priority remains rebuilding buffers.
- **Building resilience:** This would help the region sustain longer episodes of strong growth. Building resilience, including to weather-related, health, and security challenges, would require mobilizing domestic revenue, streamlining inefficient subsidies, and improving public financial management (Chapter 3) to strengthen sovereign balance sheets and create fiscal space for development needs. Promoting economic diversification, improving macroeconomic policy frameworks, and reducing nonperforming loans (NPLs) would reduce countries' vulnerability to shocks.
- **Raising medium-term growth:** Raising per capita growth rates, especially for resource-intensive countries, is essential to sustain improved social outcomes and create jobs for the 20 million (net) new entrants poised to join labor markets every year.

This chapter was prepared by a team led by Seung Mo Choi and comprising Michael Gorbanyov, Cleary Haines, Siddharth Kothari, Andresa Lagerborg, Nkunde Mwase, Malika Pant, and Torsten Wezel, under the supervision of Papa N'Diaye and Catriona Purfield.

Comprehensively tackling tariff and nontariff barriers in the context of the AfCFTA, developing regional value chains, and implementing reforms to boost investment and competitiveness (Chapter 2) could lift the region's medium-term growth.

The rest of this chapter looks more closely at (1) the challenges the global and regional environments pose for the region, (2) the region's balance sheet vulnerabilities, and (3) key policy priorities.

Chapter 2 analyzes the level of product market competition in the region and discusses policies to enhance competitiveness. The level of competition in sub-Saharan Africa remains low relative to the rest of the world. This is reflected in higher firm markups, especially in nontradable sectors, and in higher product prices. Empirical analysis suggests that, by increasing competition, the region can benefit from significant growth and welfare gains through improved productivity, stronger export competitiveness, and lower consumer prices. Boosting competition in the region requires holistic reforms encompassing an effective competition policy framework, openness to trade and foreign direct investment, and business regulations and macro policies that create an even playing field among firms.

Chapter 3 assesses domestic arrears and discusses policies to clear them and to prevent their accumulation. Based on a newly constructed database of sub-Saharan African countries, the chapter finds that financing spending through domestic arrears is prevalent, with incidence increasing in the face of large adverse exogenous shocks, such as the 2014 commodity price shock. Domestic arrears are found to negatively impact private sector activity and the delivery of social services while increasing banking sector vulnerabilities and undermining citizens' trust in the government. It also shows that arrears weaken the ability of fiscal policy to support the economy, casting doubt on the merit of relying on arrears financing to avoid spending cuts. The chapter discusses policies to clear arrears and to prevent their accumulation, including through fiscal management reforms, building buffers, and timely external support.

¹ Technology tensions include US actions related to Chinese technology companies.

MACROECONOMIC DEVELOPMENTS AND PROSPECTS

Less-Supportive Global Environment

Global growth is expected to rise from 3.0 percent in 2019 to 3.4 percent in 2020. The projected recovery in the global outlook is precarious, with significant downside risks relating to trade and technology tensions.¹ These tensions have increased policy uncertainty and lowered trade volumes (Figure 1.1). Over the medium term, global growth is projected at 3.6 percent, mainly driven by emerging market economies.

Commodity prices are set to fall. Subdued global growth is expected to weigh on the region's exports and most commodity prices except metals prices (Figure 1.2). The effects of soft commodity prices on the region, especially oil prices, are mixed. They will help the fiscal and external positions of the region's commodity importers but will provide headwinds to commodity exporters. And as commodity exporters have a significantly larger economic weight than importers and host about two-thirds of the region's population, soft commodity prices typically mean slower growth and weaker fundamentals for the region. The softening of commodity prices is projected to persist through the medium term, with broadly balanced risks around this forecast. Downside risks stem from higher-than-expected shale oil production in the United States, while upside risks are related to potential further supply disruptions in major oil-producing countries such as Iran and Venezuela.

Figure 1.1. Global Import Volume Growth and Global Economic Policy Uncertainty Index, July 2017–July 2019

Sources: Davis (2016); and World Trade Organization.

Figure 1.2. Projected Change in Commodity Prices: Expected Changes, Average 2019–20 versus 2018

Sources: IMF, Commodity Price System; and IMF Global Assumptions.

Note: Besides oil, some of the main export commodities in the region are copper (Democratic Republic of Congo, Zambia), iron ore (Liberia, Sierra Leone, South Africa), coal (Mozambique, South Africa), gold (Burkina Faso, Ghana, Mali, South Africa, Tanzania), and platinum (South Africa). WEO = World Economic Outlook database.

Global financial conditions have eased since early 2019 as major central banks shifted toward greater monetary accommodation. Global equity prices have risen, bond yields have declined, and capital inflows into the region's bond markets have resumed, although volatilities in inflows and spreads remain high. These conditions have supported issuances of international sovereign bonds by the region's frontier markets of more than US\$10.5 billion so far in 2019 (Figure 1.3).

Rising Regional Challenges

The region continued to suffer from weather-related shocks. Severe droughts caused by El Niño have affected Angola, Botswana, Ethiopia, Kenya, Lesotho, Namibia, Zambia, and Zimbabwe, causing

Figure 1.3. Sub-Saharan Africa: Eurobond Issuances, 2010–19

Source: Bloomberg Finance L.P.

¹ Data as of September 2019

food insecurity, migration, inflation pressure (owing to supply constraints), fiscal pressure, electricity shortages, and lower trade balances. In addition, cyclones Idai and Kenneth hit Mozambique and other southeastern African countries in March and April, affecting millions and causing more than US\$2 billion in damages. The cyclones also weakened economic activity, by disrupting the functioning of major ports, and added pressure to inflation, fiscal balances, and trade balances.

The Ebola outbreak in the Democratic Republic of the Congo worsened. As of September 2019, about 3,000 cases were reported, of which more than 2,000 were fatal. Vaccination has provided some protection, but the disease has spread to Goma—a city with a population of more than 2 million. This prompted the World Health Organization to declare a “public health emergency of international concern.” So far, economic growth, fiscal revenue, and foreign exchange reserves have been broadly unaffected as economic activity is located elsewhere. In a positive development, experimental drugs administered to Ebola patients have been reported to cut mortality rates significantly. In addition, in Burundi, the outbreak of malaria has infected nearly half the population, killing about 1,800 people this year as of July 2019.

Security tensions in the Sahel continued to intensify (Figure 1.4). Reported terrorism incidents in Sahel countries rose by 75 percent in 2019 (annualized based on January through September). Burkina Faso, Mali, and Niger were the most affected. Security challenges have had substantial fiscal impact in some of these countries, translating into lower revenue and higher military and

Figure 1.4. Sahel Countries: Conflicts with Fatalities, 2018

Source: Uppsala Conflict Data Program.

security spending. Military and security spending doubled in 2019 in Burkina Faso, Mali, and Niger, representing about 4 percent of GDP and absorbing 20 percent of fiscal revenues.

Outlook

Diverging Growth Paths

Growth for the region is projected to remain at 3.2 percent in 2019 and rise to 3.6 percent in 2020, amid steady growth in private consumption and investment and slower growth in public consumption and investment. The growth outlook relies on continued support from monetary policy in countries with independent monetary policy and a modest recovery in oil exporters from very low levels. The growth momentum is expected to be held back somewhat by fiscal consolidation in most countries.

The projected growth rates are lower than envisaged in April, by 0.3 percentage point and 0.1 percentage point for 2019 and 2020, respectively. Growth has been revised down in about two-thirds of the countries in the region, reflecting the challenging external and regional environment (described above) and weaker-than-anticipated growth in South Africa.

There is significant heterogeneity in the growth paths across countries. Non-resource-intensive countries are expected to grow nearly three times faster (at 6.0 percent in 2019) than oil exporters (at 2.1 percent) and other resource-intensive countries (at 2.7 percent) (Figure 1.5). The diversity is also manifest within country groupings, with wide differences across countries depending on the degree of diversification, the macroeconomic adjustment to the 2014 terms-of-trade shock, policy uncertainty, and debt vulnerabilities. This difference in performance holds even among oil exporters, with the more diversified economies having higher GDP growth rates (Figure 1.6).

Economic activity in the region's three largest economies, Nigeria (an oil exporter), South Africa (a non-oil, resource-intensive country), and Ethiopia (a non-resource-intensive country), illustrates the bifurcated growth paths in the region.

Figure 1.5. Sub-Saharan Africa: Real GDP per Capita, 1990–2023

Source: IMF, World Economic Outlook database.

Note: SSA = sub-Saharan Africa.

- Nigeria is projected to grow at 2.5 percent in 2020, up from 2.3 percent in 2019, driven by both oil and non-oil sectors. Medium-term growth is projected at slightly higher than 2.5 percent, implying no progress in per capita growth. This low growth is driven by insufficient policy adjustment, a large infrastructure gap, low private investment, and banking sector vulnerabilities.
- South Africa's growth is projected to remain subdued, increasing only mildly from 0.7 percent in 2019 to 1.1 percent in 2020, as private investment and export growth are expected to remain low. Medium-term growth is projected to be slightly lower than 2 percent, barely above population growth. This reflects structural constraints (including high cost of doing business, inflexible product and labor markets, and low public enterprise efficiency), which are expected to keep business confidence and private investment lackluster.

Figure 1.6. Sub-Saharan Africa: Real GDP Growth versus Merchandise Exports Concentration Index

Sources: United Nations Commission on Trade and Development; and IMF, World Economic Outlook database.

Note: Higher values for the merchandise exports concentration index imply higher concentration.

- Ethiopia is expected to grow by 7.2 percent in 2020, slightly below the 7.4 percent rate projected for 2019. Growth is expected to ease over the medium term to about 6.5 percent reflecting efforts to address large external imbalances through fiscal and monetary policy tightening.

Sluggish growth in Nigeria and South Africa is likely to limit positive spillovers to their trading partners, especially remittances, financial sector activity, and import demand.

Non-resource-intensive countries are expected to continue to grow rapidly at about 5½ percent (excluding Ethiopia) in 2020. The growth momentum remains strong, partly due to private investment (Côte d'Ivoire, Rwanda, Senegal), productivity growth in the agricultural sector (Benin), and public investment (Mauritius, Rwanda).

Over the medium term, growth in the region is projected to be close to 4 percent, or about 1½ percent in per capita terms. Excluding the two largest countries (Nigeria and South Africa), medium-term growth would be somewhat higher at above 5 percent. The bifurcated growth paths between resource- and non-resource-intensive countries are expected to persist through the medium term with growth forecast to be strong in non-resource-intensive countries (about 6 percent) and sluggish in resource-intensive countries (about 3 percent) (Figure 1.7).

- In per capita terms, 21 out of 45 countries in the region would have per capita growth

Figure 1.7. Sub-Saharan Africa: Histogram of GDP Growth, 2022

Source: IMF, World Economic Outlook database.

lower than the world average, of which 12 countries (representing about one-third of the region's population) are expected to have negative per capita growth in 2019.

- At the same time, 24 countries, which are mostly non-resource-intensive and home to about 500 million people, will see their per capita income rise faster than the rest of the world. Rapid growth in services, particularly communication, wholesale, retail, and financial services, as well as construction, is expected to continue to drive growth going forward. These sectors have grown on average by more than 5 percent a year during 2013–17.

Easing inflation

Average inflation in the region is poised to ease, from 8.5 percent in 2018 to 8.4 percent in 2019 and 8.0 percent in 2020, but there are wide differences across countries. Inflation is likely to rise in countries that have suffered from conflicts or political turmoil, experienced large depreciations (Angola, Liberia) (Figure 1.8), suffered from droughts (Kenya, Lesotho, Namibia, Zambia, Zimbabwe), or have larger fiscal deficits (Figure 1.9). In contrast, inflation is expected to remain low in monetary unions (West African Economic and Monetary Union [WAEMU] and Central African Economic and Monetary Community [CEMAC]). Some WAEMU countries are likely to experience deflation.

Figure 1.8. Sub-Saharan Africa: Nominal Effective Exchange Rate Depreciation and Consumer Price Index Inflation, 2019

Source: IMF, World Economic Outlook database.

Note: CEMAC = Central African Economic and Monetary Community; CPI = consumer price index; NEER = nominal effective exchange rate; WAEMU = West African Economic and Monetary Union. Excludes Zimbabwe. See page vi for country abbreviations list.

Figure 1.9. Sub-Saharan Africa: Fiscal Deficit and Consumer Price Index Inflation, 2019 Projections

Source: IMF, World Economic Outlook database.

Note: CEMAC = Central African Economic and Monetary Community; CPI = consumer price index; NEER = nominal effective exchange rate; WAEMU = West African Economic and Monetary Union. See page vi for country abbreviations list.

Weak Balance Sheets

Elevated balance sheet vulnerabilities in many countries limit the room for macroeconomic policies to address downside risks to growth. Several countries have weaknesses in public balance sheets, with high debt ratios and limited repayment capacity, low levels of foreign exchange reserves, and weaknesses in financial and nonfinancial corporate balance sheets.

Public Debt Vulnerabilities Remain Elevated

The region's public debt as a ratio to GDP has stabilized at about 55 percent on average across countries (Figure 1.10). Oil exporters' debt ratios have fallen by about 10 percentage points of GDP since 2016. Adjustment in this group of countries occurred through expenditure compression. The reduction in the noncommodity primary fiscal deficit of nearly 14 percentage points of GDP during 2013–18 was achieved largely by cutting public investment and, to a lesser degree, current primary expenditure, while noncommodity revenue fell slightly (Figure 1.11). Other resource-intensive countries also made some progress on fiscal consolidation, mainly by reducing recurrent spending. In non-resource-intensive countries, the primary fiscal deficit increased as revenue fell as a ratio to GDP, contributing to higher debt ratios.

Despite the stabilization of debt dynamics, public debt vulnerabilities remain elevated in some

Figure 1.10. Sub-Saharan Africa: Public Debt, 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 2016–18 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.

countries. Among low-income and developing sub-Saharan African countries, seven (accounting for 3 percent of regional GDP) are in debt distress (Eritrea, The Gambia, Mozambique, Republic of Congo, São Tomé and Príncipe, South Sudan, Zimbabwe), and nine (accounting for 16 percent of regional GDP) are at high risk of debt distress (Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Ethiopia, Ghana, Sierra Leone, Zambia) (Figure 1.12). 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.

Figure 1.11. Sub-Saharan Africa: Change in Noncommodity Primary Fiscal Deficit, 2013 versus 2018

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

Note: Excludes Burundi, Eritrea, and South Sudan due to data availability.

Figure 1.12. Sub-Saharan Africa: Debt Risk Status for PRGT Eligible Low-Income Developing Countries, 2008–19

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.

There are also vulnerabilities related to the composition of public debt. Public debt stocks are mainly from commercial sources, with more than half from domestic creditors and about 15 percent from Eurobonds (Figure 1.13). Official bilateral and multilateral debt accounted for only about a quarter of total public debt in 2017, much less than in the early 2000s. The greater reliance on commercial public debt exposes sovereign balance sheets to greater rollover and exchange rate risks. Also, an increase in debt from domestic creditors could crowd out financing for private sector projects.

External Buffers Remain Low

For the region, the (simple) average current account deficit is expected to widen from 6.2 percent of GDP in 2018 to about 7.2 percent of GDP in 2019, reflecting larger deficits in oil exporters (due to lower projected oil prices) and in countries suffering from weather-related shocks (Lesotho, Mozambique). At the end of 2019, foreign exchange reserves are expected to remain between 3 and 4 months of imports, with wide differences across countries.

There remains substantial diversity in external positions across countries. Large external imbalances emerged in oil exporters following the decline in oil price in 2014–15. Since then, current account deficits have narrowed significantly to about 1 percent of GDP on average in 2018, as fiscal consolidation advanced and contributed to domestic demand compression and their terms

Figure 1.13. Sub-Saharan Africa: Composition of Public Debt, 2000–17

Sources: World Bank, International Debt Statistics; and IMF, World Economic Outlook database.

Note: Excludes Equatorial Guinea, Namibia, Seychelles, and South Sudan due to data availability.

of trade improved (Figure 1.14). While this is a positive development, the current account adjustment is likely to be less durable than if it had occurred through a reallocation of resources toward more productive, export-oriented sectors. The nature of the adjustment reflects the fact that exchange rates and relative prices played little role as several countries had fixed exchange rate regimes or had concerns about large foreign currency-denominated liabilities, a significant pass-through of exchange rate changes to inflation (estimated at about 40 percent), and limited responsiveness of output and exports to changes in real exchange rates. For non-oil-exporting countries, current account deficits remain elevated, reflecting mainly larger public savings–investment gaps.

Looking ahead, and under current policies, only a small decline in current account deficits is expected owing to continued pressure to address development needs. As a result, foreign exchange reserves are expected to remain low leaving several countries exposed to terms-of-trade shocks (Figure 1.15).

Banks' Balance Sheets Remain Weak

NPL ratios remain elevated, averaging 11 percent. This reflects, in some cases, deficiencies in risk management practices, the legacy of the commodity price shock, and weaknesses in public balance sheets, which have weighed on suppliers' finances, including through domestic arrears. The accumulation of arrears, in turn, has hampered suppliers' ability to service their liabilities to banks (Figure 1.16; Chapter 3).

Figure 1.14. Sub-Saharan Africa: Contributions to Current Account Adjustment

Source: IMF staff calculations.

Note: Contributions based on the results of an extended model of the Harberger-Laursen-Meltzer effect. The model relates changes in the current account balance to the terms of trade, domestic, and external demands; the nominal exchange rate; and relative prices. The part of the bars labeled residuals contain the average country fixed effects.

Figure 1.15. Sub-Saharan Africa: Reserve Buffers

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

Note: Adequate levels of reserves based on methodology for assessing reserve adequacy for credit-constrained economies (IMF 2016). 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.

Figure 1.16. Sub-Saharan Africa: Domestic Arrears and Nonperforming Loan Ratio, 2018 Sources: IMF, International Financial Statistics; Chapter 3 of this volume of the *Regional Economic Outlook: Sub-Saharan Africa*.

Note: See page vi for country abbreviations list.

High NPLs, public borrowing, and regulatory changes have contributed to slowing private sector credit growth (Figure 1.17), hampering economic activity. Credit growth remains well below its long-term average (close to 10 percent during 2006–19). Weak credit growth also reflects countries' introduction of new prudential norms aligned with Basel II/III, for which banks had to increase provisions and raise capital (WAEMU). Banks' capital ratios are high on average across countries (21 percent in the third quarter of 2018), but there is significant variation across countries and individual banks, with some banks remaining undercapitalized in some countries. Other sources of concern include foreign currency liquidity mismatches (Angola), high loan concentration (Benin, Eswatini, Lesotho, Malawi), and increased household and corporate debts (Namibia).

Figure 1.17. Sub-Saharan Africa: Change in Credit to the Private Sector and Domestic Currency Public Debt, 2014–18

Sources: Country authorities; and IMF, World Economic Outlook database.

RISKS TO THE OUTLOOK

The growth outlook for sub-Saharan Africa faces considerable downside risks. On the external front, near-term risks include (1) rising protectionism, (2) a sharp rise in risk premiums, and (3) faster-than-anticipated slowdown in China and in the euro area. Domestically, near-term downside risks include climate shocks, intensification of security challenges, and a further spreading of the Ebola outbreak in the Democratic Republic of the Congo to neighboring countries. In addition, fiscal slippages, including ahead of elections in some countries, and lack of reform in key countries could add to deficit and debt pressures.² Over the medium term, a successful implementation of reforms, including in the context of the AfCFTA, could provide significant upside risk (discussed later in this chapter).

Rising Protectionism

Additional trade and technology barriers and threats of new actions would reduce global growth, both directly, through lower investment and a dislocation in global supply channels, and indirectly through adverse confidence effects and financial market volatility. This would likely lower commodity prices, negatively affecting the region's resource-intensive countries. Current trade tensions have taken a toll on the region's export growth (Figure 1.18).

Figure 1.18. Sub-Saharan Africa: Export Growth, Jan. 2014–Jun. 2019

Sources: CPB Netherlands Bureau for Economic Policy Analysis, *World Trade Monitor*; and IMF, Direction of Trade Statistics.

Note: B = billions.

² Presidential elections are scheduled in Botswana, Guinea-Bissau, Mozambique, and Namibia in 2019. In 2020, Burkina Faso, Burundi, Central African Republic, Comoros, Côte d'Ivoire, Ethiopia, Ghana, Guinea, Seychelles, Tanzania, and Togo will have elections.

Sharp Rise in Risk Premiums

Against a backdrop of easy monetary policy and supportive financial conditions in many advanced economies, global risk appetite could drop abruptly in the event of increased trade tensions, renewed stresses in emerging market economies, or a disorderly Brexit. This could translate into a sharp rise in risk premiums and a sudden stop or reversal of portfolio flows into the region. In such circumstances, the region's frontier economies could experience higher public debt service costs, further depreciation pressures, and weaker bank balance sheets. Many frontier market economies have a large share of foreign currency-denominated debt in total public debt, which exposes them to exchange rate and refinancing risks (Figure 1.19).

The effects of a sudden tightening of global financial conditions could add to financial and fiscal stress and derail the region's progress in growth and development. Increased financial flows into the region's frontier markets have provided resources to finance development needs. However, a tightening of global financing conditions at a time when countries need to roll over large amounts of bonds could force a sharp adjustment in domestic spending, with attendant adverse consequences on growth.

Faster-than-Anticipated Slowdown in China or Euro Area

If China or the euro area slow down faster than anticipated (for example, because of a disorderly Brexit in the case of the euro area), their demand

Figure 1.19: Sub-Saharan Africa: Foreign Currency Share in Total Debt, Median, 2010–19

Source: IMF, World Economic Outlook database.

for the region's commodity exports could fall, which would hamper growth for the commodity exporters. China and the euro area account for about 20 percent and 30 percent of total trade, respectively.

Growth-at-risk analysis shows that, in a combined scenario in which all three external shocks mentioned above materialize, the region's growth could fall by about 1 percent in the initial year and by about ½ percent in the next year (Figure 1.20). Differences in impacts across countries would vary with countries' dependence on commodities and openness to trade and financial flows.

Natural Disasters

The frequency and intensity of natural disasters have increased over the past 30 years. The frequency of floods, for example, rose sixfold from the 1980s to the 2000s in sub-Saharan Africa (compared with threefold in the world, Figure 1.21). The expected El Niño in early 2020 points to elevated risks of flooding and droughts in various areas. Heavy reliance on rain-fed agriculture makes the region vulnerable to weather-related disasters, such as droughts, cyclones, and heavy rainfalls (IMF 2016a). In addition, a spreading of the Ebola outbreak in the Democratic Republic of the Congo to large cities and neighboring countries could, in addition to causing terrible human losses, undermine confidence, investment, and trade activities in the region.

Figure 1.20. Downside Risk Scenario: Impact of Escalating Trade Tensions, Global Slowdown, and Tightening Global Financial Conditions on Sub-Saharan African Growth

Source: IMF staff calculations.

Note: The scenario assumes an increase in the US trade policy uncertainty index by two standard deviations, global financial conditions tightened by one-third of a standard deviation, and a slowdown in global growth by one-third of a standard deviation. EPU = economic policy uncertainty.

Figure 1.21. Incidence of Natural Disasters, 1980s–2000s

Source: Center for Research on the Epidemiology of Disasters, Emergency Events database (EM-DAT).

POLICIES

The region faces immense development challenges. Meeting the 2030 United Nations Sustainable Development Goals (SDGs) requires significant spending—resources estimated at an additional 15 percent of GDP on average a year—from the public and the private sectors, and multilateral and bilateral official sources (Gaspar and others 2019). At the same time, a significant increase in job creation will be required to employ about 20 million (net) new entrants poised to join labor markets every year through 2030. This is twice as large as what the region has created annually during 2017–19 (Figure 1.22). Thus, it is important to advance reforms to promote growth and job creation. Failure to do so could place at risk gains made in macroeconomic stability and see development progress stall, with potential spillovers to other regions, including via migration.

Near-Term Policy Mix

Amid limited buffers and elevated debt vulnerabilities in some countries, policymakers have few options to counter external headwinds. Most countries have appropriately continued to tighten fiscal policy to address vulnerabilities, and several have loosened monetary policy. For example, policy interest rates have been reduced in 2019 in Angola, Botswana, the Democratic Republic of the Congo, Eswatini, The Gambia, Ghana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Nigeria, Rwanda, and South Africa

Figure 1.22. Sub-Saharan Africa: Net Job Creation, 2010–30

Sources: International Labour Organization; United Nations World Population Prospects; and IMF staff calculations.

(Figure 1.23). Looking ahead, the room for supporting growth remains mainly on the monetary policy side and limited to countries where inflation pressures are muted and growth is below potential.

In the event downside risks materialize, fiscal and monetary policy could be recalibrated to support growth, in a manner consistent with debt sustainability and available financing, and as part of a credible medium-term adjustment plan. In countries that are growing slowly, the pace of adjustment could be made more gradual, provided financing is available. If not, they should design the composition of adjustment to minimize the impact on growth. In fast-growing countries that are facing elevated debt vulnerabilities, the priority remains rebuilding buffers.

Figure 1.23. Sub-Saharan Africa: Changes in Monetary Policy Rates since December 2018

Sources: Haver Analytics; and IMF, International Financial Statistics.

Note: See page vi for country abbreviations list.

Medium-Term Policies to Build Resilience and Raise Longer-Term Growth

The reform spurt of the 1990s across most countries in the region (Chapter 2) has allowed them to enjoy sustained periods of positive real GDP growth, spanning over 30 years in some cases. The continued growth has led to a doubling of GDP in 28 out of 45 sub-Saharan African countries. The time has come for countries to undertake a new wave of reforms to lift medium-term growth, create the jobs for future entrants to labor markets, and make progress toward the SDGs. The launch of the AfCFTA provides an opportunity to catalyze such reforms. The AfCFTA is expected to establish a single unified market of 1.2 billion people with a combined GDP of \$2.5 trillion.³

To sustain and propel growth, countries also need to enhance resilience to external shocks. This would require reducing debt vulnerabilities, improving the flexibility of the economy, upgrading macroeconomic policy frameworks, and repairing balance sheets. Policies should also aim to build resilience to natural disasters and improve political and governance institutions to minimize security risks. The sections below provide a range of policies needed to strengthen resilience and lift medium-term growth. The prioritization and sequencing of these policies will vary with individual country circumstances, including implementation capacity.

Building Resilience

Reducing public debt vulnerabilities.

Improving debt dynamics. Further fiscal consolidation is needed over the medium term to reduce debt vulnerabilities and create fiscal space for development needs. Interest-growth differentials—which are negative for most countries and average –6 percent—ease budget constraints but are not enough for preventing growing debt. To keep debt dynamics in check, primary deficits also need to be contained (Figure 1.24). In particular, oil exporters would need to continue to adhere to their plans

³ With the signing by Benin and Nigeria in July 2019, nearly all African countries have signed the agreement. As of September 2019, 27 countries have ratified the AfCFTA. While the operational phase of the AfCFTA was launched during the African Union Summit in July 2019, its full operationalization still would require countries to agree on the rules of origin, the schedule of tariff concessions, the monitoring and elimination mechanism on nontariff barriers, and digital payment and settlement platforms.

of reducing noncommodity primary fiscal deficits by about 3 percentage points of GDP. Other resource-intensive countries and non-resource-intensive countries would also need to implement the planned reduction in noncommodity primary fiscal deficits of about 1½ percentage points and 1 percentage point of GDP, respectively (Figure 1.25).

Advancing domestic revenue mobilization. Since 2016, revenue in the region has risen by only 0.2 percent of GDP a year on average, although countries have room to mobilize, on average, between 3 percent and 5 percent of GDP in revenue (IMF 2018a). Several countries continue to have low tax rates (Angola, Nigeria), narrow tax bases (Ethiopia, Nigeria, Republic of Congo, São Tomé and Príncipe), or broad exemptions (Angola, Cameroon, Chad, Côte d'Ivoire, Ethiopia, Nigeria). In some countries, proposed reforms have not been adopted (Equatorial Guinea) or fully implemented (Gabon, Niger, Senegal, São Tomé and Príncipe). In several countries, tax administrative capacities remain weak, and governance is a concern. Also, the informal sector is large in many countries (including Angola, Central African Republic, Chad, Guinea, Nigeria), resulting in low tax compliance. Finally, challenging security conditions are hindering tax collection in some countries (Burkina Faso, Mali). Mobilizing more domestic revenue requires improving tax administration (such as assigning tax

identification numbers for commercial importers, improving land registries, and strengthening tax audit functions, customs administration, and compliance management of large taxpayers) and reforms to broaden revenue bases, including through fewer exemptions (IMF 2019a).

Streamlining inefficient subsidies. Subsidies and other transfers from the government averaged more than 5 percent of GDP (or 25 percent of expenses) as of 2017 for sub-Saharan African countries with available data.⁴ Fuel subsidies tend to be poorly targeted, foster overconsumption, curtail investment and maintenance in related sectors, and crowd out more productive government spending. Some countries need to take the opportunity afforded by low oil prices to reduce fuel subsidies to free up additional fiscal space (Cameroon, Nigeria, Senegal), as was done in Mozambique and South Sudan and is being pursued by Burkina Faso. There is also a scope to reexamine how to improve the effectiveness of other types of subsidies (for example, Malawi's farm input subsidy program, IMF 2018b). International subsidy reform experience (including in sub-Saharan Africa) suggests that the following elements can increase the chances of success: (1) a comprehensive reform plan; (2) a far-reaching communication strategy, aided by improvements in transparency; (3) appropriately phased energy price increases, which can be sequenced differently across energy products;

Figure 1.24. Sub-Saharan Africa: Primary Fiscal Balance and Debt-Stabilizing Balance, 2014–18

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

Note: Each point represents a country year. Bold numbers correspond to the number of data points in each quadrant.

⁴ See IMF (2018g, page 18).

Figure 1.25. Sub-Saharan Africa: Change in Noncommodity Primary Fiscal Deficit, 2018 versus 2023

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

Note: Excludes Burundi, Eritrea, and South Sudan due to data availability.

(4) improvement in the efficiency of state-owned enterprises (SOEs) to reduce producer subsidies; (5) targeted measures to protect the poor; and (6) institutional reforms that depoliticize energy pricing, such as the introduction of automatic pricing mechanisms (Clements and others 2013).

Improving public financial management.

Weaknesses in public financial management have contributed to domestic payment arrears in several countries, hampered the efficiency of public investment and social spending, and increased vulnerabilities in public sector balance sheets. Mechanisms should be put in place to monitor domestic arrears, accompanied by specific actions to clear and prevent their accumulation (Chapter 3). Strategies to clear arrears should be consistent with maintaining macroeconomic stability, anchored on inclusive growth, and implemented transparently. Strengthening fiscal policy, institutions and building buffers would limit arrears buildup. Several countries are taking actions to improve public financial management, including enhancing medium-term expenditure frameworks (Angola, Botswana), switching to a treasury single account (Republic of Congo, Côte d'Ivoire, Guinea, Sierra Leone, Tanzania), moving to performance-based budgeting (Botswana), and enforcing internal controls (Angola, Uganda). In addition, countries are adopting measures to improve the selection of capital projects to enhance the efficiency of public investment and reduce potential risks arising from SOEs and public-private partnerships (Seychelles). Better governance could help to raise the efficiency of public investment (Box 1.1), with significant growth payoffs (IMF 2015a).

Building strong debt management frameworks.

With several countries facing increased foreign exchange and refinancing risks, it is critical to enhance debt management frameworks and transparency. Some have made strides by using debt buybacks to ease near-term refinancing risks and reprofile external debt (Côte d'Ivoire, Ghana), better aligning repayment currency with foreign exchange earnings (Seychelles), and relying on multitranche Eurobond issuances.

Developing credible medium-term fiscal frameworks. This will require fiscal rules, supported by adequate public financial management

systems, a greater use of state contingent financial instruments, and, for commodity exporters, an adequate institutional framework to manage the revenue inflows from natural resources.

Enhancing External Sector Resilience.

Fostering economic diversification. Cross-country data suggest that macroeconomic stability, improved access to credit, good infrastructure, conducive regulatory environments, and a skilled workforce are associated with higher economic diversification, including in exports, and would enhance the region's resilience to commodity price shocks (IMF 2017a). Labor market reforms that align workers' productivity and wages and facilitate the reallocation of resources across sectors are also important to promote diversification. Policies supporting export-oriented sectors could help encourage the development of new industries, provided such policies are carefully implemented.

Promoting flexibility in exchange rates.

Allowing for greater exchange rate flexibility, where balance sheets' foreign currency mismatches are not a concern, would promote adjustment to commodity price shocks and the development of tradables. In countries with fixed exchange rate regimes (including CEMAC and WAEMU), such flexibility would mainly stem from relative price adjustments, and thus would require further structural reforms to enhance wage and price flexibility. In these countries, policies should aim to build adequate foreign exchange reserves and sustain fiscal positions consistent with the peg.

Dealing with capital flows. Although easy global financial conditions and associated capital inflows into the region's frontier economies could help finance development needs, the fickle nature of these flows also creates significant macroeconomic challenges (IMF 2018c). In the event of large financial inflows, appreciation pressures could rise, causing risk of overvaluation and buildup of financial imbalances. In the event of large outflows, depreciation pressures could raise inflation, tighten domestic financial conditions, and cause a sharp contraction in activity. Countries with stronger fundamentals and larger buffers are better positioned to contain these risks. Countries in the region could implement countervailing

macroeconomic and macroprudential policies while buffers are being restored. Foreign exchange interventions should be reserved to counter temporarily disorderly market conditions given the need to rebuild reserve buffers. Attracting foreign direct investment (FDI) inflows could provide more stable and longer-term sources of funding for the region's sizable development needs.

Improving the effectiveness of monetary policy.

Reinvigorating credit growth. In many countries, monetary authorities are trying to reinvigorate decelerating credit growth (Figure 1.26) with varying degrees of success. Some countries tried to reduce the cost of credit through interest rate controls, but this led to lower credit availability (Kenya). Nigeria introduced a requirement for banks to achieve a minimum loan-to-deposit ratio, which could significantly weaken banks' balance sheets and lower the cost of funds (as banks could quote low rates to curtail new deposits). Developing credit or collateral registries as well as resolving nonperforming loans and domestic arrears could lift credit growth (Liberia, Mali, Zimbabwe). A more efficient financial sector can mobilize domestic savings and channel these savings toward productive investment. Shifting investment from the public to the private sector, especially in non-resource-intensive countries, could create space for private sector credit to grow.

Enhancing the monetary transmission mechanism. The transmission mechanism between policy rate and lending conditions remains weak

Figure 1.26. Sub-Saharan Africa: Bank Credit to Private Sector, 2006–18

Sources: Country authorities; and IMF, International Financial Statistics.

in many countries. Enhancing it would require mopping up excess liquidity, developing deeper interbank markets and well-functioning secondary markets, and repo transactions for public debt securities (CEMAC, WAEMU). Countries or monetary areas facing excess liquidity (CEMAC, Namibia) could use open market operations or higher reserve requirements. Countries operating under interest rate-based monetary policy frameworks should continue to guide short-term market rates using interest rate corridors linked to the key policy rate (Malawi, Mauritius, Rwanda, Seychelles). The effectiveness of monetary policy could also be improved by reducing fiscal dominance, setting a medium-term inflation objective, and ensuring operational independence of the central bank (IMF 2015b). Further improving the effectiveness of monetary policy—including by enhancing the quality and timeliness of information sharing between the government and central bank—would help anchor inflation expectations and macroeconomic management, especially given the limited fiscal space in most countries. Zimbabwe's steps toward monetary policy normalization (including limiting the fiscal deficit and liberalizing the foreign exchange market) have reduced the spread between the official and parallel market exchange rates through August 2019.

Repairing banking sector balance sheets.

Reducing NPLs. Reducing banking systems' NPLs would reinvigorate credit and support growth. With varying results, some countries have adopted strategies to clean up banks' balance sheets, including mandating accelerated write-offs (Comoros, Mauritius, Sierra Leone, Tanzania), transferring defaulted claims to asset management companies (Angola, Guinea-Bissau, Zimbabwe), clearing domestic arrears (Eswatini, Gabon), restructuring or resolving failing banks (Côte d'Ivoire, Ghana, Kenya), facilitating foreclosure or out-of-court settlements with debtors (Cameroon), and a combination of such measures (Malawi, Mali, Togo).

Improving banking sector resilience. This would require better use of both macroprudential and microprudential policies. Among 25 surveyed countries in the region, countries on average had

only five macroprudential measures available at the end of 2016 (Figure 1.27). Macroprudential measures that have been most used by sub-Saharan African countries include restrictions on banks' foreign exchange positions, reserve requirements, and capital requirements. Since 2017, more countries have adopted higher capital requirements (Angola, Ghana, Mozambique, Tanzania) as a macroprudential tool to safeguard financial stability. Where relevant, such measures could be used to prevent a further buildup of risks. Strengthening regulations on concentration risks, including requiring the use of realistic capital adequacy risk weights for loans to SOEs, would also contribute to improving banking sector resilience in some cases.

Limiting the transmission of cross-border financial risks. The expansion of pan-African banks has contributed to improving competition and supporting financial inclusion (IMF 2016b). And this trend is expected to continue as the AfCFTA is expected to further liberalize trade in cross-border financial services (IMF 2019b). However, the lack of adequate cross-border supervisory oversight of banks on a consolidated basis could result in regulatory arbitrage. Thus, policies should focus on (1) improving cross-country collaboration among home and host supervisors; (2) expediting

harmonization of regulations and supervisory procedures, including complying with core Basel standards;⁵ and (3) establishing an appropriate mechanism for resolving unviable cross-border financial institutions.

Expanding correspondent banking relationships.

Some countries continue to face challenges in securing correspondent banking relationships. Ongoing reforms to strengthen the financial stability framework and to address the risks related to anti-money laundering and combating the financing of terrorism (AML/CFT) would help reduce the risk of further loss of correspondent banking relationships.

Building resilience to natural disasters.

A comprehensive approach to building resilience would consist of enhancing structural resilience, building financial resilience, and making contingent planning and related investments (IMF 2019c).

Several countries are seeking to **enhance structural resilience** through better infrastructure and other investments. Some countries have introduced new crop varieties that are more resilient to droughts and water stress or harvest rainwater at a local level (Burkina Faso). Others are using mobile technology to supply farmers with rainfall forecasts to optimize planting of crops and purchase crop insurance (Ethiopia, Kenya, Rwanda). As part of risk-informed planning, São Tomé and Príncipe and Zambia helped their populations relocate away from flood-prone areas. Kenya diversified its energy generation away from drought-prone hydropower to include gas and geothermal.

Building financial resilience by creating fiscal buffers and using prearranged financial instruments to protect fiscal sustainability and manage recovery costs is also essential. For example, sub-Saharan Africa has a regional sovereign insurance pool called the African Risk Capacity (established in 2013), which covers droughts and extreme weather events.

Figure 1.27. Number of Available Macroprudential Measures per Country, 2016

Source: IMF (2018d).

Note: Based on the IMF survey of member countries conducted in 2017. 141 (including 25 sub-Saharan African countries) out of 192 jurisdictions responded. FX = foreign exchange; MECA = Middle East and Central Asia; SSA = sub-Saharan Africa; Western Hem = Western Hemisphere. Structural measures include capital surcharges for systematically important institutions, limits on the size of exposures between financial institutions, etc.

⁵ About 32 percent of sub-Saharan African countries that responded to the EIB (2018) survey is compliant with Basel III standards while 41 percent is working towards compliance. Also, 64 percent is compliant with Basel II standards while 36 percent is working toward compliance. (In 2016, only 46 percent responded that they are compliant with Basel II standards.)

Contingency planning and related investments

could ensure a speedy response following a disaster. Increasing households' and firms' access to finance and cost-effective insurance could help risk transfer. To help risk retention, countries could enhance social safety nets, including by improving public health system.

Ultimately, sustained resilience to climate shocks would require international coordination given the externalities associated with carbon emissions that are contributing to the rise in global temperatures. Stepped-up and targeted financing from donors and international financial institutions would help to build up the resilience of sub-Saharan African countries.

Raising Longer-Term Growth

Lifting the region's medium-term growth prospects will require broad reforms to boost productivity and investment in physical and human capital.⁶ The measures needed to lift medium-term growth, create jobs, and spur the region's development vary with individual countries' situations. Examples include ensuring greater integration into regional and global trade and financial markets, enhancing competitiveness, and deepening inclusion.

Promoting regional and global integration.

Developing value chains could provide an opportunity to promote the region's industrialization process and lift growth. Sub-Saharan Africa's ratio of foreign value added⁷ to total exports is only about 20 percent, lower than Europe and Asia, and has been stagnant since the 1990s (Figure 1.28). Value chains could expand through deeper intraregional trade in the context of the AfCFTA.⁸ This would require tackling tariff and nontariff barriers, including trade and logistics costs (IMF 2019b). As a step in this direction, African central banks are acting to connect major cross-border payment systems, which is expected to facilitate intraregional payments. Structural reforms could complement the regional integration process, as suggested by the experiences of other regional trade agreements (Box 1.2).

Promoting competitiveness.

Stronger competition across firms would improve productivity, promote export competitiveness, and lower consumer prices. Competition among firms remains low in sub-Saharan Africa relative to the rest of the world (Chapter 2). Boosting competition in the region would require a holistic reform strategy that sees an effective competition policy framework accompanying measures to open sectors to trade and foreign direct investment, cut red

Figure 1.28. Sub-Saharan Africa and Selected Regions: Value Chain Related Trade, 1990s–2010s

Sources: United Nations Conference on Trade and Development, Eora Global Value Chain Database; and IMF staff calculations.

⁶ See IMF (2019d).

⁷ “Foreign value added” refers to imported inputs used by a country to produce its exports; and “indirect value added” refers to a country’s value added to intermediate inputs that are exported to and used by other countries to be re-exported.

⁸ IMF (2015d) documents that, in the global sample, a country’s insertion into global value chains is determined by tariffs, the index of rule of law, and domestic credit to private sector. Also, as impediments to trade in sub-Saharan Africa, IMF (2015d) identifies high tariffs, the lack of infrastructure, unfavorable governance and business climate, and low access to credit.

tape, and create an even playing field among firms. Competitiveness would be generally supported by strong institutions, including strong contract enforcement and rule of law.

Countries also need to harness the Fourth Industrial Revolution to sustain competitiveness and take advantage of technological advances to spur growth and leapfrog infrastructure (IMF 2018e). Development strategies need to (1) build digital infrastructure (as the region has the lowest internet penetration in the world), (2) ensure education systems are meeting changing skill requirements while catering to lifelong learning, and (3) promote smart urbanization (to build a hub of innovation).

Ensuring inclusiveness.

Countries need to ensure more equitable sharing of the benefits of growth and increased prosperity, including equal employment and education opportunities and improved access to and provision of health care and financial services.

- Fiscal policy could focus on moving to more progressive taxation to fund expanded access to high-quality education and health services, while replacing regressive expenditures such as fuel subsidies with more effective and targeted social safety nets (IMF 2017b).
- Promoting gender equality would broaden the gains from growth. Gender inequality in the region remains among the highest in the world (Figure 1.29). Increasing access to health and education services and promoting financial inclusion—especially in rural and

underserved areas and populations—could boost female labor force participation, especially in higher-value-added economic activity.

- Improving labor market outcomes for youth is critical, particularly given the large demographic dividend for the region (IMF 2015c). This would require promoting education and training, and advancing structural reforms to lift growth (discussed above) (Ahn and others 2019).
- Deepening financial access will require supporting financial innovation, while safeguarding financial stability through enhanced consumer protection and cybersecurity. Doing so would extend sub-Saharan Africa's global leadership in mobile money accounts per capita, mobile money outlets, and volume of mobile money transactions (Sy and others 2019).

Figure 1.29. Gender Inequality Index and Gini Coefficient, Average 2010–17

Sources: United Nations Development Programme (UNDP) Human Development Report; and IMF staff calculations.

Box 1.1. Improving Governance in Sub-Saharan Africa

Good governance can improve overall growth and economic performance. While improving governance takes time, there are already various instruments in place that governments can leverage in the near term.

Substantial gains could be made if governments can successfully deliver on their commitment to improve governance. Bringing sub-Saharan Africa's average governance scores to the rest of the world average could boost the region's growth by about 1 percent of GDP (Hammadi and others 2019). Sub-Saharan Africa's governance indicators tend to lag other regions, including those perceived as having weak governance (Figure 1.1.1).

Figure 1.1.1. Selected Regions: Distribution of Governance Ratings, 2014–18

Source: International Country Risk Guide.

Note: The grey and green areas are middle quartiles. LAC = Latin America and the Caribbean; MENAP = Middle East, North Africa, Afghanistan, and Pakistan; SSA = sub-Saharan Africa.

Elevated corruption is associated with high costs. Examples include higher tax evasion and lower tax revenue; a shift in the composition of government spending; lower efficiency of government spending; higher procurement costs; increased central bank financing; and weaker financial stability, which can all arise from a lack of trust in public institutions, the quest for economic rents, poor lending practices, and weak financial supervision (IMF 2018f).

With increased access to timely information through public dissemination and digital platforms, there is a demand for accountability and transparency from citizens. Also, there is an increasing recognition that weak governance and corruption undermine growth and development in various ways.

Notwithstanding the political commitment, improving governance is difficult as beneficiaries will fight to maintain the status quo. It is also a complex process as governance has various dimensions, each requiring a tailored approach. Although the approach to improving governance is country specific, there are basic principles that apply across countries—including improving the regulatory quality, enhancing government effectiveness, and strengthening fiscal and anti-corruption institutions.

Significant gains are possible in the near term. For instance, adhering to existing laws and public-financial-management regulations could be a first step. This would help improve the budgetary process by closing loopholes that lead to inflated procurement costs and inefficient public investment. Greater checks and balances on state-owned enterprises can improve their economic and operational performance while containing fiscal risks. Safeguarding the independence of central banks will allow them to better supervise the financial system. Additionally, bolstering the framework on anti-money laundering and combating the financing of terrorism (AML/CFT) by implementing measures related to customer due diligence, beneficial ownership, asset declarations, and politically exposed persons will allow for better tracking of illicit transactions and asset recovery.

This box was prepared by Vimal Thakoor.

Box 1.2. Lessons from Other Regional Trade Arrangements for the African Continental Free Trade Agreement (AfCFTA)

Lessons from other regional trade arrangements (RTAs) suggest that a successful AfCFTA would require signatories to adopt a complementary set of reforms, while ensuring that the AfCFTA is fully implemented and supports an outward-oriented growth strategy.

Regional trade agreements have become an important feature of the international trade architecture. In 2018, there were more than 400 RTAs notified to the World Trade Organization (WTO) (Table 1.2.1). These RTAs vary in size, composition, coverage, and implementation record. The AfCFTA is the world's largest RTA measured by membership and population. The agreement aims, among other goals, to create a single market for goods and services and to facilitate movement of persons. The agreement also contemplates reforms on competition policy, investment, and intellectual property rights.

Table 1.2.1. World: Selected Characteristics of Key Regional Trade Agreements, 2019

	Regional/Total trade (Percent)	Share of World Trade (Percent)	Population (Millions)	GDP (USD Billions)	Exports & Imports to GDP (Percent)	Number of Members	Income status	Type	Date of entry into force	Coverage	Implementation Status
EU	63.8	33.1	510	18,750	88.8	28	AEs (23); EMEs (5)	Common market	1993	GS, TF, IP, RO, DS, M, T, NTB	Full
NAFTA	40.5	15.6	489	23,429	33.3	3	AEs (2); EMEs (1)	Free trade area	1994	GS, TF, IP, RO, DS, M, T, NTB	Full
AFTA	23.1	7.3	647	2,923	120.2	10	AEs (1); EMEs (5); LIDCs (4)	Free trade area	1993	G, IP, TF, DS, RO, M, T	Partial
COMESA	7.3	0.8	546	7,646	4.7	21	EMEs (6); LIDCs (15)	Customs union	1994	GS, RO, T, NTB, TF, CP, DS, IP, M	Partial
Mercosur	13.7	1.5	263	2,488	30.0	4	EMEs (4)	Customs union	1991	GS, T, IP, DS, RO, NTB, CP, M, TF	Partial
<i>Memorandum:</i> AfCFTA	16.4	2.7	1,239	2,323	54.8	54	EMEs (15); LIDCs (39)	Customs union	2019	GS, TF, I, RO, DS, M, T, NTB	Beginning

Sources: IMF, Direction of Trade Statistics; IMF, World Economic Outlook database; and IMF staff calculations.

Note: AE = advanced economies; CP = competition policy; DS = dispute settlement; EME = emerging market economies; G = goods; GS = goods and services; IP = intellectual property; LIDC = low-income developing countries; M = monitoring and implementation mechanism; NTB = nontariff barriers; RO = rules of origin; T = tariffs; TF = trade facilitation.

RTAs have generated broadly positive macroeconomic effects on their membership by:

- Creating trade, with minimal trade diversion (Freund and Ornelas 2010, Vicard 2011). They have also facilitated participation in global value chain (GVC) trade. Studies have generally found substantial trade creation on the North American Free Trade Agreement (NAFTA) and the ASEAN Free Trade Area (AFTA) but some trade diversion effects on Mercosur.¹
- Enhancing growth, due to scale effects from a larger domestic market and technological diffusion (Berthelon 2004, Schiff and Wang 2003). Membership in an RTA may also reduce growth volatility due to increased market size, a clearer policy framework, and mechanisms for dispute settlement (Kpodar and Imam 2017).
- Increasing foreign direct investment (FDI), through the extended domestic market as well as through deep integration provisions (including those covering investment, intellectual property rights, standards, and competition policy), which lower political risks and improve the business climate.²

This box was prepared by Garth Peron Nicholls, Malika Pant, Hector Perez-Saiz, and José Nicolás Rosas García.

¹ See Chang and Winters (2002), Trefler (2004), Romalis (2007), and Acharya and others (2011).

² See Lim (2001), Lederman and others (2005), and Medvedev (2012).

Box 1.2. continued.

Some RTAs covering various parts of sub-Saharan Africa for decades have had limited results. The AfCFTA's success in creating trade, enhancing growth, and increasing FDI would hinge on a fundamental change in attitude to regional integration in three areas: (1) the design of the agreement, (2) the implementation of the agreement, and (3) the articulation of an accompanying broad-based reform agenda.

- Design of the agreement:
 - The creation of the AfCFTA should be complemented with a gradual reduction of most-favored-nation (MFN) tariffs.³ In this way, the AfCFTA would expand the African countries' global trade, especially with more technologically advanced economies. Within the AfCFTA, a key challenge is to coordinate and agree on a reasonable level of common external tariff (CET) for countries at different stages of development in an arrangement without a compensating mechanism. As the cases of Economic Community of West African States (ECOWAS) and East African Community (EAC) have shown, it would be important to set the CET at a level that does not raise the cost of living, especially for low-income households (AfDB 2019, page 80).
 - To maximize the potential gains, the rules of origin should be nonrestrictive and avoid going beyond preventing trade deflection or the transshipment of goods from countries outside the agreement. This would minimize bureaucratic costs and facilitate implementation. There is evidence that complex and stringent rules of origin in some RTAs have discouraged trade flows. Very detailed and complex rules of origin adopted by NAFTA are assessed to have substantially increased the level of protection faced by nonmembers, violated article XXIV of GATT rules, and contributed to trade diversion (Conconi and others 2016). According to the AfDB (2019, page 113), the low-income countries would be disadvantaged as they have to source inputs from higher-cost members if the AfCFTA were to adopt restrictive product-specific rules of origin (that favor upstream capital-intensive sectors).
- Implementation of the agreement: Lack of effective monitoring and implementing mechanisms has been a key reason for the lower performance of some past RTAs in Africa and other regions. It would be crucial for the AfCFTA's institutions to be strengthened and have the authority to create a monitoring mechanism. Such a mechanism could act as a disciplinary device to identify lagging countries as seen during the implementation of the European Union and the East African Community.
- Articulation of an accompanying broad-based reform agenda: Member countries should focus on maintaining macroeconomic stability, fostering business environments where the private sector can thrive, tackling labor market distortions, enhancing social protection, and increasing domestic revenue mobilization. At the regional level, efforts should aim at scaling up investments in the continental infrastructure and creating a regional competition commission.

³ RTAs represent a departure from the non-discrimination principle underlying the multilateral trading system and can have both positive and negative effects.

REFERENCES

- Acharya, R., J. A. Crawford, M. Maliszewska, and C. Renard. 2011. "Landscape." Chapter 2 in *Preferential Trade Agreement Policies for Development: A Handbook*, edited by J. Chauffour and J. Maur, Washington, DC: World Bank.
- African Development Bank (AfDB). 2019. *African Economic Outlook 2019*. Abidjan.
- Ahn, J., Z. An, J. Bluedorn, G. Ciminelli, Z. Kóczán, D. Malacrino, D. Muhaj, and P. Neidlinger. 2019. "Work in Progress: Improving Youth Labor Market Outcomes in Emerging Market and Developing Economies." IMF Staff Discussion Note 19/02, International Monetary Fund, Washington, DC.
- Berthelon, M. 2004. "Growth Effects of Regional Integration Agreements." Working Paper No. 278. Central Bank of Chile, Santiago.
- Chang, W., and L.A. Winters. 2002. "How Regional Blocs Affect Excluded Countries: The Price Effects of Mercosur." *American Economic Review*. 92(4): 889–904.
- Clements, B., D. Coady, S. Fabrizio, S. Gupta, T. Alleyne, and C. Sdravovich. 2013. "Reforming Energy Subsidies: Lessons from Experience." Chapter 4 in *Energy Subsidy Reform: Lessons and Implications*, Washington, DC: International Monetary Fund.
- Conconi, P., M. García Santana, L. Puccio, and R. Venturini. 2016. "The Perverse Effect of Preferential Rules of Origins." Vox CEPR Policy Portal, March 16.
- Davis, S. 2016. "An Index of Global Economic Policy Uncertainty." *Macroeconomic Review* October.
- Estevadeordal, A., and K. Suomien. 2006. "Mapping and Measuring Rules of Origin around the World." Chapter 3 in *The Origin of Goods: Rules of Origin in Regional Trade Agreements*, edited by O. Cadot, A. Estevadeordal, A. Suwa-Eisenmann, and T. Verdier, Oxford: University Press.
- European Investment Bank (EIB). 2018. *Banking in Africa: Delivering on Financial Inclusion, Supporting Financial Stability*. Luxembourg.
- Freund, C., and E. Ornelas. 2010. "Regional Trade Agreements." Policy Research Working Paper 5314, World Bank, Washington, DC.
- 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.
- Hammadi, A., M. Mills, N. Sobrinho, V. Thakoor, and R. Velloso. 2019. "A Governance Dividend for Sub-Saharan Africa?" IMF Working Paper 19/1, International Monetary Fund, Washington, DC.
- International Monetary Fund (IMF). 2015a. "Making Public Investment More Efficient." Policy Papers, Washington, DC.
- . 2015b. "Evolving Monetary Policy Frameworks in Low-Income and Other Developing Countries." Policy Papers, Washington, DC.
- . 2015c. "How Can Sub-Saharan Africa Harness the Demographic Dividend?" Chapter 2 in *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, April.
- . 2015d. "Global Value Chains: Where Are You? The Missing Link in Sub-Saharan Africa's Trade Integration." Chapter 3 in *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, April.
- . 2016a. "Enhancing Resilience to Natural Disasters in Sub-Saharan Africa." Chapter 3 in *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, October.
- . 2016b. "Financial Development and Sustainable Growth." Chapter 3 in *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, April.
- . 2017a. "Economic Diversification in Sub-Saharan Africa." Chapter 3 in *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, October.
- . 2017b. "Tackling Inequality." Chapter 1 in *Fiscal Monitor*, Washington, DC, October.
- . 2018a. "Domestic Revenue Mobilization in Sub-Saharan Africa: What Are the Possibilities?" Chapter 2 in *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, May.
- . 2018b. "Malawi—2018 Article IV Consultation and Request for a Three-Year Arrangement Under The Extended Credit Facility." Country Report 18/115, Washington, DC.
- . 2018c. "Capital Flows to Sub-Saharan Africa: Causes and Consequences." Chapter 2 in *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, October.
- . 2018d. "The IMF's Annual Macprudential Policy Survey— Objectives, Design, and Country Responses." Policy Papers, Washington, DC.
- . 2018e. "The Future of Work in Sub-Saharan Africa." Chapter 3 in *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, September.
- . 2018f. "Review of 1997 Guidance Note on Governance - A Proposed Framework for Enhanced Fund Engagement." Policy Papers, Washington, DC.
- . 2018g. "Recovery and Risking Risks." Chapter 1 in *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, October.
- . 2019a. "Macroeconomic Developments and Prospects in Low-Income Developing Countries—2019." Policy Papers, Washington, DC.

- . 2019b. “Is the African Continental Free Trade Area a Game Changer for the Continent?” Chapter 3 in *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, April.
- . 2019c. “Building Resilience in Developing Countries Vulnerable to Large Natural Disasters.” Policy Papers, Washington, DC.
- . 2019d. “Reigniting Growth in Emerging Market and Low-Income Economies: What Role for Structural Reforms?” Chapter 3 in *World Economic Outlook*, Washington, DC, October.
- Kpodar, K., and P. Imam. 2017. “Regional Trade Agreement and Growth Volatility.” Vox, CEPR Policy Portal.
- Lederman, D., W. Maloney, and L. Serven. 2005. Lessons from NAFTA for Latin America and Caribbean countries: A Summary of Research Findings. Washington, DC: World Bank.
- Lim, E. G. 2001. “Determinants of, and the Relation between, Foreign Direct Investment and Growth: A Summary of the Recent Literature.” IMF Working paper 01/175, International Monetary Fund, Washington, DC.
- Medvedev, D. 2012. “Beyond Trade: The Impact of Preferential Trade Agreements on FDI Inflows.” *World Development* 40(1): 49–61.
- Romalis, J. 2007. “NAFTA’s and CUSFTA’s Impact on International Trade.” *Review of Economics and Statistics* 89(3): 416–35.
- Schiff, M., and Y. Wang. 2003. “Regional Integration and Technology Diffusion. The Case of the North American Free Trade Agreement.” Policy Research Working Paper 3132, World Bank, Washington, DC.
- Sy, A., R. Maino, A. Massara, H. Perez-Saiz, and P. Sharma. 2019. “FinTech in Sub-Saharan African Countries: A Game Changer?” Departmental Paper 19/04, African Department, International Monetary Fund, Washington, DC.
- Trefler, D. 2004. “The Long and Short of the Canada-U.S. Free Trade Agreement.” *American Economic Review* 94(4): 870–95.
- Vicard, V. 2011. “Determinants of Successful Regional Trade Agreements.” *Economic Letters* 111: 188–90.

2. Competition, Competitiveness, and Growth in Sub-Saharan Africa

Competition among firms is generally deemed an essential driving force of market economies. It ensures an efficient allocation of resources as factors are allocated to their best use, and generates firm dynamics that boost innovation, productivity growth, and external competitiveness—translating into macroeconomic gains.¹ Moreover, by limiting unfair pricing, discriminatory practices, and rent extraction, competition is seen to have significant welfare, employment generation, and distributional implications as well.

The expected benefits of competition are, however, more likely to accrue in the absence of market distortions. Where market distortions exist—whether in advanced economies or low-income countries—it is often argued that competition, especially from foreign entrants, can hurt the domestic industry and create dominant firms that end up stifling competition and harming consumer welfare. Such concerns generally lead to trade and other regulatory barriers that restrict the entry of private firms in domestic markets. Nevertheless, many of these fears can be mitigated by implementing an appropriate policy framework that encompasses the opening of the market along with a strong competition law and enforcement agency. By and large, existing evidence shows that competition and a well-crafted competition policy framework can help to improve welfare and other macroeconomic outcomes (Dutz and Hayri 1999; UNCTAD 2004; Aghion and Griffith 2005; OECD 2014).

Despite the advantages of competition, markets are often characterized by anticompetitive practices and structures, especially in developing countries. Sub-Saharan Africa is no exception—monopolies, especially state-owned, are widely prevalent, and single operators hold large

market shares in key sectors in many countries. The lack of competition has significant potential costs, hurting the poor through higher prices of essential items and undermining external competitiveness and economic growth.² Although the issue of declining competition and rising corporate market power has received much attention in recent years in the context of advanced and emerging market economies (Autor and others 2017; De Loecker and Eeckhout 2018; De Loecker and others 2018; IMF 2019a), a systematic analysis for sub-Saharan Africa remains lacking.

Against this background, this chapter aims to broaden the understanding of the state of product market competition in sub-Saharan Africa by bringing together country and firm-level data from several sources to explore the following key questions:

- How has product market competition in sub-Saharan Africa evolved over the years and how does it compare to other regions?
- What are the macroeconomic implications of competition for external competitiveness, economic growth, and consumer welfare?
- How does competition affect firm behavior and performance to generate observed macroeconomic outcomes?
- What role does macroeconomic policy, including competition policy, play in promoting competition in the region?

The analysis, based on a sample of 39 sub-Saharan African countries during 2000–17, shows that competition in the region remains generally

This chapter was prepared by a team led by Jesus Gonzalez-Garcia and comprising Reda Cherif, Sandesh Dhungana, Xiangming Fang, Miguel Pereira Mendes, Yuanchen Yang, Mustafa Yenice, and Jung Eun Yoon, under the supervision of Mahvash Qureshi and David Robinson.

¹ The dynamic efficiency gains conferred by competition are based on the Schumpeterian “creative destruction” hypothesis, which postulates that competition drives innovation and constant change, leading the least productive firms to exit the market and the most productive firms to survive (Schumpeter 1942). To reap the dynamic benefits of competition, however, firms must be able to enter, upgrade, and exit easily.

² World Bank (2016), for example, estimates that retail prices of essential food items are at least 24 percent higher in African cities than in other major cities around the world, while cement prices are, on average, about 183 percent higher than world prices.

low relative to the rest of the world. Specifically, country-level indicators show that, on average, sub-Saharan Africa lags advanced and emerging market economies in both domestic and foreign competition, though it is on par with other developing economies. More than 70 percent of the countries in the region fall in the bottom half of countries globally in terms of domestic and foreign competition indicators. The low level of domestic competition is related to the market dominance of a few large firms, the absence or weak enforcement of competition policies, structural and regulatory barriers to entry, and the distortive effects of tax regimes. Foreign competition is mainly impeded by high trade barriers, which may also indirectly affect domestic competition by restricting access to intermediate inputs.

Firm-level indicators of competition—such as markups and profitability—provide deeper insights into sectoral market structures and suggest that markups and profitability are generally significantly higher, and more persistent, in sub-Saharan African countries compared to other emerging market and developing economies.³ Both profitability and markups in the region vary considerably across sectors and country groups but tend to be the highest in the services sectors (such as hotels and restaurants, information and communications, transport, and so on), and among oil exporters relative to other country groups. In general, there is a strong association between the number of competitors faced by a firm and its markup and profitability, suggesting that reducing barriers to business entry could play an important role in boosting competition and improving market dynamics.

The empirical analysis shows that sub-Saharan Africa has much to gain from promoting competition. Moving from the median value of the competition intensity index for sub-Saharan African countries to the top quartile of the global distribution is associated with an average increase in the real GDP per capita growth rate of about 1 percentage

point, achieved mainly through an improvement in export competitiveness and productivity growth. Also, an international comparison of price levels suggests that prices, including of essential items, are on average about 20 percent higher in sub-Saharan African countries than in other emerging market and developing economies. Higher competition can help to significantly lower prices of consumer and intermediate goods, thereby improving welfare and competitiveness.

Firm-level analysis shows that firm behavior responds to market structure, generating the observed macroeconomic patterns. Specifically, a decline in firm markups is significantly associated with an increase in investment and exports, productivity growth, and labor's share of output. The effect of markups is more pronounced in the manufacturing sector relative to services, and stronger for domestic firms relative to majority foreign-owned firms.

These findings reinforce the potential benefits from strengthening product market competition in sub-Saharan Africa. As several factors affect competition, a holistic approach is essential. This approach should encompass an effective competition policy framework, including an adequate competition law and an independent enforcement agency, openness to trade and foreign direct investment, and product market reforms that reduce barriers to firm entry and exit. In fact, these policies tend to be mutually reinforcing—trade and investment liberalization, for example, stimulate competition, but an effective competition policy framework is required to ensure that gains from openness are realized and markets are not taken over by a few large firms engaging in unfair trading practices. Fiscal policies and tax and procurement systems also need to be carefully designed so that competition is not distorted. Moreover, growing regional trade and investment interlinkages require strengthening cooperation among competition authorities to effectively tackle any anticompetitive practices of large pan-regional firms.

³ While several variables, most notably market shares, have been used in previous studies as a proxy for the state of competition, this chapter uses profitability and markup measures given limited firm-level data availability for sub-Saharan African countries, which makes it difficult to compute market shares precisely (see online annex for data details). In principle, differences in profitability and markup—which broadly speaking capture the divergence between the product price and the cost of production—could be reflecting differences in the return to capital and in productivity; the empirical analysis, however, attempts to control for these factors. Moreover, the chapter also analyzes the persistence of profits and markups, as in competitive markets, the process of firm entry and exit should imply a mean-reverting behavior of these variables.

PRODUCT MARKET COMPETITION: SOME STYLIZED FACTS

Product market competition across sub-Saharan Africa remains low compared to the rest of the world. According to the World Economic Forum's product market competition indicator, overall competition in the region is, on average, significantly lower than in advanced and emerging market economies but somewhat like that in other developing economies (Figure 2.1). More than 40 percent of the countries in sub-Saharan Africa are in the bottom quartile of the global distribution of the competition index, while more than 70 percent are below the world median (Annex Figure 2.1). These patterns are also observed in other available country-level competition indicators such as the Bertelsmann Stiftung Transformation Index, which shows a notable difference between sub-Saharan Africa and other countries in terms of market competition (Annex Figure 2.2).⁴

The low level of competition in most sub-Saharan African countries can be attributed to low levels of both domestic and foreign competition.⁵ The weak domestic competition environment mainly stems from the market dominance of a few firms,

lack of effective competition policies, structural and regulatory barriers to entry, and the distortive effects of prevalent fiscal regimes (Annex Figure 2.3). Low foreign competition is to a large extent driven by trade barriers, which have declined significantly over the last two decades but remain relatively high (Annex Figure 2.4). Trade barriers—both tariff and non-tariff related—tend to limit direct competition from foreign goods but could indirectly affect domestic competition by restricting the availability of inputs (or by making them more expensive).

A look across the different country groups in the region shows considerable heterogeneity in the state of competition across markets. Non-resource-intensive countries generally have the most competition-prone market structures, while oil exporters have the least, probably reflecting the structure of these economies, with limited diversification, significant import protection, and the prevalence of a few large firms in the extractive industry (Figure 2.2, panel 1). Domestic competition, however, appears to have increased over the last decade in all country groups, with non-resource-intensive countries recording the largest improvement, mainly due to an improvement in the ease of doing business. Across subregions, competition is significantly lower in central Africa, while it is the highest across southern African countries (Figure 2.2, panel 2).

Figure 2.1: Selected Groups of Countries: Product Market Competition, 2007–17

Source: World Economic Forum, Global Competitiveness Index.

Note: Index ranges from 1 to 7, with higher values indicating greater competition; DEV = Developing countries; SSA = sub-Saharan Africa.

Firm-Level Competition

Firm-level competition indicators—such as profitability and markups—corroborate the country-level indicators and show that the extent of competition faced by firms in the region is indeed limited.⁶ While such indicators are not readily available for sub-Saharan Africa, for the purpose of this chapter, they are constructed using detailed information obtained from two data sources: the World Bank Enterprise Survey (WBES), which provides mostly cross-sectional information on over 10,000 firms in

⁴ The World Economic Forum's competition indicator is based on both subjective (opinion surveys of business executives) and objective (tariff rates, number of regulatory procedures, etc.) components. The Bertelsmann Stiftung Transformation Index is based on opinion surveys of country experts. See online annex for data-related details.

⁵ The methodology to compute the World Economic Forum's product market competition index was revised in 2018. The revised index, while not strictly comparable to earlier years, portrays a similar picture for sub-Saharan Africa relative to other countries in terms of domestic and foreign competition (Annex Figure 2.5).

⁶ While in absolute terms the markup and profitability measures may not necessarily reflect the extent of market competition under fairly general assumptions such as similar technologies, a comparison across firms and countries could inform on differences in market power.

Figure 2.2. Sub-Saharan Africa: Product Market Competition, 2007–17

Source: World Economic Forum, Global Competitiveness Index.

Note: Index ranges from 1 to 7, with higher values indicating greater competition.

39 sub-Saharan African countries during 2006–18; and the Orbis database, which provides time-series information on about 500 firms in 18 sub-Saharan African countries during 2000–17, resulting in nearly 9,000 firm-level observations.⁷

Based on these databases, average firm profitability in sub-Saharan African countries is significantly higher (10–20 percent) compared to other emerging market and developing economies (Figure 2.3).⁸ Firm markups are also about 11 percent higher in sub-Saharan African countries relative to other countries at a similar level of development, thereby implying a lower degree of competition in the region.⁹

The derived firm profitability and markup measures are positively associated with each other by construction, but also with other measures of market concentration, such as the number of competitors faced by firms.¹⁰ Thus, countries characterized by a higher share of firms reporting fewer competitors tend to record higher average firm profitability and markups—suggesting that removing barriers to entry and encouraging more firms to enter

the market could bolster competition and reduce corporate market power (Figure 2.4). Notably, for a given share of firms reporting few competitors, profitability and markups across sub-Saharan

Figure 2.3. Selected Groups of Countries: Firm-Level Competition Indicators

Sources: IMF staff estimates based on the World Bank Enterprise Survey (WBES) and Orbis databases.

Note: Profitability is defined as the difference between revenue and the cost of inputs relative to revenue. Markup is defined as the log ratio of sales to the cost of inputs using the WBES database, and as the log ratio of revenue turnover to costs using the Orbis database. See online annex for methodological details. *** and * indicate statistically significant difference in the mean values between the two groups at the 1 and 10 percent levels, respectively. SSA = sub-Saharan Africa.

⁷ The number of firms covered in both databases varies considerably across countries, but more than 90 percent of the firms in the WBES and 50 percent of the firms in the Orbis database belong to the manufacturing sector. See online annex for further details.

⁸ Firm profitability is often captured by an empirical measure of the Lerner index—the ratio of operating earnings to sales (IMF 2019a). Given the limited availability of data on operating earnings in the WBES for sub-Saharan African firms, profitability is defined as the difference between firm sales and the cost of inputs to firm sales, and using Orbis data, it is measured as operating revenue to the cost of goods and services.

⁹ Theoretically, markup is defined as the price to marginal cost ratio. However, given the unavailability of data on marginal costs, the following proxies are used here: 1) the log of the ratio of sales to the cost of inputs when considering the WBES data; and 2) the log ratio of revenue turnover to costs when considering the Orbis database. With these definitions, markup values (profits) higher than 1 (0) can be considered as indicators of market power, as they suggest a divergence between prices and costs.

¹⁰ While market share (that is, firm sales to total industry sales in a given period) is a commonly used measure of market concentration, given the lack of data on the entire size of the market, in particular in the informal segment, it is not the preferred measure for the analysis here. Nevertheless, market shares calculated as a check with the databases mentioned are strongly positively correlated with both firm markups and profitability.

Figure 2.4. Selected Groups of Countries: Competition Indicators and Number of Competitors

Source: IMF staff estimates based on World Bank Enterprise Survey data.

African countries tend to be higher than in other emerging market and developing economies, indicating a relatively higher degree of corporate market power in the region.

A look across country groups within sub-Saharan Africa shows average firm markups and profitability are higher among oil-exporting countries with about a 16 and 8 percent difference, respectively, relative to other countries (Table 2.1). Similarly, central African countries tend to have significantly higher markups and profitability (by about 8 percent and 18 percent, respectively) compared to other regions within sub-Saharan Africa.¹¹

Table 2.1. Sub-Saharan Africa: Firm Markup and Profitability

	By Resource Intensity	
	Markup	Profitability
Oil exporters	0.82	0.51
Other resource-intensive	0.69	0.45
Non-resource-intensive	0.64	0.42
	By Region	
	Markup	Profitability
Central Africa	0.82	0.51
East Africa	0.66	0.44
Southern Africa	0.62	0.43
West Africa	0.65	0.42
EMDEV excl. SSA	0.57	0.39

Source: IMF staff estimates based on the World Bank Enterprise Survey.

Note: Profitability is defined as the difference between revenue and the cost of inputs relative to revenue. Markup is defined as the log ratio of sales to the cost of inputs. EMDEV = Emerging market and developing economies; SSA = sub-Saharan Africa.

The higher markups among the oil exporters and in central African countries are consistent with Figure 2.2, which documents a relatively low level of product market competition at the macro level across these countries.

In terms of the dynamics of markups, the lack of consistent firm-level time-series data for most sub-Saharan African countries makes it difficult to draw definitive conclusions; however, the available information suggests an increase in markups in some countries, including the region's two largest economies: Nigeria and South Africa (Figure 2.5). These trends are consistent with other studies (Aghion, Braun, and Fedderke 2008; Fedderke, Obikili, and Vieg 2018; De Loecker and Eeckhout 2018), which also document rising firm markups in these countries and globally. More generally, the analysis shows that markups are highly persistent in sub-Saharan Africa, with the half-life of markups being almost twice as long in countries in the region than in other emerging market and developing economies.¹²

Evaluating the behavior of markups across the different types of firms in the region indicates that majority state-owned and foreign-owned firms tend to have higher markups than other firms, especially in the manufacturing sector. By contrast, small firms tend to have lower markups than medium and large firms (Annex Figure 2.6). These observations

¹¹ In addition to average markup, markup dispersion within sectors is also significantly higher among the oil exporters, as well as in central African countries. As noted by Lerner (1934), markup dispersion could lead to a misallocation of resources resulting in efficiency losses.

¹² The half-life of firm markups—obtained by estimating an autoregression (AR(1)) model of markups, while controlling for different firm, industry, and country-level characteristics and year effects—is about 1 year for the sub-Saharan African sample compared to 0.5 years for other emerging market and developing economies.

Figure 2.5. Sub-Saharan Africa: Firm Markups, 2002–17

Source: IMF staff estimates based on the Orbis database.

Note: The series show averages over all firms for each year.

are consistent with those for other emerging market and developing economies—but it is notable that the share of mostly state-owned firms in the sample for sub-Saharan Africa is almost double that for other emerging market and developing economies, indicating a much greater prevalence of such firms in the region.

Competition across Sectors

The macro and firm-level competition indicators presented above suggest generally low levels of competition in sub-Saharan Africa, but are all

sectors equally anticompetitive across countries? To answer this question, the computed firm profitability and markup measures are aggregated across sectors to gauge the degree of sectoral competition in the region. The results show considerable variation across sectors in sub-Saharan Africa, with both profitability and markups being the highest in the nontradable sectors, such as hotels and restaurants, wholesale and retail trade, and construction, based on the WBES database, and in other services, information and communications, financial intermediation, and transportation, based on the Orbis database, which has larger coverage of firms in the services sector (Annex Tables 2.1 and 2.2). On average, markups tend to be lower in the manufacturing sector, especially among textile and leather producers.

Comparing the profitability and markup measures for countries in sub-Saharan Africa with those for other emerging market and developing economies indicates that competition is weaker in the region across nearly all sectors, with the average difference in markups equivalent to about 7 percent (Figure 2.6). In general, however, there is a strong positive correlation (about 0.9) between sectoral markups in sub-Saharan African countries and other

Figure 2.6. Selected Groups of Countries: Firm Markups by Sector

Source: IMF staff estimates.

Note: Bars show averages per sector. Markup is defined as the log of the ratio of sales to cost in panel 1 and the log of the ratio of revenue turnover to costs in panel 2. Manuf. = manufacturing; SSA = sub-Saharan Africa; WBES = World Bank Enterprise Survey.

countries, suggesting that the pattern of sectoral competition tends to be similar across countries.¹³

Sectoral markups are also generally positively correlated across country groups within sub-Saharan Africa, except for central African countries, which tend to have higher markups in most manufacturing industries along with the services sector (Annex Table 2.3). On average, commodity exporters—both oil and other—also tend to have higher markups in the manufacturing sector than the non-resource-intensive countries.

COMPETITION AND MACROECONOMIC PERFORMANCE

Does the low level of competition prevalent across sub-Saharan Africa affect macroeconomic performance? The idea that competition is an important driving force of market economies that affects economic growth can be traced back to Adam Smith's *Wealth of Nations*, penned more than two centuries ago.¹⁴ Since then, a voluminous body of literature has examined the effect of competition on economic growth and welfare. Theoretically, the relationship is ambiguous: rivalry among firms can encourage innovation and boost productivity growth, but it can also stifle innovation and growth by limiting the expected returns for firms from innovating (Aghion and Griffith 2005). Open and competitive systems can also enable firms in dominant positions to entrench themselves and work toward closing the system and impeding growth (Rajan and Zingales 2004)

Cross-country empirical studies, however, generally indicate a strong positive relationship between competition and growth resulting from a more

efficient allocation of resources and increased investment, innovation, productivity, and export competitiveness (OECD 2014; Goodwin and Pierola Castro 2015). Competition is also observed to have important welfare and distributional implications by lowering prices for consumers and downstream producers, generating income and employment opportunities, and reducing discriminatory practices (Begazo and Nyman 2016).

Growth

The positive relationship between competition and growth is borne out by data used in this chapter. Estimating standard economic growth regressions—while controlling for traditional determinants of growth, country-fixed effects, and year effects—the results show a statistically significant positive association between the World Economic Forum's local competition intensity index and real GDP per capita growth in a broad sample comprising advanced economies, emerging market and developing economies, as well as in a sample restricted to emerging market and developing economies including sub-Saharan African countries.¹⁵ Specifically, these results show that an increase in the competition intensity index from the median level for sub-Saharan African countries to the top quartile of the global distribution implies an average increase in the real GDP per capita growth rate of about 1 percentage point (Figure 2.7). The impact is economically relevant as the average real GDP per capita growth rate in sub-Saharan Africa after 2010 has been 1 percent.¹⁶ While these results do not necessarily imply causation, they are robust to addressing potential endogeneity concerns by applying alternative econometric approaches.

¹³ While higher returns to capital resulting in higher profitability may be expected in low-income countries relative to advanced economies given their low level of capital endowment, the relatively higher markups in most sub-Saharan African countries compared to other developing economies with similar capital endowment structure suggest that the high level of profitability/markups cannot be fully attributed to higher returns to capital. More generally, the equality between returns to capital and the marginal product of capital relies on the assumption of perfect competition in capital markets (Caselli and Feyrer 2007), which generally does not hold in low-income countries.

¹⁴ See, for example, Smith (1776), Book II, Chapter II, p. 329, para. 106.

¹⁵ Further limiting the sample to sub-Saharan African countries shows a positive but statistically insignificant (p -value = 0.2) correlation between competition and GDP per capita growth. The results for sub-Saharan Africa should, however, be interpreted with caution given the limited sample size for the region, which covers a period with few observed changes in competition indicators (Annex Table 2.13).

¹⁶ Several emerging market and developing economies in the sample, such as Colombia, Mauritius, and Morocco, have achieved a sustained increase in the competition intensity index over the last decade equivalent to an increase from the median level for sub-Saharan African countries to the top quartile of the world distribution.

Channels of Transmission

What are some of the channels through which competition lifts economic growth? Analyzing the effect of competition on private investment, non-oil exports and labor productivity, the results show a positive but statistically weak association of the local competition intensity index and investment (percent of GDP) but a strongly positive association with exports (percent of GDP) and labor productivity growth. Specifically, an improvement in the competition index from the median value for sub-Saharan Africa to the top quartile of the global distribution is associated with an increase in exports by 1.7 percent of GDP and labor productivity growth by about 1 percentage point (Figure 2.7 and Annex Table 2.15). The rise in exports may be attributed to faster productivity growth induced by greater innovation and technological readiness associated with competition, as well as to an improvement in price competitiveness in international markets. Indeed, using the World Economic Forum's innovation and technological readiness indicators, regressions suggest that all else being constant, improving domestic competition is associated with a significant boost in innovation and technological capability (Annex Table 2.16).

Figure 2.7. Sub-Saharan Africa: Competition and Macroeconomic Performance

Source: IMF staff estimates.

Note: Statistics are based on the regressions results reported in Annex Table 2.13 (col. 1), Annex Table 2.15 (cols. 1, 4, and 7), and represent the change in the respective macroeconomic variables for an increase in the World Economic Forum's local competition intensity index from the median for sub-Saharan African countries to the top quartile of the global distribution. ***, ** and * indicate statistical significance at the 1 and 5 percent levels, respectively.

¹⁷ A look at price levels across subregions in sub-Saharan Africa shows that, on average, eastern Africa has the lowest prices for goods, although prices for most services and utilities are not statistically different among regions (Annex Table 2.19). The higher prices in the services sector are consistent with the higher firm markups in the services sector across regions, as noted in Annex Figure 2.3. Moreover, differentiating between sub-Saharan African countries based on their exchange rate regime, the results indicate no statistically significant difference in the price levels of countries within and outside the CFA franc zone for most product categories, except for some nontradable items such as health, communications, and recreation (Annex Table 2.20).

Welfare

How does competition affect welfare? To assess this, internationally comparable price levels—obtained from the World Bank's International Comparison Program—for different items in the consumption basket are analyzed. The results show that after controlling for country-specific macroeconomic and structural characteristics, price levels in sub-Saharan African countries are significantly higher than those in other emerging market and developing economies for most goods and services, including food, clothing, and health services—items that tend to carry a larger weight in the consumption basket of low-income households (Figure 2.8). Prices for intermediate inputs used in production—such as utilities and machinery and equipment—are also significantly higher in the region relative to other emerging market and developing economies. These higher product prices translate on average into a 20 percent higher price level for the individual consumption basket in sub-Saharan Africa compared to other countries at a similar level of development (Annex Table 2.17).¹⁷

Figure 2.8. Sub-Saharan Africa: Price Differentials with Other Country Groups

Sources: IMF staff calculations based on World Bank, International Comparison Program data.

Note: The bars show the average difference in price levels between sub-Saharan Africa and other country groups. ***, ** denote statistically significant differences at 1 and 5 percent levels, respectively. SSA = sub-Saharan Africa.

Increasing competition, however, may help to lower prices as indicated by the strongly negative relationship between the local competition intensity index and prices of most goods and services—thereby improving welfare and the external competitiveness of economies (Annex Table 2.18). Specifically, moving from the median level of the competition index for sub-Saharan Africa to the top quartile of the global distribution is, on average, associated with about an 8 and 14 percent reduction in the prices of food items and health services, respectively, and a 10 percent decline in the price of the overall individual consumption basket (Figure 2.9).

Accounting explicitly for foreign competition by including measures of trade openness and foreign direct investment in the regressions, the results show that greater foreign competition also helps to lower prices. While the domestic and foreign competition indicators explain a large part of the average price differential between sub-Saharan Africa and other emerging market and developing economies, they do not fully account for it—indicating that other macro-structural factors may also play a role in pushing up the price levels across sub-Saharan African countries.¹⁸

Figure 2.9. Sub-Saharan Africa: Impact of Increased Local Competition on Prices

Source: IMF staff calculations, based on data from the World Bank International Comparison Program.

Note: The bars show the effect of an increase in the indicator of local competition intensity from the median in sub-Saharan Africa to the top decile of the world distribution.

FIRM DYNAMICS AND COMPETITION

The country-level results on competition and macroeconomic performance are strongly supported by firm-level evidence, which shows that lower markups are statistically significantly associated with higher firm investment and exports in emerging market economies and developing economies including sub-Saharan Africa. Specifically, using WBES data—and controlling for firm characteristics, as well as country and year-fixed effects—the results show that a 1 percent decline in markups is associated with an increase in investment and exports of about 0.7 percent and 0.2 percent of the firm's value added, respectively (Figure 2.10, panel 1). Notably, the labor share is also significantly associated with firm markups, with a 1 percent decline in markup implying a proportionate increase in the share of output that is remunerated to labor.

Restricting the sample to sub-Saharan African countries portrays a similar picture and indicates a strong negative association between firm markup and investment, exports, and labor shares.¹⁹ Including an additional indicator of competition in the regressions such as the number of competitors faced by the firm, shows that, on average, firms facing fewer competitors have lower exports, labor shares, and investment though the association is statistically significant for exports only.

These observations are reaffirmed with Orbis data, which also captures the time dimension of firm behavior, allowing for a more refined measurement of markups and assessing their impact on productivity growth.²⁰ Controlling for fixed and time-varying firm-, industry-, and country-level characteristics, the results show that a 1 percent decline in markups is associated with a 1–1.4 percent increase in firm's investment to value added ratio and about a 1 percent increase in the share of labor in a firm's output in emerging market and developing economies including in sub-Saharan

¹⁸ While countries in sub-Saharan Africa tend to have large informal markets, including available indicators of the size of the informal market in the estimations (such as the share of firms competing against unregistered/informal firms in the country; or the share of informal employment in total employment) does not alter the results significantly.

¹⁹ The largely cross-sectional nature of the WBES data does not allow testing for the association between firm markup and productivity growth. See online annex for technical details and results (Annex Tables 2.21–2.24).

²⁰ Following De Loecker and Warzynski (2012), the markups based on Orbis data used for the regression analysis are constructed as the log ratio of the output elasticity of inputs to the expenditure share of inputs in sales. See online annex for details.

Figure 2.10. Estimated Impact of Markups on Firm Performance

Source: IMF staff estimates.

Notes: Bars show the estimated impact of a 1 percent decline in firm markups, defined as the log of the ratio of sales to cost in panel 1 and the log of output elasticity to input relative to the expenditure share of the input in sales in panel 2. Emerging market and developing economies include sub-Saharan Africa. WBES = World Bank Enterprise Survey. *** indicates statistical significance at the 1 percent level.

Africa (Figure 2.10, panel 2). Lower markups are also significantly associated with higher labor and total factor productivity growth, with a 1 percent decline in markups implying a 0.8 percentage point increase in the rate of productivity growth.²¹

These findings echo the results of earlier studies, which show—mostly in the context of advanced economies—that firms with higher markups and greater market power tend to have lower investment, productivity growth, and labor shares (Nickell 1996; Autor and others 2017; Gutiérrez and Philippon 2017; IMF 2019a), and do not support the view that stronger competition discourages firm innovation. Moreover, the results suggest that the association between markups and investment, labor share, and productivity growth is nearly twice as strong in the manufacturing sector as in the services sector—implying that weak competition in the manufacturing sector may have a greater impact on economic growth compared to the services sector. Differentiating between firms based on their ownership structure does not show any statistically significant difference in the response of publicly and privately owned firms to markups, but—for a given increase in markups—domestically owned firms have significantly lower investment and labor shares compared to their foreign counterparts.

BOOSTING COMPETITION IN DOMESTIC MARKETS

Given the benefits of competition, how can it be strengthened in sub-Saharan Africa? Several factors are important, most notably enforcement of a strong competition policy framework that encompasses, among other things, product market liberalization, the adoption of an adequate competition law, an independent enforcement body, and competition advocacy. Other policies—notably, trade, fiscal, and structural—that facilitate business activity and reduce barriers to entry also play a critical role in stimulating competition.

Product Market Liberalization

The liberalization of product markets typically includes a transfer of production from state-owned enterprises (SOEs) to private firms, elimination of price controls, and developing regulatory bodies to facilitate private sector activity. Prior to the 1980s, most sub-Saharan African economies were state led, with SOEs largely dominating domestic markets. Product market reforms were initiated as part of a broader set of structural reforms that included trade policy liberalization in the early 1980s, followed by current account and financial liberalization in the 1990s (Figure 2.11). Product market liberalization (notably in three key sectors: telecommunications,

²¹ While labor share in output is positively associated with competition, this does not necessarily imply an increase in unit labor costs due to an improvement in productivity growth, as well as a general decline in price levels.

electricity, and agriculture) followed soon after in the late 1990s and encompassed a shift from public to private ownership, development of independent regulatory bodies, and the elimination (or reduction) of price controls.²²

Existing evidence suggests that such reforms have generally helped to boost productivity and growth in developing economies, including in sub-Saharan Africa (Ostry, Prati, and Spilimbergo 2009; Robinson, Gaertner, and Papageorgiou 2011). The reform momentum, however, appears to have slowed down over the last decade, with SOEs still dominating markets in many sub-Saharan African countries, especially in the utilities and transportation sectors (MGI 2016; Sibiya and others 2018).²³ According to the OECD–World Bank Product Market Regulations database, some sub-Saharan African countries (Kenya, Senegal, South Africa) are among the most restrictive in terms of allowing entry into the network and services sectors. Price controls are also widely prevalent—for instance,

about two-thirds of the sub-Saharan African countries surveyed by the World Bank (2016) reported the existence of regulations that allow for price controls.

Pursuing further product market reforms, especially in the network and services sector, reducing regulatory and structural barriers to firm entry and exit, and improving the overall investment climate could catalyze private sector development and boost competition and growth.²⁴ Although the small size of domestic markets and the large fixed costs associated with some sectors (especially utilities, telecommunications, and transportation) imply that natural monopolies may arise, unbundling the components such that those more amenable to competition are separated and opened for competition could help to improve economic outcomes.²⁵

Competition Policies

An adequate competition policy framework is essential to protect consumer welfare and derive the expected developmental benefits from product market reforms such as deregulation and privatization. Enforcement of a robust competition policy framework comprises the development of antitrust laws, setting up independent and well-functioning institutions, and judicial support. In sub-Saharan Africa, there have been significant advances in the adoption of antitrust laws since the 2000s, with the number of countries with a competition law more than doubling from 12 in 2000 to 31 by 2019 (Annex Figure 2.7).²⁶ In general, these laws are based on those of advanced economies—typically covering merger control, collusive practices, and the abuse of dominance issues—and have been operationalized by setting up competition agencies.

Figure 2.11. Sub-Saharan Africa: Structural Reforms, 1973–2014

Source: Alesina and others, forthcoming.

Notes: Average across 14 countries for which data are available. See online annex for details. Higher values indicate greater liberalization.

²² The structural reforms index is obtained from Alesina and others (forthcoming) and is available for 14 economies in sub-Saharan Africa: Burkina Faso, Cameroon, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Madagascar, Mozambique, Nigeria, Senegal, South Africa, Tanzania, Uganda, and Zimbabwe. See online annex for details.

²³ The slowdown in the product market reform momentum is evident from the limited improvement in the overall competition indicator, as noted in Figure 2.1.

²⁴ Further reforms in the network sector could, for example, include liberalizing the telecommunications and wholesale electricity markets and fully unbundling electricity generation, transmission, and distribution. Some electricity unbundling reforms have already been introduced in Ethiopia, Ghana, Kenya, and Nigeria.

²⁵ For example, in the electricity sector, transmission and distribution tend to be the noncompetitive components, but generation and retailing are considered to be more amenable to competition (OECD 2001). Studies show that when such reforms induce competition, industry performance is significantly improved (Zhang, Parker, and Kirkpatrick 2008).

²⁶ These statistics are based on an IMF desk survey of competition authorities in member countries in the region.

Despite this progress in the adoption of competition laws and the establishment of competition agencies, notable improvements in domestic market competition have not been witnessed in most countries, as noted previously. One reason for this disconnect is that well-functioning antitrust frameworks require not only a sound legal setup, but also independent regulatory bodies, adequate financial resources, and suitably qualified staff to pursue anticompetition investigations. Viewed against these benchmarks, antitrust frameworks in the region present a mixed picture. According to World Bank (2016), about one-third of the countries in the region with a competition law have competition agencies that fall under the purview of another government body, potentially undermining their independence. The financial resources allocated to competition agencies are often limited, with few reporting any self-financing from penalties.²⁷ The availability of technical staff also varies—while the Competition Commission of South Africa (CCSA) has more than 130 technical staff, about one-third of the surveyed countries reported employing fewer than 10 staff members. On average, agencies in the region report investigating two cases a year, with the clear exception of Kenya and South Africa, which investigate about 500 cases a year.²⁸

The variation in the competition policy frameworks in the region is reflected in the perception-based indicators of the effectiveness of antitrust enforcement. For example, based on the World Economic Forum's effectiveness of anti-monopoly policy index, Kenya and South Africa are among the best performers in the region, while oil exporters lag behind. It is also striking that in the region's oil exporters, the perceived effectiveness of antitrust frameworks has declined during the last decade, highlighting the need for persistent efforts to maintain a robust antitrust

framework (Figure 2.12).²⁹ More generally, adopting a competition law is not a panacea, and proper enforcement of the law needs to be ensured to foster private investment and enterprise development.

In enforcing competition laws, the regional dimension is also becoming increasingly important. The small size of domestic markets in most sub-Saharan African countries implies that large firms may operate in multiple jurisdictions to reap economies of scale, or a few large firms across countries may form cartels to limit foreign competition in their jurisdictions and exploit consumers. A case in point is that of the cement industry, where nine regional firms produce more than 50 percent of the cement, and anticompetitive practices have regional dimensions (World Bank 2016).³⁰ Limiting such regional anticompetitive behavior requires cross-country cooperation. Some agencies have initiated bilateral cooperation, including informal information sharing and signing memoranda of understanding, such as between Kenya and South Africa and among Malawi, Tanzania, and Zambia (World Bank 2016). In addition, supranational competition authorities for blocs like the Common Market for Eastern and

Figure 2.12. Sub-Saharan Africa: Anti-Monopoly Enforcement

Source: World Economic Forum.

Note: Index ranges from 1 to 7, with higher values indicating more comprehensive anti-monopoly policy enforcement.

²⁷ Both World Bank (2016) and the IMF country desk survey conducted for this chapter show that there is a significant variation in the annual budgets of competition agencies in sub-Saharan Africa, ranging from less than 0.001 percent of GDP to 0.06 percent of GDP. In 2017–18, the CCSA had the largest budget, of \$22 million in nominal terms (0.01 percent of GDP), followed by Kenya (\$6 million). Relative to its economic size, Seychelles Fair Trading Commission had the largest budget.

²⁸ The CCSA is the most active antitrust authority in the region. In 2017–18 alone, it prohibited 12 mergers, levied about 0.01 percent of GDP in penalties, and finalized 193 enforcement cases (see CCSA *Annual Report 2017–18*). The increase in markups and market concentration in South Africa, however, suggests that more needs to be done to stimulate competition and check anticompetitive practices.

²⁹ In some cases, the reversals correspond to the onset of conflict, which weakened the general institutional and fiscal capacity in the affected countries.

³⁰ The CCSA investigated and fined the four largest cement producers in 2008 for colluding to segment markets across countries (See CCSA *Annual Report 2009–10*).

Southern Africa (COMESA) and the West African Economic and Monetary Union (WAEMU) have started operating regional merger control regimes, facilitating investigative actions at a regional level. Nevertheless, further regional cooperation remains necessary to tackle the growing challenges from pan-regional monopolies and cartels, especially in view of greater expected trade and investment flows in the context of the African Continental Free Trade Agreement (AfCFTA).

Other Policies

Competition policies are important but may not be enough to increase competition without complementary macroeconomic policies—notably, trade, foreign investment, and fiscal policies. In the context of sub-Saharan Africa, several studies show that trade barriers—both tariff and nontariff—hurt overall competition and competitiveness (World Bank 2012; Cadot and others 2015). The analysis conducted for this chapter supports these findings and shows that a reduction in tariff and nontariff barriers is indeed associated with significantly lower firm markups. Specifically, trade reforms that lower tariffs can lower markups by about 4.5 percent during the five years after the reform (see Box 2.1).

The AfCFTA, which aims to boost regional trade and economic integration, is thus likely to help improve economic competition across the region. The agreement envisions the elimination of tariffs on most goods, the liberalization of the trade of key services, and the reduction of nontariff obstacles to international trade—reforms that are expected to stimulate trade and growth in the region (IMF 2019b). In pursuing regional integration, however, the mutually reinforcing relationship among trade, investment, and competition policies should be considered: trade and investment liberalization stimulate competition, but an effective competition policy framework is needed to ensure that gains from foreign competition are realized and markets are not taken over by a few large firms engaging in unfair trading practices.

The level of competition is also influenced by government interventions and fiscal policies. For example, preferential tax treatment to selected firms through discriminatory policies or the selective implementation of policies can impede competition by creating an uneven playing field. Public procurement policies that benefit certain firms—whether state or privately owned—can also hurt competition and entrench the dominant position of large firms.³¹ Moreover, inefficient customs administrations can adversely impact trade and foreign competition. Fiscal policies and public procurement systems thus need to be carefully designed, and customs administration systems need to be strengthened and modernized so as not to undermine competition. In cases where certain firms or sectors need to be subsidized for the provision of a public good, the costs and benefits of the incentives should be clearly analyzed.

CONCLUSIONS

Product market competition in sub-Saharan Africa is low relative to the rest of the world. Country-level data suggest that more than 70 percent of countries in the region are below the median in terms of the global distribution of competition indicators. Firm markups—directly calculated using enterprise data—corroborate the macro-level observations and suggest that, on average, markups in sub-Saharan African countries are higher than in other emerging market and developing economies, especially in the services sectors. A comparison of the price levels of internationally comparable products and services indicates that prices in the region are relatively higher than in other regions at a similar level of development, which can at least partly be attributed to low product market competition.

Empirical analysis suggests that an increase in competition can help to improve economic growth and welfare through increased productivity and export competitiveness, and lower consumer prices. These findings are supported by firm-level evidence, which shows that market structure affects firms' behavior and performance, ultimately shaping

³¹ Collusive practices can infiltrate public procurement systems even if the process does not deliberately favor certain undertakings. In 2012, for example, the Zambian Competition and Consumer Protection Commission investigated irregularities in bids for a government subsidy program, alleging that two firms divided their bids to avoid competing against each other (World Bank 2016). Based on the investigations, the commission levied sanctions and the government broadened the tender process. This case illustrates the need for competition authorities to work closely with public procurement agencies to make procurement processes competition-friendly and to remain vigilant of platforms allowing competitor contact.

macroeconomic outcomes. Specifically, a decline in markups is significantly associated with an increase in firm investment, exports, productivity growth, and labor's share in output. These effects are more pronounced in the manufacturing sector relative to services and tend to be stronger for domestic firms relative to foreign-owned firms.

The analysis in this chapter reinforces the need to strengthen product market competition in sub-Saharan Africa. Although product market reforms were undertaken in several countries in the region in the late 1990s and early 2000s that helped to boost competition and conferred growth gains, the reform momentum has stalled in recent years. Thus, despite the almost three-fold increase in the number of countries that have enacted competition laws since 2000, progress on the ground remains limited.

As several factors affect competition, a holistic approach that encompasses the following key elements is needed to stimulate competition in the region:

- Product market reforms that reduce structural and regulatory barriers to private sector participation in the goods and services markets and improve the ease of doing business.
- An effective competition policy framework, which includes an adequate competition law along with an independent, adequately funded, and staffed enforcement agency.

- Complementary trade and foreign direct investment policies that bolster foreign competition and improve access to intermediate inputs.
- Carefully designed fiscal policies and procurement systems that do not distort competition by benefiting a few market players.

Although these policies are individually important, they tend to be mutually reinforcing. For example, trade and investment liberalization help to stimulate competition, but an effective competition policy framework is essential to ensure that gains from foreign competition are realized and a few large firms do not dominate the markets using unfair trading practices. In the same vein, development policies aimed at the advancement of certain sectors deemed as essential to boosting productivity and growth should not give way to a decline in competition and increase in corporate market power, which could impose costs on the rest of the economy and offset the potential effects of the original policies.

More generally, countries need to maintain a stable and sound macroeconomic and institutional environment to attract private investment and ensure that policies to stimulate competition have traction. Furthermore, in the current context of increasing regional trade and integration, cooperation among national competition authorities needs to be strengthened to tackle any anticompetitive practices of large pan-regional firms.

Box 2.1. Firm Markups and Trade Liberalization

Trade liberalization affects the competitive environment in which domestic firms operate in several ways—including by exposing them to direct competition from foreign goods and services; facilitating access to intermediate inputs; and increasing access to global markets. Existing research documents that trade liberalization has significant effects on firm behavior and performance through an increase in competition. Notably, trade liberalization stimulates firm innovation, productivity, and efficiency, while helping to lower product prices and firm costs, thereby affecting firm markups (Saggay, Heshmati, and Dhif 2007; Mazumder 2014; Edmond, Midrigan, and Xu 2015; De Loecker and others 2016). Trade liberalization is, thus, usually a major element of product market and competition reforms.

The analysis of firm-level data indicates that lowering trade barriers—both tariff and nontariff—in emerging market and developing economies indeed affects firm behavior and helps to limit markups and corporate market power in domestic markets. Specifically, a reform of trade tariffs, captured using the mean tariff score obtained from the Fraser Institute database, results in a cumulative reduction in markups of about 4.5 percent over a five-year period after the reform is implemented (Figure 2.1.1).¹ Lowering tariffs in the services sector appears to have a much stronger effect on markups than in the manufacturing sector, perhaps because product differentiation is less pronounced in the services sector. These results are robust to considering alternative measures of import openness, such as sectoral tariff rates and the overall import-to-GDP ratio.

Among other factors, stronger institutional quality and better transport infrastructure are, on average, associated with significantly lower markups, suggesting that these factors tend to boost competition possibly by stimulating investment and business activity. Higher economic policy uncertainty also lowers markups, perhaps by depressing economic activity and the prices of goods and services.

**Figure 2.1.1. Emerging market and developing economies:
Cumulative Effect of Tariff Reform on Markups**

Source: IMF staff estimates based on Orbis data.

Note: Bars show the cumulative effect on markups. *** indicates statistical significance at the 1 percent level.

This box was prepared by Yuanchen Yang.

¹ A reform episode is defined as a change in the indicator of at least one standard deviation that is not followed by a reversal in the following years.

REFERENCES

- Aghion, P., M. Braun and J. Fedderke, 2008. "Competition and Productivity Growth in South Africa." *Economics of Transition*, 16: 741–68.
- Aghion, P., and R. Griffith, 2005. *Competition and Growth: Reconciling Theory and Evidence*. Cambridge, MA: MIT Press.
- Alesina, A., D. Furceri, J. Ostry, C. Papageorgiou, and D. Quinn. Forthcoming. "The Impact of Structural Reforms on Electoral Outcomes: Using a New Database of Regulatory Stances and Major Policy Changes," IMF Working Paper, International Monetary Fund, Washington, DC.
- Autor, D., D. Dorn, L. Katz, C. Patterson, and J. Van Reenen. 2017. "Concentrating on the Fall of the Labor Share." *American Economic Review* 107(5): 180–85.
- Begazo, T., and S. Nyman. 2016. *Competition and Poverty*. View Point Note No. 350. Washington, DC: World Bank Group.
- Cadot, O., A. Asprilla, J. Gourdon, C. Knebel, and R. Peters. 2015. *Deep Regional Integration and Non-Tariff Measures: A Methodology for Data Analysis*. Policy Issues in International Trade and Commodities Research Study Series No. 69. Geneva: UNCTAD.
- Caselli, F., and J. Feyrer. 2007. "The Marginal Product of Capital," *The Quarterly Journal of Economics*, 122(2): 535–568.
- Competition Commission of South Africa. 2018. *Annual Report 2017–18*. Johannesburg.
- . 2010. *Annual Report 2009–10*. Johannesburg.
- De Loecker, J., and F. Warzynski. 2012. "Markups and Firm-Level Export Status," *American Economic Review*, 102(6): 2437–71.
- De Loecker, J., P. Goldberg, A. Khandelwal, and N. Pavcnik. 2016. "Prices, Markups and Trade Reform." *Econometrica*, 84(2): 445–510.
- De Loecker, J., and J. Eeckhout. 2018. "Global Market Power." NBER Working Paper 24768, National Bureau of Economic Research, Cambridge, MA.
- De Loecker, J., J. Eeckhout, and G. Unger. 2018. "The Rise of Market Power and the Macroeconomic Implications," NBER Working Paper 24768, National Bureau of Economic Research, Cambridge, MA.
- Dutz, M., and A. Hayri. 1999. "Does More Intense Competition Lead to Higher Growth?" CEPR Discussion Paper 2249, Centre for Economic Policy Research, London.
- Edmond, C., V. Midrigan, and D. Xu. 2015. "Markups, and the Gains from International Trade." *American Economic Review* 105(10): 3183–221.
- Fedderke, J., N. Obikili, and N. Vieg. 2018. "Markups and Concentration in South African Manufacturing Sectors: An Analysis with Administrative Data." *South African Journal of Economics* 86(S1): 120–40.
- Goodwin, T., and M. Pierola Castro. 2015. *Export Competitiveness: Why Domestic Market Competition Matters*. View Point Note 348. Washington, DC: World Bank Group.
- Gutiérrez, G., and T. Philippon. 2017. "Declining Competition and Investment in the U.S." NBER Working Paper No. 23583, National Bureau of Economic Research, Cambridge, MA.
- International Monetary Fund (IMF). 2019a. "The Rise of Corporate Market Power and Its Macroeconomic Effects." *World Economic Outlook*, Washington, DC, April.
- . 2019b. *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, April.
- . 2019. "Online Annex—Competition, Competitiveness, and Growth in sub-Saharan Africa" Background Paper: <https://www.imf.org/-/media/Files/Publications/REO/AFR/2019/October/English/backgroundpapers.ashx?la=en>
- Lerner, A. 1934. "The Concept of Monopoly and the Measurement of Monopoly Power." *Review of Economic Studies*, 1: 157–75.
- McKinsey Global Institute (MGI). 2016. *Lions on the Move II: Realizing the Potential of Africa's Economies*. New York.
- Mazumder, S. 2014. "The Price-Marginal Cost Markup and Its Determinants in U.S. Manufacturing." *Macroeconomic Dynamics* 18: 783–811.
- Nickell, S. 1996. "Competition and Corporate Performance," *Journal of Political Economy*, 104(4): 724–746.
- Organisation for Economic Co-operation and Development (OECD). 2001. *Restructuring Public Utilities for Competition*. Paris.
- . 2014. *Factsheet on How Competition Policy Affects Macroeconomic Outcomes*. Paris.
- Ostry, J., A. Prati, and A. Spilimbergo. 2009. "Structural Reforms and Economic Performance in Advanced and Developing Countries." IMF Occasional Paper 268, International Monetary Fund, Washington, DC.
- Rajan, R., and L. Zingales. 2004. *Saving Capitalism from the Capitalists: Unleashing the Power of Financial Markets to Create Wealth and Spread Opportunity*. Princeton: Princeton University Press.

- Robinson, D., M. Gaertner, and C. Papageorgiou. 2011. "Tanzania: Growth Acceleration and Increased Public Spending with Macroeconomic Stability." In *Yes Africa Can: Success Stories from a Dynamic Continent*, edited by P. Chuhan-Pole and M. Angwafo, Washington, DC: World Bank Group.
- Saggay, A., A. Heshmati, and M. Dhif. 2007. "Effects of Trade Liberalization on Domestic prices Some Evidence from Tunisian Manufacturing." *International Review of Economics* 54: 148–75.
- Schumpeter, J. 1942. *Capitalism, Socialism and Democracy*. New York: Harper & Brothers.
- Sibiya, T., P. Brishimov, M. Saunders, and B. Marais. 2018. *A Private Path to Power in Africa*. Chicago: ATKearney.
- Smith, A. 1776. *An Inquiry into the Nature and Causes of The Wealth of Nations*. London: William Strahan and Thomas Cadell.
- United Nations Conference on Trade and Development (UNCTAD). 2004. *Competition, Competitiveness and Development: Lessons from Developing Countries*, New York.
- World Bank. 2012. *Africa Can Help Feed Africa: Removing Barriers to Regional Trade in Food Staples*, Washington, DC.
- . 2016. *Breaking Down Barriers, Unlocking Africa's Potential through Vigorous Competition Policy*. Washington, DC.
- Zhang, Y., D. Parker, and C. Kirkpatrick. 2008. "Electricity Sector Reform in Developing Countries: An Econometric Assessment of the Effects of Privatization, Competition and Regulation." *Journal of Regulatory Economics*, 33(2): 159–78.

This page intentionally left blank

3. Domestic Arrears in Sub-Saharan Africa: Causes, Symptoms, and Cures

Domestic arrears, a form of forced financing prevalent in many sub-Saharan African countries, have increased in recent years.¹ As such, they have become a key economic policy challenge, whether for the clearance of the existing stock or for the prevention of new arrears.

Despite the prevalence of arrears, their causes, effects, and consequences are not well understood. The literature on domestic arrears is limited, presumably reflecting a lack of reliable and comparable data (Box 3.1). Therefore, their true scale and cost may be hidden, and little operational guidance exists as to the best approach to arrears clearance. Studies often attribute arrears accumulation to weak public financial management (PFM) systems and lack of political commitment to agreed financial policies (Khemani and Radev 2009; Pattanayak 2016).²

Although a limited amount of arrears accumulation is therefore to be expected in countries with weak PFM systems, their extent and frequency suggest that the causes transcend this weakness. They are thus best examined in a broad macroeconomic context, including to shed light on the role of shocks—such as commodity price declines, political instability, and abrupt tightening of financial conditions—in generating arrears, and the extent to which arrears undermine the effectiveness of fiscal policy.

The new arrears data set specially compiled for this chapter shows that the impact of domestic arrears accumulation is multifaceted and can be substantive. It weakens private sector performance, heightens vulnerabilities in banks, increases procurement costs incurred by governments, and results in poor public service delivery to citizens. In addition, past accumulation of unrecorded arrears could raise

the burden of debt, adding to vulnerabilities in countries with limited or no fiscal space.

This chapter sheds light on key aspects of domestic arrears accumulation in sub-Saharan Africa. It investigates the causes of domestic arrears and the different channels through which they affect the economy, followed by a discussion of principles for arrears clearance and prevention. Its main findings are the following:

- Domestic expenditure arrears are pervasive in sub-Saharan Africa and often sizeable. They have increased recently, mainly in commodity-exporting countries and are largely owed to private sector firms. Monitoring of arrears accumulation is generally weak, and many countries have unrecorded arrears, which can be an important source of contingent liabilities and sudden increases in debt burden.
- Domestic arrears accumulation reflects weak fiscal and budgetary institutions, particularly weak PFM systems. In addition, arrears can emerge following large fiscal shocks that may otherwise be difficult to absorb. The impact of fiscal shocks on arrears is larger for countries with weak PFM (when PFM systems are weak arrears accumulate faster in bad times) and countries under a fixed exchange rate regime.
- Domestic arrears can have multifaceted effects on the economy. They are damaging to the private sector and lead to stress on the banking sector, with negative ramifications for growth. They undermine trust in government and the effectiveness of fiscal policy. In particular, the fiscal multiplier declines when spending is mostly financed through arrears and can turn negative when the private sector faces

This chapter was prepared by a team coordinated by Samuel Delepierre, Alexander Massara, and David Stenzel, composed of Moez Ben Hassine, Krisztina Fabo, Hoda Selim, and Martha Woldemichael, with input from Jean Portier and Samuele Rosa and research assistance from Yanki Kalfa, under the supervision of Said Bakhache and Catriona Purfield.

¹ In this chapter, domestic arrears are overdue payments on financial obligations from primary spending.

² Other studies developed theoretical models or frameworks to assess the implications of arrears accumulation (Ramos 1998; Diamond and Schiller 1987). The few existing empirical assessments of the macroeconomic effects of arrears accumulation are based on European countries (Checherita-Westphal, Klemm, and Viefers 2015; Connell 2014).

high liquidity constraints, and in cases where there are long delays in clearing arrears.

- Addressing the domestic arrears problem requires specific actions for their clearance. A clearance strategy should be consistent with maintaining macroeconomic stability, anchored on inclusive growth, and implemented transparently. If repayments must be rescheduled, priority should be given to payments that maximize the impact on growth and have a positive distributional effect.
- Prevention of arrears accumulation entails efforts to strengthen fiscal institutions, including PFM systems, and to build buffers. In addition, in the event of sizable exogenous shocks, the availability of external financing can help prevent the accumulation of domestic arrears. Finally, as fiscal institutions improve, countries should put in place mechanisms to monitor arrears and avoid further accumulation.

THE SIZE, COMPOSITION, AND EVOLUTION OF DOMESTIC ARREARS IN SUB-SAHARAN AFRICA

Fact 1: Most sub-Saharan African countries incur arrears.

Many sub-Saharan African countries officially report domestic arrears (Figures 3.1 and 3.2). At the end of 2018, 24 out of 30 countries for which

Figure 3.1. Sub-Saharan Africa: Share of Countries with Recorded Domestic Arrears, 2018

Source: IMF staff calculations.

³ See Annex 3.1. for definitions and data.

⁴ PEFA reports assess the PFM performance of a country by providing evidence-based scores for a range of indicators, including the monitoring and stock of expenditure arrears.

data are available had arrears.³ Among those, the average stock of arrears was 3.3 percent of GDP, with a maximum of 18 percent of GDP (Republic of Congo). Domestic arrears are particularly high in oil exporters (about 8.5 percent of GDP), countries with a fixed exchange rate regime (4.4 percent), and fragile states (4.1 percent). In addition, countries with a higher level of public debt and a weaker Debt Sustainability Analysis (DSA) risk rating tend to have more arrears (Figure 3.3). While the presence of arrears is not unique to sub-Saharan African countries, low scores for the stock of domestic arrears in public expenditure and financial accountability (PEFA) assessments⁴—which are regularly conducted in many sub-Saharan African countries—further corroborate the prevalence of arrears (Figure 3.4).

Fact 2: “Unrecognized” arrears are widespread.

Aside from officially reported arrears, countries also may have a stock of “unrecognized” arrears that is not officially recorded. Unrecognized arrears can be either potential claims awaiting an audit or arrears that exist but have yet to be recorded by the fiscal authorities. They can also take the form of unpaid commitments to utilities or social security funds. They increase a country’s debt stock significantly once they are verified, which can suddenly add to debt vulnerabilities.

Figure 3.2. Sub-Saharan Africa: Stock of Domestic Arrears by Country Group, 2018

Source: IMF staff calculations.

Note: Sub-Saharan Africa group includes 29 observations. Median group includes 30 observations. Oil exporters group includes 8 observations. Fixed exchange rate regime group includes 21 observations. Fragile states group includes 18 observations. Oil importers group includes 37 observations. SSA = sub-Saharan Africa. See page 60 for country groupings table.

Figure 3.3. Sub-Saharan Africa: Level of Stock of Domestic Arrears and Debt Sustainability Analysis Rating, 2017

Source: IMF staff calculations.

Note: The Republic of Congo is driving the difference between the average and the median. Number of observations is provided in parentheses.

Unrecognized arrears can emerge because of unrealistic budgeting, weak commitment controls, inability to monitor spending by institutions outside the central government (for example, local governments, state-owned enterprises (SOEs)) without adequate funding and financial oversight, or noncompliance with rules and regulations. In most countries, there is, by definition, little information to provide a precise estimate of their size. The new data set (Box 3.1) indicates that (1) more than half of sub-Saharan African countries have conducted verification exercises since 2005

Figure 3.4. PEFA Scores for Domestic Arrears Stock
(Higher score indicates lower stock of arrears)

Sources: PEFA 2016 methodology; and IMF staff calculations.

Note: PEFA = public expenditure and financial accountability. Average scores are computed by region: Sub-Saharan Africa (16 countries); Middle East & North Africa (3 countries); Asia & Pacific (5 countries); Latin America & Caribbean (4 countries); Europe & Central Asia (4 countries). A country scores 1 if the stock of expenditure arrears is no more than 2 percent of total expenditure in at least two of the last three completed fiscal years, scores 2 if it is between 2 and 6 percent, scores 3 if it is between 6 and 10 percent and scores 4 if it is above 10 percent.

⁵ The assessment is based on the survey.

Figure 3.5. Sub-Saharan Africa: Share of Countries with Unrecorded Domestic Arrears, 2018

Source: IMF staff calculations.

to assess whether there are legitimate unrecorded arrears, (2) more than half of sub-Saharan African countries currently have unverified arrears (Figure 3.5); and (3) while unrecognized arrears were estimated to be up to 2 percent of GDP at the end of 2018, a few countries are likely to have accumulated a much larger stock.

Fact 3: Domestic arrears have increased since 2012.

After declining steadily in the late 2000s, the average stock of arrears has increased recently and peaked at about 4 percent of GDP in 2016 (Figure 3.6). While oil importers, such as Ghana and Guinea-Bissau, have seen a decline in domestic arrears over the last five years, oil exporters have experienced a significant spike (Figure 3.6), reflecting the sizable drop in oil prices in 2014–15. This finding is supported by a text-mining analysis of IMF staff reports. The use of domestic-arrears-related terms increased after 2013, reaching record levels in 2016 and 2017. The discussion of domestic arrears surged particularly in staff reports for oil-exporting countries (Figure 3.7). This suggests that the topic received greater attention during this period.

Fact 4: Arrears to private suppliers of goods and services are the most common

At the end of 2018, most countries owed arrears to private sector suppliers.⁵ Arrears to SOEs are also relatively frequent; only a few countries report arrears to government employees (Figure 3.8, panels 1 and 2). This is mirrored in arrears data

Figure 3.6. Sub-Saharan Africa: Stock of Domestic Arrears, 2005–17

Source: IMF staff calculations.

Note: Results hold after controlling for the change in the sample across time (in 2005, data are available for 19 countries and for 30 countries in 2018).

Figure 3.7. Sub-Saharan Africa: Frequency of Domestic Arrears-Related Terms in IMF Staff Reports, 2005–17

Source: IMF staff calculations.

Note: Domestic arrears-related terms per 1,000 words.

broken down by spending categories. Arrears most often accumulate on spending for goods and services (53 percent of all sub-Saharan countries), transfers (31 percent), investments (24 percent), and lastly, wages and salaries. Due to their socioeconomic impact, wage arrears are rare and occur mainly in the context of severe political instability (Central African Republic) or large terms-of-trade shocks (Republic of Congo).

Fact 5: Countries in sub-Saharan Africa have included conditionality related to domestic arrears in two-thirds of their IMF-supported programs.

The extent of domestic arrears conditionality in IMF arrangements provides further evidence of widespread domestic arrears accumulation. Since 2002, more than two-thirds of IMF arrangements in sub-Saharan Africa include conditionality related to domestic arrears (Figure 3.9).⁶ In more than half of the programs in the region, conditionality often took the form of quantitative targets, either to prevent arrears accumulation, maintain it below a certain level, or reduce the stock of arrears. Structural conditionality occurred somewhat less frequently and largely focused on audits of domestic arrears or specific measures to better monitor or prevent arrears accumulation.

Figure 3.8. Sub-Saharan Africa: Domestic Arrears Breakdown, Number of Countries

Source: Survey of IMF African Department desk economists.

Note: SOE = state-owned enterprise.

⁶ Of a total of 111 IMF arrangements with 36 different sub-Saharan African countries since 2002, 78 arrangements included domestic-arrears-related conditionality.

Figure 3.9. Sub-Saharan Africa: Domestic Arrears Related Conditionality in IMF Arrangements, 2002–18

Sources: IMF, Monitoring of Fund Arrangements database; and IMF staff calculations.

CAUSES OF DOMESTIC ARREARS ACCUMULATION

Countries have accumulated expenditure arrears due to both structural and cyclical factors (Figure 3.10). The former primarily includes weak fiscal and PFM institutions, which underpin arrears accumulation in nearly every case. Cyclical factors including shocks, which amplify weakness in PFM systems, are those that adversely impact government resources and lead to funding shortages, or that exert spending pressures. They can include economic downturns, commodity price shocks, tightening of external financing conditions, natural disasters, and internal shocks such as conflict and political instability.

Structural Causes of Arrears Accumulation

Arrears accumulation can be the result of weaknesses at various stages of the expenditure cycle. The formulation of unrealistic budgets, a lack of commitment controls, poor cash management, delays in processing payments, deliberate deferral of payments, or inadequate sanctions for noncompliance could all result in arrears accumulation.⁷ This is broadly confirmed by the association between the stock of domestic arrears and fiscal governance indicators. For example, the stock of arrears is negatively correlated with indicators that measure revenue and expenditure outturns compared to initial projections, the effectiveness of spending controls, and liquidity management (Figures 3.11). The

Figure 3.10. Sub-Saharan Africa: Causes of Domestic Arrears Accumulation

Source: Survey of IMF African Department desk economists.

Note: 0 = not significant and 5 = highly significant.

stock of arrears is positively correlated with the level of public debt and the long-term volatility of fiscal deficits (Figure 3.12), again suggesting that weak fiscal discipline is an important driver of arrears accumulation.

Cyclical Causes of Arrears Accumulation

Although weak fiscal institutions are a root cause of domestic arrears accumulation, high levels of arrears are generally driven by difficult-to-absorb large shocks. Shocks can have various triggers—for example, an economic recession or slowdown, a fall in commodity prices, internal (political, security) instability, a public health crisis, or natural disasters. A government can react to the resulting revenue decline by raising noncommodity revenues and/or cutting spending. When the adjustment is too large and unfeasible, and when more financing (including from donors) is unavailable, resorting to “forced borrowing” by accumulating arrears to close the remaining financing gap may be an inevitable outcome. In addition, institutional disruption (notably in the case of conflict) can undermine the government’s ability to honor its financial obligations on time.

Large fiscal shocks are a leading indicator of substantial arrears accumulation. For example, the five oil exporters of the Central African Economic and Monetary Community (CEMAC)—Cameroon, Chad, Equatorial Guinea, Gabon, and Republic of Congo—had to cope with significantly lower fiscal revenues following the dramatic oil price decline in 2014–15. Similarly, Lesotho experienced a sudden drop in Southern African Customs Union revenues in 2016, which

⁷ For a comprehensive discussion on the relationship between weak PFM systems and arrears, see Flynn and Pessoa (2014).

Figure 3.11. Sub-Saharan Africa: Selected Governance Indicators and Stock of Domestic Arrears, 2005–18

Source: IMF staff calculations.

Note: PEFA = public expenditure and financial accountability; PFM = public financial management. Public expenditure and financial accountability alphabetic scores converted into numerical values.

¹ Simple average of Worldwide Governance Indicators covering 2005–17.

² Simple average of the six public financial management categories using the public expenditure and financial accountability 2011 classification.

Figure 3.12. Sub-Saharan Africa: Selected Fiscal Variables and Stock of Domestic Arrears, 2005–18

Source: IMF staff calculations.

represented about one-third of total government revenues. In these cases, fiscal adjustment and the drawdown on buffers could not prevent an accumulation of arrears following the shock (Figure 3.13). In cases such as Liberia in the early 2000s and the Central African Republic in 2013, severe political instability and conflict resulted in a stock of arrears well above 5 percent of GDP.

Empirical analysis seems to confirm that expenditure arrears accumulate following fiscal shocks and that some country characteristics can exacerbate the impact (Figure 3.14).⁸ There is evidence that:

- Lower growth, a decline in the commodity terms of trade, and political instability are associated with a larger stock of domestic arrears. A one standard deviation decline in GDP growth, the commodity terms of trade, and an indicator of political stability and violence⁹ results in a 0.9, 0.6, and 1 percentage point increase in the domestic arrears to GDP ratio, respectively.
- Using an alternative measure of oil shocks¹⁰ seems to yield a larger increase in domestic arrears in countries under fixed exchange rate regimes. A one standard deviation decline in the share of oil GDP in total GDP in countries

⁸ IMF staff used a cross-country panel regression model with country and year fixed effects on 45 countries during the period 2005–18. See annexes 3.1 and 3.3 for details on the data sources and specifications.

⁹ From the Worldwide Governance Indicators.

¹⁰ Notwithstanding some endogeneity problems, IMF staff used the fall in the share of oil GDP in total GDP as a proxy of oil shocks.

Figure 3.13. Accumulation of Domestic Arrears Following Fiscal Shocks

Source: IMF staff calculations.

Note: CEMAC = Central African Economic and Monetary Community; SACU = South Africa Customs Union.

with fixed exchange rate regimes is associated with a 4.3 percentage point increase in the domestic-arrears-to-GDP ratio. Similarly, the impact of oil shocks tends to be larger on the stock of domestic arrears in countries with weak governance. A one standard deviation decline in the share of oil GDP in total GDP results in a 3.2 (1.2) percentage point increase in the domestic-arrears-to-GDP ratio for countries with weak (good) governance.

In addition, the election cycle could also be a determinant of arrears accumulation. Evidence suggests that fiscal deficits are higher in election

Figure 3.14. Causes of Domestic Arrears Accumulation Regression Output

Source: IMF staff calculations.

Note: Dependent variable is the stock of domestic arrears in percent of GDP. Coefficients show the effect of a one standard deviation increase in lagged GDP growth, lagged commodity terms of trade, political stability and absence of violence on the stock of domestic arrears. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent level, respectively.

¹ Worldwide Governance Indicators.

years, with pressure coming from consumption spending, which could trigger arrears accumulation in the absence of strong fiscal controls.¹¹ Data show that some countries in sub-Saharan Africa undergoing either presidential or parliamentary elections tend to experience a small spike in arrears.¹²

These findings suggest that the causes of significant arrears accumulation go beyond weak PFM systems. Macroeconomic factors are also key determinants. For example, under a fixed exchange rate regime, negative external shocks, such as a commodity price shock, cannot be softened by exchange rate depreciation. The burden of adjustment rests exclusively on fiscal policy, making arrears accumulation more likely, particularly in countries with limited fiscal space and weak PFM. Fiscal space and the existence of fiscal buffers help cushion a shock, as a higher deficit could be financed either by drawing on financial assets or new debt issuance.

SYMPTOMS: MACROECONOMIC EFFECTS OF DOMESTIC PAYMENT ARREARS

A large and/or persistent accumulation of expenditure arrears has an adverse impact on the real, financial, and social sectors through multiple channels (Figure 3.15).¹³

¹¹ Ebeke and Ölcner (2013).¹² Because the source data are reported annually, they do not capture arrears that accumulate and are cleared within the year.¹³ Some of these transmission channels can be found in Diamond and Schiller (1987) and Flynn and Pessoa (2014).

Arrears can affect private sector activity and growth outcomes. By providing the government with discretionary and nontransparent financing, arrears enable a government to divert resources from the private sector and SOEs, which become more cash constrained. This leads to lower corporate profits and household income, possible bankruptcies, and eventually lower aggregate demand that would result in higher unemployment and lower growth.

Arrears can raise financial sector vulnerabilities. To the extent that arrears prevent private companies, households, and SOEs from adequately servicing their loans, the banking sector could suffer a deterioration in the quality of its assets and see a rise in nonperforming loans (NPLs). This could weigh on the supply of credit and result in lower investment, ultimately feeding back into fiscal revenue shortfalls and weakened economic activity. The intensity of these indirect linkages will depend on the initial soundness of the financial sector, as well as the size and pace of arrears accumulation.

Persistent arrears can result in weaker social outcomes. Arrears can undermine trust in the government's fiscal position if government suppliers or SOEs anticipate payment delays. This may lead agents to withhold their tax payments until claims are settled, charge higher prices to compensate for late payments, and/or delay the supply of inputs for government projects, especially if they are financially constrained. Agents may also resort to informal payments to speed up the settlement process (Diamond and Schiller 1987; Garamfalvi 1997), which can result in corruption. These additional expenses lead to higher public procurement costs, undermining public service delivery (Flynn and Pessoa 2014) and weakening social outcomes.

Persistent arrears can create second-round fiscal costs. A vicious circle can set in if the negative direct effects of arrears reinforce each other, leading to even weaker economic activity and heightened fiscal stress, which can contribute to even higher financing gaps.

Figure 3.15. Transmission Channels of Domestic Arrears Buildup to the Economy

Source: IMF staff.

Note: NPL = nonperforming loan; SOE = state-owned enterprise.

Regression analysis, which should be interpreted with caution given the limitations on arrears data, confirms the adverse effects of domestic arrears buildup on the economy, with poor government payment discipline hampering growth and the activities of the public and private sectors, as well as the financial sector (Figure 3.16).¹⁴ Specifically:

- A 1 percentage point increase in the accumulation of arrears is associated with a fall in real GDP per capita growth in the range of 0.3 percentage point. The use of the synthetic control method, an alternative approach that aims to isolate the effect of arrears accumulation on growth in a given country, shows a similar result—namely, that countries may witness a significant shift in real GDP per capita growth following a large buildup of arrears.¹⁵
- The effect of arrears on the banking sector is reflected in the NPL-to-total-gross-loans ratio, estimated in the range of 0.3 percentage point, which suggests that liquidity-constrained government suppliers, SOEs, and transfer-dependent households struggle to meet their financial obligations, with negative repercussions on banks' asset quality.
- Government payment arrears accumulation translates into reduced tax revenue as companies that are owed arrears could decide to withhold tax transfers.
- Public service delivery is also hampered as the government incurs higher procurement prices that shrink resources available for investing in social sectors. A 1 percentage point increase in arrears buildup is associated with a fall of about 0.6 percentage point in the proportion of the population having access to electricity.
- The corporate sector is also affected, with arrears buildup weakening firms' productivity and sales performance, and diluting their ability to create jobs. Not surprisingly, the impact of domestic arrears on the private sector varies across firms (Figure 3.17). While all firms experience a decline in sales growth, those more exposed to the government, as measured by participation in public procurement markets, witness a larger decline due to the direct effect of nonpayment by the government. In the same vein, firms more exposed to the banking sector through a bank loan record a slower pace of job creation, which highlights the financial transmission channel of arrears buildup.

Figure 3.16. Sub-Saharan Africa: The Macroeconomic Impact of Domestic Payment Arrears

Sources: IMF African Department Desk Survey; IMF Financial Soundness Indicators; World Bank Enterprise Surveys; World Development Indicators; IMF, World Economic Outlook database; and IMF staff calculations.

Note: Coefficients show the effect of a 1 percentage point of GDP increase in the accumulation of arrears. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent level, respectively. See Annex Tables 4.1–4.5 for details.

¹⁴ A description of the econometric approach and full regression tables are provided in Annex 3.4.

¹⁵ The synthetic control method was developed by Abadie and Gardeazabal (2003) and extended by Abadie, Diamond, and Hainmueller (2010). It compares a treated country with an estimated counterfactual, the synthetic control, which is a linear combination of untreated countries. Weights are chosen so that the synthetic control resembles the treated country in all relevant pretreatment (for example, pre-arrears accumulation) characteristics. Details on the synthetic control method, robustness checks, and associated results with caveats can be found in Annex 3.4. Results remain robust when the control group covering the world is restricted to SSA countries that did not witness a sharp arrears buildup in the aftermath of the oil price shock.

Figure 3.17. Sub-Saharan Africa: The Heterogenous Effect of Domestic Payment Arrears on Private Sector Performance

Sources: IMF African Department Desk Survey; IMF Financial Soundness Indicators; World Bank Enterprise Surveys; World Development Indicators; IMF, World Economic Outlook database; and IMF staff calculations.

Note: Coefficients show the effect of a 1 percentage point of GDP increase in the accumulation of arrears. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent level, respectively. See Annex Tables 4.1–4.5 for details.

In contrast, firms with a higher proportion of prepaid sales suffer less. Results also suggest that the adverse effect of arrears buildup on the corporate sector is compounded by the presence of burdensome regulatory procedures.

- Arrears accumulation may undermine government legitimacy by influencing citizens' attitudes toward trust, corruption, and public service delivery (Figure 3.18). The correlation between the stock of domestic arrears and indicators of citizens' perceptions from Afrobarometer¹⁶ shows that higher levels of arrears are associated with lower trust among citizens in their leaders and their ability to manage the economy. Individuals are also more likely to perceive widespread corruption among public officials and to report difficulties in accessing basic health services.

Financing spending through arrears accumulation undermines the effectiveness of fiscal policy. It generally leads to a shift of resources from the creditor to the government that is tantamount to taxation, as typically no interest is paid to those who supply arrears financing. The effect depends on three factors, namely the extent to which spending is financed through arrears, how long it takes to repay the arrears, and the extent of liquidity constraints in the private sector. The larger the arrears, the longer they remain outstanding, and the

less liquidity there is in the economy, the smaller the spending multiplier. Under some extreme circumstances, the multiplier can be negative. For example, in countries with a stressed banking sector and existing arrears, spending through additional arrears may actually be contractionary. Box 3.2 uses a dynamic stochastic general equilibrium (DSGE) model to illustrate how the fiscal multiplier is affected by domestic arrears in sub-Saharan Africa.

CURES: CLEARANCE AND PREVENTION OF ARREARS

When arrears exist, every effort should be made to clear them and to prevent new accumulation. Clearance entails three main steps: verification, development of a payment and prioritization strategy, and liquidation. Steps to prevent additional arrears must be taken in parallel.

Clearance

An independent and comprehensive stocktaking and verification of arrears is the first step in the clearance process. Such verification is necessary because often during the accumulation period when controls are weak, the scope for corruption is wide and can lead to illegitimate claims. In Ghana (2017) and in the Republic of Congo (2019) for instance, audits led to the rejection of a large share of the initial stock of arrears. In addition,

¹⁶ Afrobarometer is a publicly available database on pan-African national public attitude surveys regarding democracy, governance, and society.

Figure 3.18. Sub-Saharan Africa: Government Payment Discipline and Public Attitudes toward Trust, 2005–18

Sources: Afrobarometer; IMF African Department Desk Survey; and IMF staff calculations.

Note: The stock of arrears is lagged by one year.

verification should classify the size and type of expenditure arrears, to whom they are owed, when the arrears were incurred, and if any penalties on the arrears will be applied, all of which are necessary to design the clearance strategy.¹⁷ The verification exercise should cover as much of the public sector as possible (for example, SOEs and local governments) rather than just the line ministries.

Second, after the verification phase, a payment and prioritization strategy should be developed and approved by the relevant fiscal authorities. It may also be desirable to create an arrears committee. While arrears represent debt that is already overdue, often it is not possible to pay the entire stock at once because it is too large (relative to debt sustainability considerations or available financing) or because such rapid clearance would undermine macroeconomic stability. Figure 3.19 offers a stylized representation of different scenarios:

- The outstanding stock of arrears should be paid swiftly if market or donor financing is available, debt sustainability is ensured, and other macroeconomic objectives, such as low inflation and external stability, are not jeopardized by the repayment.
- Designing a repayment strategy becomes more complex if available financing is limited or if debt sustainability is already a concern. Options include undertaking fiscal adjustment or generating additional financing by selling assets to make space for arrears clearance. If this is feasible, a gradual repayment of the full amount of the claims, consistent with maintaining macroeconomic stability, would be appropriate.
- However, in cases where the government's repayment capacity is too constrained, even in the medium term, a restructuring of claims, which may include a reprofiling and/or a discount on these claims, becomes necessary.

¹⁷ Flynn and Pessoa (2014) provides an in-depth discussion of practical steps to ensure proper verification of arrears.

Figure 3.19. Repaying Arrears—Stylized Decision Tree

Source: IMF staff calculations.

This process should be guided by transparency and an open exchange of information with creditors. Considering their preferences for repayment modalities and ensuring uniformity of treatment would help facilitate voluntary participation whenever possible. In such a scenario, financial sector stability considerations should be placed at the forefront. Bank stress tests are useful when assessing the impact of restructuring scenarios on banks' balance sheets. If the restructuring leads to a depletion of banks' capital, a recapitalization plan would need to be developed with minimal fiscal costs, especially if the government is already facing liquidity and/or debt sustainability constraints. For example, the accumulation of arrears in CEMAC countries has increased stress on banks. Any restructuring plan that includes large haircuts on private sector claims should be accompanied by an assessment of the effects of the restructuring on the private sector's ability to service its bank loans and how this could affect bank solvency (which depends

on the link between arrears and NPLs). Stress tests conducted for the Republic of Congo point to the financial risks stemming from very large haircuts.¹⁸ The results also show that if banking sector losses are too severe, the government may be forced to recapitalize banks to prevent insolvency, often at large fiscal costs.

- If repayments must be sequenced, prioritization should be based on a clear set of criteria guided by the impact on macro stability and inclusive growth. For example, repaying: (1) wage arrears and arrears to small-scale suppliers (Togo, 2018) with weak balance sheets can lead to a positive fiscal impulse, given that it would relieve the liquidity constraints, support aggregate demand, and dampen the potential for social pressures; (2) arrears to companies still in operation and individuals who have defaulted on their bank loans, especially if the banking sector is facing vulnerabilities and has not provisioned for these losses;¹⁹ and (3) arrears to suppliers of critical social services, such as health. With

¹⁸ See IMF (2019).

¹⁹ Empirical work shows a domestic debt restructuring may harm the solvency of the domestic financial system if there are concerns for ex ante financial soundness (Erce-Dominguez and Diaz-Cassou 2010). In turn, banking insolvency can also lead to output losses (De Paoli, Hoggarth, and Saporta 2009).

regard to vintage, considerations related to equity and the effect on economic activity need to be balanced, particularly for arrears whose holders may have written them off partially or fully. Other factors that should weigh on prioritization include the financial penalties and legal risks associated with postponing the payment of arrears, especially if they could be fiscally costly. Priorities should be set transparently to safeguard against corruption.

- Beyond these macroeconomic considerations, there can be other relevant factors determining the repayment strategy. Clearance operations can be complex to administer and may need to be spread over time, for example, to ensure proper identification of claimants. In addition, discounts could be considered—for example, in cases of subdued expectations of repayment, or in exceptional circumstances such as civil war, where governments have negotiated with creditors who may recognize the debt but will accept a discounted repayment.

Third, once prioritization is established, multiple options for liquidating the arrears should be considered. These options can include one or a combination of the following:

- *Cash payment.* To the extent resources are available (from donors, through fiscal adjustment, or from domestic sources), outright cash payment would be the simplest and most effective way to clear arrears. This is currently the case in Lesotho, where the authorities are clearing some arrears by making direct payments to suppliers from cash raised through additional domestic debt issuance.
- *Bilateral agreement with creditors.* The government can agree with creditors to restructure overdue claims, either by explicitly turning them into contractual debt or implicitly, by announcing a new repayment schedule, as was the case in post-conflict Liberia. The government should openly engage with creditors, share relevant information, and consider the claimants' preferences about repayment modalities. One option could consist of early repayment in exchange for a discount, giving firms in urgent need of cash

an opportunity to obtain liquidity. Another option could consist of full repayment but over a longer period. As a third option, the government can encourage banks to pay borrowers in exchange for a claim against the state. Although such schemes may be complicated and not fully transparent, they could be designed to ease liquidity constraints for the private sector, reduce bank NPLs, and allow the state to defer payments, as evidenced in the case of Gabon and the Libreville Club arrangement.

- *Securitization.* A securitization of arrears would transform them directly into marketable government debt. Options could include the issuance of promissory notes, or Treasury bills and bonds, directly to creditors, as in the case of Madagascar in 2016. This way the government sets clear payment terms and gives creditors the option to access liquidity by selling the debt instruments. However, market liquidity for public debt in many countries in the region is structurally low, which could be exacerbated by issuing such securities in times of stress. This can lead to steep discounts on secondary markets.
- *Netting arrangements.* If a creditor also has liabilities to the government, for example tax obligations, both parties may agree to cancel their respective claims without actual payments. Although not advisable, such arrangements are popular between entities of the public sector, for example the central government and SOEs. However, such arrangements undermine transparency and accountability as not all payments and revenues are accounted for on a gross basis. Netting of tax liabilities could also undermine future tax compliance.

Prevention

Preventing the accumulation of arrears requires a combination of PFM reforms, sound fiscal policy, and political commitment. On the PFM side, credible budgeting, better commitment and expenditure controls, proper liquidity management, and enforcement for noncompliance by line ministries are key elements. PFM reforms are of paramount importance in cases where the

cause of arrears accumulation is structural. Fiscal authorities should regularly monitor arrears. Line ministry surveys should supplement the monitoring process in countries where procurement occurs outside official budgeting channels. Once arrears are formally recognized, debt offices should oversee their clearance. Other possible prevention measures include explicitly defining arrears through legislation and stipulating interest payments when commitments are officially in arrears.

Sound fiscal policy must accompany PFM reforms to safeguard against shocks. For example, countries that rely heavily on natural resources would be well served by strengthening domestic revenue mobilization and diversifying revenue sources. Building buffers in good times to tap during a downturn is another important measure. A fiscal rule could be used to instill countercyclical fiscal policy, build buffers, and resist political pressure for additional expenditures. A fiscal rule would also support budget credibility and could help maintain market access during downturns.

For countries with limited fiscal space and policy levers, the availability and timeliness of external financing from donors is often key to preventing arrears accumulation following severe exogenous shocks. This is particularly the case in countries in fragility (Central African Republic, Chad, Democratic Republic of the Congo), which usually have small buffers, limited capacity for policy adjustment, and weak PFM. In these cases, official external financing can help smooth the transition, especially in cases where the shock is temporary and PFM systems are being strengthened. However, official financing is often not provided with sufficient timeliness, and comes after a large stock of domestic arrears has already accumulated as a result of an exogenous shock and amid PFM weaknesses. For example, in Chad, following the sizable oil price shock in 2014–15, despite dramatic spending cuts of more than 10 percent of non-oil GDP, the country accumulated arrears exceeding 3 percent of GDP, as donor support was not available.

CONCLUSION

Using a newly constructed database on domestic arrears in sub-Saharan Africa, this chapter shows that financing spending through arrears is common, but not unique, to many countries in the region and can have adverse economic impacts. At the same time, arrears monitoring is weak, and many countries have unrecorded arrears, which can be an important source of contingent liabilities. The new data set built for this chapter using data from country authorities in the region is a starting point.

Domestic arrears accumulation is associated with weak fiscal institutions and PFM systems, but arrears accumulate faster in bad times. The accumulation of large stocks of arrears is often driven by exogenous factors such as adverse terms-of-trade shocks and political instability, which reduce fiscal space and limit policy levers. Indeed, the stock of domestic arrears increased in recent years, particularly in oil-exporting countries after the 2014–15 price shock. They also tend to be higher in countries with fixed exchange rate regimes and limited financing options, and in countries in fragile situations.

The analysis highlights the multifaceted and adverse effects of domestic arrears on the economy. These arrears are found to weaken private sector activity and undermine financial stability. Importantly, arrears reduce the ability of fiscal policy to support the economy, by reducing (even turning negative under some circumstances) the multiplier effect of government spending. Beyond the economic ramifications, evidence suggests that arrears weaken government credibility, as public institutions are considered less trustworthy, more prone to corruption, and less capable of delivering public services. The breadth and depth of the effect of arrears cast doubt on the merit of resorting to this form of financing.

When arrears exist, clearance efforts should top countries' policy agendas. This requires an independent and comprehensive verification of arrears, including careful checking of the validity of claims to address governance concerns. Next, a payment strategy should be developed based on an assessment of available financing, debt sustainability, and the macroeconomic impact of the clearance. If repayments must be sequenced, prioritization should be guided by the impact on macroeconomic stability and inclusive growth and should be transparently negotiated and communicated to the public.

Strong PFM systems are critical in preventing new arrears from accumulating. Sound fiscal policy needs to complement PFM reforms and safeguard against future shocks through building buffers, mobilizing revenue, and diversifying revenue sources.

Timely external financing is another important element. Fiscal adjustment in countries hit by severe exogenous shocks and with limited market access can reach its limits. This is particularly true for countries in fragile situations. In these cases, timely availability of external financing from donors following severe shocks, alongside efforts to strengthen PFM and fiscal institutions, is often key to preventing arrears accumulation.

Further improving our understanding of the causes and effects of arrears requires better data. Going forward, a concerted effort by country authorities, international organizations, and the wider public should focus on strengthening the monitoring and reporting of domestic arrears. Their macroeconomic impact is too important to be ignored.

Box 3.1. Domestic Arrears Data Collection Exercise

A key challenge in assessing domestic arrears is the lack of data, compounded by the absence of standardized definitions and coverage. This is often the result of weak fiscal accounting systems and irregular audits. As such, no existing cross-country database on domestic arrears in sub-Saharan Africa exists.

To generate a reliable data source for this chapter, a survey of arrears was conducted among IMF desk economists working on sub-Saharan Africa. Using data sourced from country authorities, the survey collected data and information on the size, composition, causes, and impact of arrears for the period 2005–18. Survey results, which revealed that stock data were more widely available, were supplemented with data from IMF staff reports and staff estimates. To bridge data gaps, country-specific information was also considered, and periods when arrears accumulated (as opposed to when arrears were reported) were identified. To better inform the gap-bridging exercise, additional sources were used. For example, text mining techniques were used to identify instances when domestic arrears are referenced in IMF staff reports. The data were cross-checked against information found in the public expenditure and financial accountability assessments of all sub-Saharan African countries since 2005.

Further work is still needed to build a comprehensive arrears database, based on more regular and methodical reporting and monitoring systems across the region.

This box was prepared by Krisztina Fabo.

Box 3.2. Arrears Accumulation and Fiscal Multipliers

A dynamic stochastic general equilibrium (DSGE) model illustrates how financing spending through the use of arrears negatively affects the government's ability to use fiscal policy to stimulate economic activity.¹ The main assumptions of the model are as follows: (1) government spending is financed through taxes and arrears to private companies; (2) companies are liquidity constrained, have to borrow from banks to finance their activities and offset the impact of domestic arrears on their balance sheet, and use their capital as collateral for bank loans; (3) banks apply a deeper haircut on private companies' collateral whenever the government accumulates domestic arrears, which reduces their access to credit; and (4) the government clears arrears after one or more periods by paying the face value of arrears without compensating for inflation.

The model is calibrated using government spending equal to 25 percent of GDP and a stock of arrears of 5 percent of GDP. The impact on GDP of an unanticipated 1 percent of GDP increase in government expenditure is simulated.

This box was prepared by Moez Ben Hassine.

¹ See Annex 3.5 for more details on the DSGE model used in this section.

Figure 3.2.1. Fiscal Multiplier, Percent of GDP

Source: IMF staff calculations.

The model shows that the fiscal multiplier is lower when government expenditure is financed through domestic arrears accumulation; the longer the arrears remain outstanding, the smaller the fiscal multiplier (Figure 3.2.1). In fact, by accumulating arrears, the government reduces resources available in the private sector for production and investment, which diminishes the expansionary effect of government spending on aggregate demand. The impact of the accumulation period on the size of the fiscal multiplier declines over time.

The private sector's liquidity situation can amplify the impact of domestic arrears on the fiscal multiplier (Figure 3.2.2). In fact, if the private sector faces liquidity constraints and the banking sector is not able to accommodate the extra demand for credit due to domestic arrears accumulation—either for liquidity or solvency reasons—the private sector will have to significantly adjust its level of production and investment downward, which reduces the expansionary effect of government spending on aggregate demand.

The fiscal multiplier could be substantially lower and can even be negative if government expenditure is mostly financed through arrears accumulation for a long period and the private sector is under liquidity constraints (Figure 3.2.3). In this case, the negative impact of arrears on the private sector that is amplified by financial frictions will offset the expansionary effect of government expenditures. The results are consistent with the literature,² which stipulates that fiscal multipliers are dependent on the state of the economy, the presence of financial frictions, and the efficiency of public spending.

Although the parameters that generate the negative multiplier are generally extreme, they may be present in countries already suffering from some form of stress. For example, a country with high debt service and existing arrears may need to excessively use arrears to finance spending. This, coupled with the presence of a liquidity shortage in the banking sector, may make the spending contractionary.

Figure 3.2.2. Fiscal Multiplier Under Private Sector Liquidity Constraints

Figure 3.2.3. Fiscal Multiplier Under Private Sector Liquidity Constraints and Long Arrears Repayment Period

² Ilzetzki, Mendoza, and Vegh (2013), Auerbach and Gorodnichenko (2013a, 2013b), Blanchard and Leigh (2013), Batini and others (2014).

REFERENCES

- Abadie, A., A. Diamond, and J. Hainmueller. 2010. "Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California's Tobacco Control Program." *Journal of the American Statistical Association* 105 (490): 493–505.
- Abadie, A., and J. Gardeazabal. 2003. "The Economic Costs of Conflict: A Case Study of the Basque Country." *The American Economic Review* 93 (1): 113–32.
- Auerbach, A., and Y. Gorodnichenko. 2013a. "Measuring the Output Responses to Fiscal Policy." *American Economic Journal: Economic Policy* 4 (2): 1–27.
- . 2013b. "Output Spillovers from Fiscal Policy." *American Economic Review* 103 (3): 141–46.
- Batini, N., L. Eyraud, L. Forni, and A. Weber. 2014. "Fiscal Multipliers: Size, Determinants, and Use in Macroeconomic Projections." IMF Technical Notes and Manuals 2014/04, International Monetary Fund, Washington, DC.
- Blanchard, O., and D. Leigh. 2013. "Growth Forecast Errors and Fiscal Multipliers." *American Economic Review* 103 (3): 117–20.
- Checherita-Westphal, C., A. Klemm, and P. Viefers. 2015. "Governments' Payment Discipline: The Macroeconomic Impact of Public Payment Delays and Arrears." IMF Working Paper 15/13, International Monetary Fund, Washington, DC.
- Connell, W. 2014. "The Economic Impact of Late Payments." European Commission Economic Papers, No. 531, European Commission, Brussels.
- De Paoli, B., G. Hoggarth, and V. Saporta. 2009. "Output Costs of Sovereign Crises: Some Empirical Estimates." Bank of England Working Paper 362, Bank of England, London.
- Diamond, J., and C. Schiller. 1987. "Government Arrears in Fiscal Adjustment Programs." IMF Working Paper 87/3, International Monetary Fund, Washington, DC.
- Ebeke, C., and D. Ölcer. 2013. "Fiscal Policy over the Election Cycle in Low-Income Countries." IMF Working Paper 13/153, International Monetary Fund, Washington, DC.
- Erce-Dominguez, A. and J. Diaz-Cassou. 2010. "Creditor Discrimination during Sovereign Debt Restructurings." Bank of Spain Working Paper No. 1027, Madrid.
- Flynn, S., and M. Pessoa. 2014. "Prevention and Management of Government Expenditure Arrears." IMF Technical Notes and Manuals, International Monetary Fund, Washington, DC.
- Garamfalvi, L. 1997. "Corruption in the Public Expenditures Management Process." Presentation at 8th International Anti-Corruption Conference, Lima, September 7–11.
- Iacoviello, M. 2005. "House Prices, Borrowing Constraints and Monetary Policy in the Business Cycle." *American Economic Review* 95 (3): 739–64.
- Iacoviello, M., and S. Neri. 2010. "Housing Market Spillovers: Evidence from an Estimated DSGE Model." *American Economic Journal: Macroeconomics* 2: 125–64.
- Ilzetzki, E., E. Mendoza, and C. Vegh. 2013. "How Big (Small?) Are Fiscal Multipliers?" *Journal of Monetary Economics* 60: 239–54.
- International Monetary Fund (IMF). 2019. "Staff Report—Press Release; Staff Report; Debt Sustainability Analysis, and Statement by the Executive Director for The Republic of Congo." IMF Country Report 19/244, Washington, DC.
- . 2019. "Online Annex—Domestic Arrears in Sub-Saharan Africa: Causes, Symptoms, and Cures" Background Paper: <https://www.imf.org/-/media/Files/Publications/REO/AFR/2019/October/English/backgroundpapers.ashx?la=en>
- Khemani, P., and D. Radev. 2009. "Commitment Controls." IMF Technical Notes and Manuals, International Monetary Fund, Washington, DC.
- Pattanayak, S. 2016. "Expenditure Control: Key Features, Stages, and Actors." IMF Technical Notes and Manuals, International Monetary Fund, Washington, DC.
- Ramos, Albert. 1998. "Government Expenditure Arrears: Securitization and Other Solutions." IMF Working Paper 98/70, International Monetary Fund, Washington, DC.

Statistical Appendix

Unless noted otherwise, data and projections presented in this *Regional Economic Outlook* are IMF staff estimates as of September 30, 2019, consistent with the projections underlying the October 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 document: <https://www.imf.org/-/media/Files/Publications/REO/AFR/2019/October/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 60 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 60 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 2016–18 of

more than US\$1,025.00 (World Bank, using the Atlas method).

- The low-income countries had average per capita gross national income in the years 2016–18 equal to or lower than US\$1,025.00 (World Bank, Atlas method).
- The countries in fragile situations had average CPIA scores of 3.2 or less in the years 2016–18 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 60: 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	Chad	Rwanda	Congo, Dem. Rep. of
Gabon	Guinea	Eritrea	Côte d'Ivoire	Comoros	Sierra Leone	Congo, Republic of
Nigeria	Liberia	Eswatini	Equatorial Guinea	Congo, Dem. Rep. of	South Sudan	Côte d'Ivoire
South Sudan	Mali	Ethiopia	Eswatini	Eritrea	Tanzania	Eritrea
	Namibia	Gambia, The	Gabon	Guinea	Togo	Gambia, The
	Niger	Guinea-Bissau	Ghana	Guinea-Bissau	Uganda	Guinea
	Sierra Leone	Kenya	Kenya	Liberia	Zimbabwe	Guinea-Bissau
	South Africa	Lesotho	Lesotho	Madagascar		Liberia
	Tanzania	Madagascar	Mauritius			Malawi
	Zambia	Malawi	Namibia			Mali
	Zimbabwe	Mauritius	Nigeria			São Tomé & Príncipe
		Mozambique	São Tomé & Príncipe			Sierra Leone
		Rwanda	Senegal			South Sudan
		São Tomé & Príncipe	Seychelles			Togo
		Senegal	South Africa			Zimbabwe
	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	Comoros	Lesotho	Cabo Verde
Guinea-Bissau	Congo, Republic of	Eritrea	Tanzania	Congo, Dem. Rep. of	Namibia	Côte d'Ivoire
Mali	Equatorial Guinea	Eswatini	Uganda	Eswatini	South Africa	Gambia, The
Niger	Gabon	Ethiopia		Lesotho		Ghana
Senegal		Kenya		Madagascar		Guinea
Togo		Madagascar		Malawi		Guinea-Bissau
		Malawi		Mauritius		Liberia
		Mauritius		Mozambique		Mali
		Rwanda		Namibia		Niger
		Seychelles		Seychelles		Nigeria
		Uganda		South Africa		Senegal
		Zambia		Tanzania		Sierra Leone
		Zimbabwe		Zambia		Togo
				Zimbabwe		

List of Appendix Tables SA1—SA4:

SA1.	Real GDP Growth and Consumer Prices, Average	62
SA2.	Overall Fiscal Balance, Including Grants and Government Debt.....	63
SA3.	Broad Money and External Current Account, Including Grants	64
SA4.	External Debt, Official Debt, Debtor Based and Reserves	65

List of Sources and Footnotes for Appendix Tables SA1—SA4:

Tables SA1.–SA3.

Sources: IMF, Common Surveillance database and IMF, World Economic Outlook database, October 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, October 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 (Annual percent change)						Consumer Prices, Annual Average (Annual percent change)					
	2010–15	2016	2017	2018	2019	2020	2010–15	2016	2017	2018	2019	2020
Angola	4.6	-2.6	-0.2	-1.2	-0.3	1.2	10.6	30.7	29.8	19.6	17.2	15.0
Benin	4.2	3.3	5.7	6.7	6.6	6.7	2.0	-0.8	1.8	0.8	-0.3	1.0
Botswana	5.5	4.3	2.9	4.5	3.5	4.3	6.1	2.8	3.3	3.2	3.0	3.5
Burkina Faso	5.9	5.9	6.3	6.8	6.0	6.0	1.2	-0.2	0.4	2.0	1.1	1.4
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	3.7	5.1	5.0	5.0	1.7	-1.4	0.8	1.3	1.2	1.6
Cameroon	4.8	4.6	3.5	4.1	4.0	4.2	2.2	0.9	0.6	1.1	2.1	2.2
Central African Rep.	-3.0	4.7	4.5	3.8	4.5	5.0	5.2	4.6	4.5	1.6	3.0	2.6
Chad	6.2	-5.6	-2.4	2.4	2.3	5.4	2.4	-1.6	-0.9	4.0	3.0	3.0
Comoros	3.1	2.6	3.0	3.0	1.3	4.2	2.2	0.8	0.1	1.7	3.2	1.4
Congo, Dem. Rep. of	7.7	2.4	3.7	5.8	4.3	3.9	7.0	3.2	35.8	29.3	5.5	5.0
Congo, Rep. of	4.8	-2.8	-1.8	1.6	4.0	2.8	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	7.3	2.0	0.7	0.7	0.4	1.0	2.0
Equatorial Guinea	-1.2	-8.8	-4.7	-5.7	-4.6	-5.0	3.8	1.4	0.7	1.3	0.9	1.7
Eritrea	6.4	7.4	-9.6	12.2	3.1	3.9	10.9	-5.6	-13.3	-14.4	-27.6	0.0
Eswatini	3.1	1.3	2.0	2.4	1.3	0.5	6.0	7.8	6.2	4.8	2.8	4.0
Ethiopia ¹	10.2	8.0	10.1	7.7	7.4	7.2	15.1	6.6	10.7	13.8	14.6	12.7
Gabon	5.4	2.1	0.5	0.8	2.9	3.4	1.7	2.1	2.7	4.8	3.0	3.0
Gambia, The	1.4	1.9	4.8	6.5	6.5	6.4	5.5	7.2	8.0	6.5	6.9	6.5
Ghana	7.9	3.4	8.1	6.3	7.5	5.6	11.0	17.5	12.4	9.8	9.3	9.2
Guinea	4.5	10.8	10.0	5.8	5.9	6.0	13.6	8.2	8.9	9.8	8.9	8.3
Guinea-Bissau	3.6	6.3	5.9	3.8	4.6	4.9	1.6	1.5	1.1	1.4	-2.6	1.3
Kenya	6.0	5.9	4.9	6.3	5.6	6.0	7.8	6.3	8.0	4.7	5.6	5.3
Lesotho	4.2	2.7	0.5	2.8	2.8	-0.2	4.8	6.2	4.5	4.7	5.9	5.7
Liberia	5.3	-1.6	2.5	1.2	0.4	1.6	8.0	8.8	12.4	23.5	22.2	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	4.5	5.1	18.4	21.7	11.5	9.2	8.8	8.4
Mali	3.9	5.8	5.4	4.7	5.0	5.0	1.9	-1.8	1.8	1.7	0.2	1.3
Mauritius	3.8	3.8	3.8	3.8	3.7	3.8	3.6	1.0	3.7	3.2	0.9	2.3
Mozambique	7.0	3.8	3.7	3.3	1.8	6.0	6.1	19.9	15.1	3.9	5.6	7.6
Namibia	5.7	1.1	-0.9	-0.1	-0.2	1.6	5.2	6.7	6.1	4.3	4.8	5.5
Niger	6.6	4.9	4.9	6.5	6.3	6.0	0.5	0.2	0.2	2.7	-1.3	2.2
Nigeria	5.8	-1.6	0.8	1.9	2.3	2.5	10.4	15.7	16.5	12.1	11.3	11.7
Rwanda	7.3	6.0	6.1	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	2.7	2.7	3.5	9.8	5.4	5.7	7.9	8.8	8.9
Senegal	4.3	6.4	7.1	6.7	6.0	6.8	1.0	0.8	1.3	0.5	1.0	1.5
Seychelles	5.1	4.5	4.3	4.1	3.5	3.3	2.8	-1.0	2.9	3.7	2.0	1.8
Sierra Leone	5.3	6.4	3.8	3.5	5.0	4.7	6.2	10.9	18.2	16.9	15.7	13.0
South Africa	2.3	0.4	1.4	0.8	0.7	1.1	5.2	6.3	5.3	4.6	4.4	5.2
South Sudan	-5.1	-16.7	-5.5	-1.1	7.9	8.2	24.9	379.8	187.9	83.5	24.5	16.9
Tanzania	6.5	6.9	6.8	7.0	5.2	5.7	9.2	5.2	5.3	3.5	3.6	4.2
Togo	6.1	5.6	4.4	4.9	5.1	5.3	1.7	0.9	-0.2	0.9	1.4	2.0
Uganda	5.3	2.3	5.0	6.1	6.2	6.2	7.5	5.5	5.6	2.6	3.2	3.8
Zambia	6.0	3.8	3.5	3.7	2.0	1.7	8.1	17.9	6.6	7.0	9.9	10.0
Zimbabwe ²	9.4	0.7	4.7	3.5	-7.1	2.7	1.5	-1.6	0.9	10.6	161.8	49.7
Sub-Saharan Africa	5.1	1.4	3.0	3.2	3.2	3.6	7.7	10.8	10.9	8.5	8.4	8.0
Median	5.0	3.8	3.8	3.8	4.3	4.9	4.9	5.2	4.8	3.9	3.5	4.2
Excluding Nigeria and South Africa	5.8	3.5	4.7	4.8	4.6	5.0	7.3	9.9	10.0	7.9	8.3	7.2
Oil-exporting countries	5.3	-1.8	0.5	1.5	2.1	2.5	9.4	17.5	17.1	12.2	10.8	10.8
Excluding Nigeria	4.1	-2.1	-0.2	0.2	1.5	2.4	6.8	22.3	18.6	12.5	9.6	8.4
Oil-importing countries	4.9	3.5	4.5	4.3	3.9	4.3	6.6	6.5	7.0	6.1	6.9	6.4
Excluding South Africa	6.4	5.1	6.1	6.0	5.4	5.6	7.4	6.6	7.8	6.8	8.0	6.9
Middle-income countries	4.7	0.4	2.0	2.3	2.5	2.8	7.7	11.6	11.0	8.3	7.8	8.1
Excluding Nigeria and South Africa	5.3	2.7	3.7	3.7	4.1	4.1	6.7	11.1	9.6	6.9	6.8	6.6
Low-income countries	6.5	4.4	5.8	5.9	5.2	5.9	8.0	8.6	10.5	9.1	9.9	7.8
Excluding low-income countries in fragile situations	6.9	5.9	7.0	6.7	6.1	6.4	8.6	5.9	7.2	6.6	6.8	6.8
Countries in fragile situations	5.6	2.5	3.9	4.8	4.2	5.2	5.4	10.6	12.6	10.3	12.2	7.5
CFA franc zone	4.6	3.4	3.9	4.6	4.9	5.1	2.0	0.6	0.9	1.5	1.2	1.9
CEMAC	3.9	-0.2	0.4	1.7	2.5	3.0	2.5	1.2	0.8	2.1	2.2	2.4
WAEMU	5.2	6.3	6.5	6.5	6.4	6.5	1.5	0.1	1.0	1.0	0.6	1.6
COMESA (SSA members)	6.8	4.8	5.7	6.0	5.0	5.5	8.7	6.6	9.9	9.3	12.0	9.1
EAC-5	6.0	5.4	5.6	6.5	5.6	6.0	8.0	5.7	6.5	3.6	4.3	4.6
ECOWAS	5.9	0.6	2.8	3.4	3.8	3.8	8.9	12.7	12.9	9.7	8.9	9.3
SACU	2.6	0.6	1.4	1.0	0.8	1.2	5.3	6.2	5.2	4.5	4.3	5.1
SADC	3.9	1.3	2.3	2.1	1.5	2.3	6.6	9.7	9.8	7.7	8.6	7.4

See sources and footnotes on page 61.

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	2.2	0.8	0.1	37.2	75.7	69.3	89.0	95.0	89.9
Benin	-0.4	-4.3	-4.2	-3.0	-2.3	-1.8	22.3	35.9	39.6	41.0	40.9	39.7
Botswana	4.5	0.7	-1.1	-3.0	-3.1	-2.5	18.6	15.6	13.4	12.1	12.3	12.0
Burkina Faso	-0.8	-3.6	-7.9	-5.0	-3.0	-3.0	30.3	39.2	38.4	42.9	42.9	42.6
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	-3.0	-2.8	-2.2	-1.4	97.9	128.4	127.2	124.5	123.5	118.9
Cameroon	7.9	-6.1	-4.9	-2.5	-2.3	-2.1	19.6	32.8	37.6	39.1	40.5	40.5
Central African Rep.	0.5	1.1	-1.1	0.4	2.6	0.6	40.8	53.9	50.3	49.9	44.5	39.2
Chad	1.2	-1.9	-0.2	1.9	0.3	1.8	34.2	51.5	49.8	48.3	44.7	40.2
Comoros	-1.0	-4.4	0.4	-1.0	-3.3	-2.2	20.2	16.9	18.4	21.0	24.3	28.2
Congo, Dem. Rep. of	0.2	-0.5	1.4	0.4	-0.1	0.1	21.7	21.7	19.1	15.3	13.5	11.6
Congo, Rep. of	14.6	-20.4	-7.4	6.6	8.6	8.4	53.6	118.6	117.5	87.8	78.5	73.3
Côte d'Ivoire	-1.0	-4.0	-4.5	-4.0	-3.0	-3.0	52.1	48.4	49.8	53.2	52.7	51.5
Equatorial Guinea	16.3	-10.9	-2.6	0.5	0.9	0.5	12.4	43.4	38.0	43.3	45.4	46.5
Eritrea	-24.0	3.9	1.8	10.9	0.6	-2.8	175.9	170.1	196.2	174.3	165.1	161.4
Eswatini	1.4	-10.8	-8.6	-10.5	-8.8	-4.8	14.8	25.0	27.5	35.2	40.9	42.5
Ethiopia ¹	-3.4	-2.3	-3.3	-3.0	-2.8	-3.0	46.1	55.8	58.6	61.0	59.1	54.4
Gabon	8.5	-4.7	-1.7	-0.2	1.6	0.9	29.0	64.2	62.6	60.7	56.4	54.0
Gambia, The	-1.7	-6.4	-5.0	-6.2	-3.4	-3.8	56.7	80.9	87.0	86.6	80.9	75.0
Ghana	-3.8	-6.9	-4.1	-7.0	-7.1	-6.1	41.8	57.1	57.3	59.3	63.8	63.5
Guinea	-1.1	-0.1	-2.1	-1.1	-2.6	-2.0	44.2	42.5	40.6	38.2	45.4	44.8
Guinea-Bissau	-5.4	-5.6	-1.4	-5.2	-4.9	-3.9	59.5	62.5	57.2	64.3	69.2	68.2
Kenya	-1.9	-8.5	-7.9	-7.4	-7.4	-6.6	45.9	54.5	55.2	60.1	61.6	61.3
Lesotho	7.6	-8.0	-3.4	-5.1	-4.1	-2.9	37.2	37.0	37.1	44.5	45.9	46.9
Liberia	0.5	-3.7	-5.1	-5.4	-6.0	-6.6	20.7	28.3	34.0	39.9	45.5	51.1
Madagascar	-2.6	-1.3	-2.4	-1.5	-2.3	-4.5	36.7	47.1	46.0	45.7	46.5	47.5
Malawi	-2.3	-7.3	-7.3	-5.5	-4.9	-2.8	46.6	61.3	61.5	62.9	65.1	63.9
Mali	3.6	-3.9	-2.9	-4.7	-3.0	-3.0	26.4	36.0	36.0	37.3	37.6	38.2
Mauritius	-3.6	-3.5	-1.4	-2.2	-2.3	-2.8	58.2	65.0	64.3	66.2	68.7	69.4
Mozambique	-2.9	-6.0	-3.1	-5.2	-6.5	-4.8	56.0	129.9	100.5	99.8	108.8	106.8
Namibia	1.9	-8.6	-4.7	-4.9	-5.5	-4.6	26.0	42.6	41.0	45.8	49.2	50.9
Niger	7.1	-6.1	-5.7	-4.1	-4.2	-3.0	26.7	44.6	54.4	53.8	55.8	54.3
Nigeria	4.7	-4.0	-5.4	-4.5	-5.0	-4.7	16.9	23.4	25.3	27.3	29.8	31.4
Rwanda	0.6	-2.3	-2.5	-2.6	-3.7	-4.1	21.8	32.9	36.5	40.7	49.1	50.6
São Tomé & Príncipe	31.5	-4.2	-2.7	-1.9	-1.7	-0.3	77.5	95.3	91.7	74.5	77.2	65.5
Senegal	-2.0	-3.3	-2.5	-3.6	-3.0	-3.0	36.5	47.5	61.2	61.6	63.3	63.1
Seychelles	-0.7	0.2	0.4	0.2	0.9	1.6	75.5	69.0	63.2	56.9	53.8	49.7
Sierra Leone	2.2	-8.5	-8.8	-5.8	-3.6	-4.2	39.8	55.5	57.9	63.0	64.5	65.4
South Africa	0.1	-4.1	-4.4	-4.4	-6.2	-6.7	42.4	51.5	53.0	56.7	59.9	64.2
South Sudan	...	-15.5	3.3	1.2	2.4	3.8	25.0	85.7	63.2	42.2	34.4	27.4
Tanzania	-2.5	-2.1	-1.2	-1.9	-2.9	-3.5	30.3	36.4	36.6	37.3	37.7	38.2
Togo	-1.5	-9.5	-0.3	-0.8	-2.7	-2.1	55.6	81.4	76.0	76.2	72.6	68.7
Uganda	-0.8	-4.8	-3.8	-4.2	-6.6	-8.6	27.2	37.1	39.7	41.4	43.6	47.0
Zambia	2.1	-6.1	-7.7	-8.3	-4.8	-5.1	31.8	60.7	61.8	78.1	91.6	95.5
Zimbabwe ²	-2.9	-6.2	-8.1	-4.5	-2.7	-1.2	41.5	54.2	52.9	37.1	17.7	15.1
Sub-Saharan Africa	1.7	-4.4	-4.6	-3.7	-4.3	-4.3	31.7	44.4	46.2	49.0	50.2	50.4
Median	-0.6	-4.4	-3.3	-3.0	-3.0	-3.0	35.1	51.5	52.9	53.2	52.7	51.1
Excluding Nigeria and South Africa	1.1	-4.8	-4.3	-2.9	-3.1	-3.1	36.1	53.1	52.9	55.7	56.6	55.0
Oil-exporting countries	5.3	-4.6	-5.3	-2.6	-3.3	-3.3	21.6	36.4	38.6	41.9	42.1	41.2
Excluding Nigeria	6.6	-6.0	-5.1	1.2	0.7	0.4	32.0	65.7	62.6	70.7	71.7	67.6
Oil-importing countries	-0.5	-4.3	-4.1	-4.3	-4.8	-4.9	39.9	49.9	50.9	53.2	55.1	55.9
Excluding South Africa	-1.1	-4.4	-4.0	-4.2	-4.2	-4.0	38.1	49.0	49.7	51.2	52.6	51.9
Middle-income countries	2.2	-4.7	-5.1	-4.0	-4.7	-4.7	31.0	43.5	46.0	49.9	51.4	52.0
Excluding Nigeria and South Africa	2.5	-6.0	-5.3	-3.2	-3.3	-3.2	36.8	57.5	57.2	63.1	65.0	63.3
Low-income countries	-1.2	-3.2	-2.9	-2.6	-2.9	-3.0	35.1	47.4	47.2	46.2	46.4	45.3
Excluding low-income countries in fragile situations	-1.5	-3.1	-3.2	-3.1	-3.5	-3.9	35.5	49.1	49.6	51.5	52.2	51.1
Countries in fragile situations	0.6	-4.4	-3.0	-1.6	-1.4	-1.1	39.2	49.0	48.3	43.8	41.8	40.1
CFA franc zone	4.6	-5.5	-3.9	-2.2	-1.5	-1.5	32.0	48.1	50.6	51.1	50.6	49.4
CEMAC	9.3	-7.3	-3.6	0.1	0.6	0.6	26.5	51.6	52.5	50.9	49.4	47.6
WAEMU	-0.1	-4.3	-4.1	-3.9	-3.0	-2.9	37.7	45.5	49.2	51.2	51.5	50.6
COMESA (SSA members)	-1.6	-4.5	-4.6	-4.2	-4.2	-4.3	39.0	49.7	50.8	52.2	53.1	52.1
EAC-5	-1.9	-5.5	-4.9	-5.0	-5.7	-5.9	35.8	44.6	45.9	49.3	51.1	51.9
ECOWAS	2.8	-4.3	-5.0	-4.6	-4.7	-4.4	22.9	31.5	34.4	36.7	38.5	39.1
SACU	0.3	-4.1	-4.3	-4.5	-6.1	-6.4	40.6	49.0	50.4	54.0	56.9	60.9
SADC	0.3	-3.9	-4.3	-3.0	-4.2	-4.5	38.8	53.3	52.7	56.8	58.9	60.1

See sources and footnotes on page 61.

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	29.3	30.2	29.3	4.4	-4.8	-0.5	6.1	0.9	-0.7
Benin	27.4	29.8	28.6	27.9	27.9	27.9	-6.2	-6.8	-7.3	-6.0	-6.1	-5.8
Botswana	43.9	41.4	40.2	41.3	41.9	41.8	5.4	7.8	5.3	1.9	-3.0	-1.0
Burkina Faso	30.5	40.5	44.2	44.6	47.2	50.4	-5.5	-7.2	-7.3	-5.8	-5.7	-4.0
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	104.6	99.4	99.7	99.5	-9.7	-3.9	-6.6	-4.5	-4.4	-4.2
Cameroon	21.6	22.5	22.6	24.4	24.5	24.5	-3.4	-3.2	-2.7	-3.7	-3.7	-3.5
Central African Rep.	21.2	25.2	25.0	27.1	28.5	30.1	-7.9	-5.3	-7.8	-8.0	-4.1	-4.9
Chad	13.4	15.7	15.5	15.5	16.4	16.6	-9.0	-10.2	-6.6	-3.4	-6.4	-6.1
Comoros	22.4	27.5	27.1	28.1	28.1	28.1	-2.5	-4.3	-2.2	-3.8	-8.0	-7.4
Congo, Dem. Rep. of	11.1	14.1	13.5	12.8	13.0	13.1	-5.5	-4.1	-3.2	-4.6	-3.4	-4.2
Congo, Rep. of	33.5	42.7	34.1	26.2	27.9	29.5	-0.0	-63.5	-5.9	6.7	6.8	5.3
Côte d'Ivoire	15.6	14.6	13.6	13.7	15.3	14.9	1.8	-1.2	-2.7	-4.7	-3.8	-3.8
Equatorial Guinea	14.5	17.4	16.4	15.2	16.1	17.2	-8.4	-13.0	-5.8	-5.4	-5.9	-6.2
Eritrea	178.1	223.4	257.9	247.2	238.4	239.9	9.4	15.3	23.8	16.6	11.3	13.2
Eswatini	24.9	29.6	29.3	28.9	29.4	29.5	4.3	7.8	7.0	2.0	2.5	5.0
Ethiopia ¹	27.3	28.9	31.7	33.6	33.6	32.8	-5.9	-9.4	-8.6	-6.5	-6.0	-5.3
Gabon	23.0	24.7	22.7	24.3	27.1	30.0	11.0	-9.9	-4.4	-2.4	0.1	0.9
Gambia, The	35.4	36.1	40.1	42.9	44.8	45.3	-7.7	-9.2	-7.4	-9.7	-9.4	-13.1
Ghana	23.1	26.4	25.8	25.5	27.1	27.7	-7.3	-5.2	-3.4	-3.1	-3.6	-3.8
Guinea	24.5	25.2	24.0	22.7	21.0	20.4	-13.8	-31.9	-7.1	-18.4	-20.7	-17.7
Guinea-Bissau	35.9	47.9	44.7	46.0	44.6	45.5	-3.4	1.3	0.3	-4.5	-4.2	-3.7
Kenya	41.6	39.7	37.2	37.5	37.6	36.2	-8.2	-4.9	-6.2	-5.0	-4.7	-4.6
Lesotho	32.8	31.4	36.1	34.8	33.8	33.8	-7.4	-8.4	-4.7	-8.6	-14.6	-4.9
Liberia	23.3	20.5	19.9	21.3	23.6	24.5	-21.7	-18.6	-23.4	-23.4	-21.2	-21.0
Madagascar	25.6	28.0	29.7	29.3	30.2	30.6	-5.9	0.6	-0.5	0.8	-1.6	-2.7
Malawi	24.6	22.8	23.6	23.7	23.7	23.7	-10.0	-18.5	-25.6	-15.3	-14.3	-14.2
Mali	25.7	27.8	26.8	28.9	28.9	29.0	-5.1	-7.2	-7.3	-3.8	-5.5	-5.5
Mauritius	99.9	109.9	114.2	115.1	115.1	115.1	-7.6	-4.0	-4.6	-5.8	-7.2	-6.5
Mozambique	32.8	37.1	35.8	36.7	34.1	32.7	-34.6	-39.0	-20.0	-30.4	-58.0	-66.7
Namibia	58.4	51.8	52.1	54.3	54.3	54.3	-6.6	-15.4	-5.0	-2.1	-4.1	-2.3
Niger	22.6	26.8	24.4	21.8	21.9	21.2	-18.0	-15.5	-15.7	-18.1	-20.0	-22.7
Nigeria	20.5	25.4	24.7	25.4	26.5	27.4	1.8	0.7	2.8	1.3	-0.2	-0.1
Rwanda	20.9	23.9	23.6	25.3	27.0	28.5	-9.7	-14.3	-6.8	-7.8	-9.2	-8.7
São Tomé & Príncipe	38.8	35.0	32.9	35.0	32.8	32.8	-20.2	-6.6	-13.2	-10.9	-11.5	-9.0
Senegal	30.3	37.3	37.9	40.3	42.6	41.5	-6.6	-4.0	-7.3	-8.8	-8.5	-11.1
Seychelles	61.4	71.8	77.4	77.7	78.5	80.0	-19.5	-20.6	-20.4	-17.0	-16.7	-17.0
Sierra Leone	22.4	25.1	23.7	23.0	23.3	23.2	-27.0	-4.4	-14.4	-13.8	-12.3	-10.5
South Africa	73.1	72.4	72.4	72.4	72.4	72.4	-4.1	-2.9	-2.5	-3.5	-3.1	-3.6
South Sudan	18.9	25.6	13.9	13.7	14.7	14.5	-1.1	4.9	-3.4	-6.5	2.3	-4.2
Tanzania	23.4	21.4	20.7	20.3	20.0	19.9	-9.8	-4.3	-3.0	-3.7	-4.1	-3.6
Togo	45.1	53.6	56.0	57.2	58.1	58.6	-9.2	-9.8	-2.0	-4.9	-6.3	-5.5
Uganda	20.6	21.7	22.3	22.2	22.8	23.3	-7.9	-3.4	-5.0	-8.9	-11.5	-10.5
Zambia	20.7	20.6	22.0	22.5	22.5	22.4	2.5	-4.5	-3.9	-2.6	-3.6	-3.4
Zimbabwe ²	21.2	27.1	28.5	23.4	18.0	16.5	-12.1	-3.6	-1.3	-4.9	-0.5	-2.5
Sub-Saharan Africa	35.7	37.4	36.6	36.6	36.9	36.9	-2.5	-3.9	-2.3	-2.7	-3.6	-3.8
<i>Median</i>	25.7	27.8	28.5	27.9	28.1	29.3	-7.0	-5.2	-5.0	-4.9	-5.5	-4.9
Excluding Nigeria and South Africa	28.6	30.6	29.6	29.6	30.0	29.8	-4.4	-6.8	-4.6	-4.1	-5.6	-5.8
Oil-exporting countries	22.5	27.0	25.2	25.3	26.3	27.0	1.8	-2.0	1.1	1.5	-0.3	-0.5
Excluding Nigeria	27.3	31.1	26.5	25.0	26.0	26.0	1.6	-8.1	-2.1	2.0	-0.6	-1.6
Oil-importing countries	45.2	44.5	44.1	43.8	43.6	43.1	-5.8	-5.2	-4.4	-5.1	-5.6	-5.8
Excluding South Africa	29.1	30.5	30.5	30.7	31.0	30.8	-7.3	-6.4	-5.4	-6.0	-6.9	-6.9
Middle-income countries	38.8	40.6	39.6	39.6	40.1	40.2	-0.9	-2.6	-1.1	-1.2	-2.1	-2.2
Excluding Nigeria and South Africa	31.9	33.7	31.6	31.3	32.2	32.0	-1.1	-5.6	-3.1	-1.6	-3.1	-3.4
Low-income countries	24.8	27.0	27.4	27.7	27.6	27.5	-9.4	-8.3	-6.6	-7.4	-8.6	-8.7
Excluding low-income countries in fragile situations	25.2	26.8	27.6	28.1	28.2	28.2	-10.7	-8.6	-7.2	-7.7	-9.7	-9.7
Countries in fragile situations	23.0	25.8	24.5	23.7	23.6	23.5	-4.8	-9.1	-4.9	-5.5	-5.1	-5.4
CFA franc zone	23.1	26.4	25.7	26.0	27.2	27.7	-3.1	-8.4	-5.4	-4.8	-4.8	-5.1
CEMAC	21.0	24.0	22.4	22.3	23.4	24.3	-1.8	-12.8	-4.4	-2.5	-2.3	-2.3
WAEMU	25.1	28.3	28.1	28.7	29.8	29.8	-4.6	-5.2	-6.1	-6.6	-6.6	-7.0
COMESA (SSA members)	31.0	32.4	33.1	33.4	33.3	32.9	-6.3	-5.8	-5.7	-5.5	-5.5	-5.3
EAC-5	29.4	28.3	27.2	27.3	27.4	27.1	-8.9	-5.1	-5.2	-5.5	-5.9	-5.5
ECOWAS	21.8	26.2	25.7	26.2	27.3	28.0	-0.5	-1.6	-0.1	-1.5	-2.4	-2.3
SACU	70.5	69.4	69.4	69.5	69.4	69.4	-3.7	-2.7	-2.2	-3.2	-3.2	-3.4
SADC	53.5	52.9	51.8	51.0	50.7	50.3	-3.6	-4.2	-2.6	-2.7	-4.1	-4.8

See sources and footnotes on page 61.

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

	External Debt, Official Debt, Debtor Based (Percent of GDP)						Reserves (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	38.2	46.5	55.1	59.0	7.8	10.3	8.3	7.2	6.9	7.5
Benin ¹	12.8	15.5	16.8	18.6	24.1	23.7	...	...	...	...	...	...
Botswana	12.5	10.0	13.9	11.2	10.5	8.9	11.5	13.6	12.3	11.3	9.0	8.8
Burkina Faso ¹	23.4	26.6	25.3	23.4	23.6	22.8	...	...	...	...	...	...
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	72.3	92.1	99.6	88.1	91.4	88.6	4.8	6.0	5.3	5.4	5.3	5.2
Cameroon ²	12.4	21.3	26.1	27.5	31.3	31.8	...	...	...	...	...	...
Central African Rep. ²	21.5	27.2	29.5	26.8	26.4	24.8	...	...	...	...	...	...
Chad ²	23.2	25.7	26.3	24.2	25.1	23.1	...	...	...	...	...	...
Comoros	19.1	15.4	17.7	18.9	22.7	26.7	7.1	6.6	6.8	5.8	5.4	5.3
Congo, Dem. Rep. of	16.9	14.8	14.6	12.9	11.4	9.8	1.4	0.6	0.4	0.5	0.8	0.8
Congo, Rep. of ²	24.0	49.3	39.3	28.7	28.9	30.6	...	...	...	...	...	...
Côte d'Ivoire ¹	34.2	27.7	32.4	36.0	37.7	36.3	...	...	...	...	...	...
Equatorial Guinea ²	7.1	9.1	9.2	9.2	12.3	14.7	...	...	...	...	...	...
Eritrea	62.7	59.6	70.3	64.4	58.0	55.2	3.2	2.8	2.4	2.4	1.9	3.1
Eswatini	7.7	9.1	8.9	9.8	11.6	13.1	4.1	3.5	3.3	2.7	2.4	2.8
Ethiopia ³	21.6	29.2	29.6	30.7	29.9	28.0	2.0	2.1	2.0	1.7	1.9	2.1
Gabon ²	21.9	35.6	40.6	38.5	40.5	41.1	...	...	...	...	...	...
Gambia, The	30.7	40.3	45.8	46.6	43.7	41.7	4.5	1.3	2.8	2.7	3.1	3.6
Ghana	20.4	29.9	29.1	27.8	30.3	31.9	2.8	2.6	2.8	2.7	2.3	2.1
Guinea	29.7	22.5	20.6	19.5	29.2	30.9	2.4	1.4	1.4	1.8	2.1	2.3
Guinea-Bissau ¹	27.2	22.8	19.8	22.3	24.5	24.0	...	...	...	...	...	...
Kenya	21.9	26.7	27.1	30.4	32.1	31.8	4.1	4.7	4.2	4.5	4.8	4.6
Lesotho	31.0	35.1	33.6	33.8	34.8	35.5	5.2	4.4	4.3	3.2	3.3	3.0
Liberia	9.3	20.1	24.2	28.0	32.4	36.9	2.0	2.8	2.9	2.6	1.9	1.2
Madagascar	26.1	28.1	28.5	29.4	31.4	33.1	2.8	3.0	3.8	4.0	4.2	4.1
Malawi	20.3	31.3	32.8	31.2	29.8	29.4	2.0	2.6	3.4	3.2	3.2	3.5
Mali ¹	21.0	23.9	26.2	23.7	25.8	25.4	...	...	...	...	...	...
Mauritius	14.1	14.6	12.9	11.2	13.8	15.3	5.7	8.3	9.5	10.1	11.3	11.4
Mozambique	46.8	99.8	91.5	84.0	91.2	90.3	3.1	2.8	3.7	2.3	1.9	1.9
Namibia	7.9	16.6	15.2	14.8	16.9	16.6	2.6	2.5	1.7	1.7	2.1	2.5
Niger ¹	18.6	28.9	34.7	32.0	36.3	37.3	...	...	...	...	...	...
Nigeria	5.1	9.9	13.3	13.7	15.8	15.2	5.8	6.4	6.6	7.2	6.4	6.0
Rwanda	19.3	33.6	37.3	40.8	42.3	43.6	5.0	4.1	4.5	4.6	4.6	4.5
São Tomé & Príncipe	77.5	80.3	78.0	70.5	70.0	65.5	4.0	3.9	3.6	2.6	2.4	2.6
Senegal ¹	25.9	31.1	41.4	48.5	50.8	50.2	...	...	...	...	...	...
Seychelles	42.8	31.8	29.7	27.5	26.5	25.3	3.2	3.7	3.7	3.6	3.5	3.4
Sierra Leone	26.9	36.7	40.5	38.6	39.3	39.5	2.6	3.7	3.9	3.4	3.2	3.4
South Africa	12.7	18.9	21.3	18.2	19.6	19.8	5.2	5.7	5.6	5.6	5.4	5.2
South Sudan	...	...	...	...	...	...	2.8	0.3	0.1	0.2	0.4	0.3
Tanzania	22.1	27.6	27.6	27.5	26.2	25.0	4.0	5.4	6.2	5.5	4.4	4.2
Togo ¹	15.8	19.2	21.1	19.7	21.9	22.2	...	...	...	...	...	...
Uganda	16.0	21.8	25.4	27.3	29.2	31.2	4.6	5.0	4.5	3.9	3.8	4.0
Zambia	16.2	38.2	36.7	42.2	55.0	62.6	3.0	2.4	2.2	1.7	1.4	1.0
Zimbabwe ⁴	37.0	33.8	31.1	33.6	56.0	55.5	0.5	0.6	0.4	0.2	0.1	0.1
Sub-Saharan Africa	14.3	22.0	24.0	24.0	25.9	25.8	4.9	5.1	5.0	4.9	4.7	4.6
Median	21.4	27.4	28.0	27.7	29.5	30.7	3.5	3.5	3.7	3.2	3.2	3.4
Excluding Nigeria and South Africa	21.3	29.9	30.1	31.2	33.6	33.7	4.3	4.2	4.0	3.7	3.6	3.7
Oil-exporting countries	9.5	17.9	20.6	21.5	23.5	23.0	6.0	6.5	6.3	6.5	6.0	5.9
Excluding Nigeria	19.4	36.4	34.0	37.2	42.3	44.2	6.3	6.7	5.8	5.1	5.2	5.6
Oil-importing countries	18.1	24.7	26.0	25.5	27.4	27.5	4.1	4.2	4.2	4.0	3.9	3.8
Excluding South Africa	22.2	27.8	28.7	29.4	31.4	31.2	3.3	3.3	3.4	3.2	3.2	3.2
Middle-income countries	12.4	20.2	22.6	22.7	24.7	24.7	5.5	5.9	5.7	5.7	5.4	5.3
Excluding Nigeria and South Africa	20.3	31.1	30.9	33.3	36.7	37.5	5.4	5.5	5.0	4.6	4.6	4.7
Low-income countries	23.0	28.3	28.9	28.5	29.9	29.3	2.7	2.5	2.7	2.4	2.5	2.5
Excluding low-income countries in fragile situations	22.7	30.9	31.8	32.1	32.7	32.1	3.1	3.3	3.6	3.2	3.1	3.1
Countries in fragile situations	25.6	25.9	26.6	25.8	27.8	27.1	2.8	1.3	1.3	1.5	1.8	1.9
CFA franc zone	20.4	25.8	29.2	29.8	32.4	32.3	5.3	3.2	3.4	3.8	4.2	4.3
CEMAC	16.2	25.6	27.7	26.5	29.3	30.0	5.2	2.3	2.3	2.7	3.3	4.0
WAEMU	24.9	26.0	30.3	32.2	34.5	33.8	5.3	3.9	4.1	4.5	4.8	4.5
COMESA (SSA members)	20.8	26.4	26.8	28.1	30.0	29.9	3.0	3.1	3.0	2.9	3.2	3.2
EAC-5	20.7	26.4	27.3	29.3	30.1	30.0	4.2	4.9	4.9	4.7	4.5	4.3
ECOWAS	10.0	15.4	19.1	19.8	21.7	21.2	5.0	5.1	5.2	5.5	5.1	4.9
SACU	12.6	18.4	20.7	17.8	19.0	19.2	5.3	6.0	5.7	5.6	5.4	5.2
SADC	16.8	26.3	26.3	25.4	27.7	28.1	5.2	5.9	5.6	5.2	4.9	4.9

See sources and footnotes on page 61.

This page intentionally left blank

IN THIS ISSUE:

CHAPTER 1

Navigating Uncertainty

CHAPTER 2

Competition, Competitiveness, and Growth
in Sub-Saharan Africa

CHAPTER 3

Domestic Arrears in Sub-Saharan Africa:
Causes, Symptoms, and Cures

CHAPTER 4

Statistical Appendix

PUBLICATIONS

REGIONAL ECONOMIC OUTLOOK
SUB-SAHARAN AFRICA – OCTOBER 2019