

Regional Economic Outlook

Sub-Saharan Africa

Domestic Revenue Mobilization and Private Investment

.....

APR **18**



World Economic and Financial Surveys

Regional Economic Outlook

Sub-Saharan Africa

Domestic Revenue Mobilization and Private Investment

.....

APR 18

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

©2018 International Monetary Fund

Cataloging-in-Publication Data

Regional economic outlook. Sub-Saharan Africa. — Washington, D.C.: International
Monetary Fund, 2003—
v. ; cm. — (World economic and financial surveys, 0258-7440)

Began in 2003.
Some issues have thematic titles.

1. Economic forecasting — Africa, Sub-Saharan — Periodicals. 2. Africa, Sub-Saharan —
Economic conditions — 1960 — Periodicals. 3. Economic development — Africa, Sub-Saharan
— Periodicals. I. Title: Sub-Saharan Africa. II. International Monetary Fund. III. Series: World
economic and financial surveys.

HC800.R4 2017
ISBN: 978-1-48433-398-62 (paper)
ISBN: 978-1-48434-889-5 (Web PDF)

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. Slow Recovery amid Growing Challenges	1
Macroeconomic Developments	2
Challenges and Risks	10
Policies.....	14
References	30
2. Domestic Revenue Mobilization in Sub-Saharan Africa: What Are the Possibilities?	31
Trends in Revenue Mobilization in Sub-Saharan Africa	32
Structural Factors Affecting Tax Effort and Potential	40
Lessons from Successful Revenue Mobilization Episodes	42
Conclusions and Policy Implications	48
References	58
3. Private Investment to Rejuvenate Growth	59
Private Investment Trends	60
Determinants of Private Investment Ratios.....	62
Alleviating Constraints to Private Investment	65
Conclusions and Policy Recommendations	73
References	87
Statistical Appendix	89
Publications of the IMF African Department, 2012–18	109
Boxes	
1.1. Grappling with Rising Insecurities in the Sahel Region.....	18
1.2. Regional Spillovers: A Steady Strengthening of Diverse Linkages	20
1.3. African Continental Free-Trade Area (AfCFTA) Agreement: What to Expect	22
1.4. CEMAC: Implementation of the Regional Economic Strategy and Road Ahead.....	25
1.5. Protecting Social Spending in IMF-supported Programs.....	27
2.1. Looking ahead: Digital Revenue Mobilization	50
2.2. Modeling the Economic Impacts of Revenue Mobilization in Resource-Rich Sub-Saharan African Countries.	51
3.1. Policy Reform and Private Investment Growth.....	74
3.2. Public Investment Efficiency in Sub-Saharan Africa.....	76
3.3. Developing Domestic Debt Markets in Sub-Saharan Africa.....	78
3.4. Fintech in Sub-Saharan Africa	80
Tables	
2.1. Sub-Saharan African Revenue Mobilization Episodes: Background Information	44
2.2. Sub-Saharan African Revenue Mobilization Episodes: Timeline of Tax Policy and Administrative Reforms.....	45
3.1. Economic Impact on the Private Investment Ratio of a 1 Percentage Point Increase in GDP Growth, Depending on Institutional and Structural Characteristics	64

Figures**Chapter 1**

1.1. Business Cycle Synchronization between Sub-Saharan Africa and China, European Union, and United States, 2001–16	2
1.2. Sub-Saharan African Frontier Market Economies: International Sovereign Bond Issuances, 2014–18	3
1.3. Sub-Saharan Africa: EMBIG Spreads and Total Public Debt, 2015–17	3
1.4. Change in Selected Commodity Prices since 2013	3
1.5. Sub-Saharan Africa: Real GDP Growth, 2013–19	4
1.6. Sub-Saharan Africa: Number of Countries with Increasing Real GDP Growth, 2000–19	4
1.7. Sub-Saharan Africa: Share of Population Based on Real GDP per Capita Growth Performance, 2016–18	4
1.8. Sub-Saharan Africa: Internally Displaced Persons, 2010–16	5
1.9. Sub-Saharan Africa: Total Exports by Partner, 2000–16	5
1.10. Sub-Saharan Africa: Current Account Balance Decomposition, 2011–18	6
1.11. Sub-Saharan Africa: Current Account Deficit and Sources of Financing, 2011–18	6
1.12. Sub-Saharan Africa: International Reserves, 2017	7
1.13. Sub-Saharan Africa: Overall Fiscal Balance, 2016–17	7
1.14. Sub-Saharan Africa: Total Public Debt, 2011–17	8
1.15. Sub-Saharan Africa: Interest Expenditure, 2011–17	8
1.16. Sub-Saharan Africa: Real GDP Growth Decomposition, 2014–18	9
1.17. Sub-Saharan Africa: Inflation, 2011–18	9
1.18. Sub-Saharan Africa: Average Change in Base Money, 2016 and 2017	9
1.19. Sub-Saharan Africa: Depreciation of National Currencies against the US Dollar from January 2017 to January 2018	10
1.20. Sub-Saharan Africa: Interest Payments, 2011–17	10
1.21. Sub-Saharan Africa: Public Sector Debt Currency Decomposition, 2011–17	11
1.22. Sub-Saharan Africa: External Debt Service, 2011–17	11
1.23. Sub-Saharan Africa: Medium-Term Fiscal Plans, 2018–22	11
1.24. Sub-Saharan Africa: External Arrears, 2017	12
1.25. Sub-Saharan Africa: Debt Risk Status for PRGT Eligible Low-Income Developing Countries, 2011–17	12
1.26. Sub-Saharan Africa: Bank Nonperforming Loans to Total Loans, 2014–16	13
1.27. Sub-Saharan Africa: Private Sector Credit Growth, 2016–17	13
1.28. Sub-Saharan African Oil Exporters: Fiscal Breakeven Oil Price, 2014 versus 2017	14
1.29. Sub-Saharan Africa: Real GDP per Capita Relative to the US, 1985 and 2000	16
1.30. Sub-Saharan Africa: Real GDP per Capita Relative to the US, 2000 and 2017	16

Chapter 2

2.1. Sub-Saharan Africa: Total Revenue Excluding Grants, 1995–2016	33
2.2. Sub-Saharan Africa: Tax Revenue, 1995–2016	33
2.3. Sub-Saharan Africa: Nonresource Revenue to Nonresource GDP, 1995–2015	33
2.4. Sub-Saharan Africa: Tax Revenue to GDP	33
2.5. Sub-Saharan Africa: Sources of Revenue, 1995–2016	33
2.6. Change in Revenue Excluding Grants	34
2.7. Total Revenue Excluding Grants, Median, 2016	34
2.8. Sub-Saharan Africa: Decomposition of Revenue, 2016	34
2.9. Sub-Saharan Africa: Revenue, Oil Exporters, Median, 1995–2016	34

2.10. Sub-Saharan Africa: Nonresource Revenue, Fragile and Nonfragile States, Median, 1997–2015.....	35
2.11. Personal Income Tax Rate, Average Top Rate, 2000–16	35
2.12. Corporate Income Tax Rate, Average Top Rate, 2000–16	35
2.13. Sub-Saharan Africa: CIT Productivity and CIT to GDP, 2016 or Latest Available.....	36
2.14. CIT Productivity, Average	36
2.15. VAT C-Efficiency, Average.....	36
2.16. Sub-Saharan Africa: CIT Productivity, 2016 or Latest Available.....	37
2.17. Sub-Saharan Africa: VAT C-Efficiency, 2016 or Latest Available.....	37
2.18. Sub-Saharan Africa: PIT Threshold Relative to per Capita GDP.....	38
2.19. Sub-Saharan Africa: VAT Threshold Relative to per Capita GDP.....	38
2.20. Excise Taxes, 2015, Average.....	39
2.21. Sub-Saharan Africa: Excise Taxes, 2015	39
2.22. Sub-Saharan Africa: Share of Nonresource Revenue Collected at Customs, 2015	40
2.23. Sub-Saharan Africa: Tax Efforts	41
2.24. Sub-Saharan Africa: Tax Frontier and Gap	41
2.25. Non-Sub-Saharan Africa: Tax Frontier and Gap.....	41
2.26. Sub-Saharan Africa: Tax Ratio and Tax Frontier.....	42
2.27. Sub-Saharan Africa: Nonresource Revenue Mobilization Episodes.....	43
2.28. Sub-Saharan Africa: Nonresource Revenue Mobilization Episodes.....	43
2.29. Progression of Tax Policy and Administrative Reforms	46
2.30. Revenue Mobilization Episodes and IMF Supported programs, 2001–16.....	47

Chapter 3

3.1. Poverty Headcount Ratio at \$2 a Day in Purchase Power Parity Terms and Real Private Investment Growth, 2000–16	59
3.2. Selected Regions: Investment to GDP, 2000–16	60
3.3. Sub-Saharan Africa and Developing Economies: Real Investment Index, 2000–16	61
3.4. Sub-Saharan Africa: Average Growth of Real Private Investment 2010–14 and 2015–16	61
3.5. Selected Groups in Sub-Saharan Africa: Private Investment to GDP Ratios, 2000–16.....	61
3.6. Selected Groups in Sub-Saharan Africa: Contribution of Investment to GDP Growth, 2006–16	62
3.7. Selected Countries: Real Private Investment Growth before and after Conflicts	62
3.8. Selected Regions: Corporate Financing, 2011–14	66
3.9. Sub-Saharan Africa: Regulatory Capital Ratios and Firms Using Banks to Finance Investment, 2011–14	66
3.10. Sub-Saharan Africa: Bond and Equity Allocations	66
3.11. Selected Regions: Financial Development.....	67
3.12. Sub-Saharan Africa: Safety and Soundness of Banking System and Financing of Investment	67
3.13. Selected Regions: Public-Private Partnership Investment as Share of GDP, 2000–16	68
3.14. Sub-Saharan Africa: Public-Private Partnership Investment to GDP by Country, Average 2000–16	69
3.15. Sub-Saharan Africa: Public-Private Partnership Investment by Sector, 2000–16.....	69
3.16. Selected Regions: Disputed and Cancelled Public-Private Partnerships to GDP, 2006-16	70
3.17. Selected Regions: Share of Disputed Projects 2006-16 and Benchmarking of Public-Private Partnership Management 2016	70
3.18. Selected Regions: Foreign Direct Investment	71
3.19. Sub-Saharan Africa: Foreign Direct Investment by Country, Average 2000–16	71

Abbreviations

AfCFTA	African Continental Free Trade Area
AMU	Arab Maghreb Union
BEAC	Bank of Central African States
BOAD	West African Development Bank
CAPB	cyclically adjusted primary balance
CBRs	correspondent banking relationships
CEMAC	Economic and Monetary Community of Central Africa
CEN-SAD	Community of Sahel-Saharan States
CIT	corporate income tax
COBAC	Central African Banking Commission
COMESA	Common Market for Eastern and Southern Africa
DIGNAR	debt, investment, growth, and natural resources
EAC	East African Community
ECCAS	Economic Community of Central African States
EMDEs	emerging market and developing economies
EMEDEV	all emerging market economies
FC	financially constrained
FDI	foreign direct investment
FOCAC	Forum on China-Africa Cooperation
GDP	gross domestic product
GMM	generalized method of moments
IAD	intergovernmental authority on development
ICRG	<i>International Country Risk Guide</i>
ICT	information and communication technology
ICTSD	International Centre for Trade and Sustainable Development
IEFX	Investor and Exporter Foreign Exchange
IOC	Indian Ocean Commission
LPM	local projections method
MENA	Middle East and North Africa
NFC	non-financially constrained
ODA	official development aid
PIT	personal income tax
PPP	public-private partnerships
P-FRAM	PPP Fiscal Risk Assessment Model
PRGT	Poverty Reduction and Growth Trust
REC	regional economic communities
REO	<i>Regional Economic Outlook</i> (IMF)
ROA	return on assets
SACU	Southern African Customs Union
SADC	Southern African Development Community
SANRAL	South African National Roads Agency Limited
SARB	South Africa Reserve Bank
SDGs	Sustainable Development Goals
SEZs	special economic zones
SSA	Sub-Saharan Africa
TFTA	Tripartite Free Trade Area
VAT	value-added tax
WAEMU	West African Economic and Monetary Union
WEO	<i>World Economic Outlook</i> (IMF)

Acknowledgments

The April 2018 issue of the *Regional Economic Outlook: Sub-Saharan Africa* (REO) was prepared by a team led by Papa N'Diaye under the direction of David Robinson.

The team included Francisco Arizala, Romain Bouis, Paolo Cavallino, Chuling Chen, Reda Cherif, Xiangming Fang, Jesus Gonzalez-Garcia, Cleary Haines, John Hooley, Gabriel Leost, Miguel Pereira Mendes, Nkunde Mwase, Mustafa Yenice, Toomas Orav, Hector Perez-Saiz, Ashan Rodriguez, Manuel Rosales, Alex Segura-Ubiergo, Jaroslaw Wieczorek, and Ludger Wocken.

Specific contributions were made by Karim Barhoumi, Matthieu Bellon, Dalia Hakura, Nana Hammah, Thordur Jonasson, James Knight, Trevor Lessard, Margaux MacDonald, Edouard Martin, Giovanni Melina, Alice Mugnier, Garth Nicholls, Mathilde Perinet, Marcos Poplawski-Ribeiro, Ivohasina F. Razafimahefa, Sampawende J. Tapsoba, and Shirin Nikaein Towfighian.

Charlotte Vazquez was responsible for document production, with production assistance from Natasha Minges and Sarahalou Pilouzoue. The editing and production were overseen by Linda Long 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 ¼ of 1 percentage point).

Editor’s Note

April 30, 2018

Table SA24. External Debt, Official Debt, Debtor Based table on page 116 has been replaced; the new version includes revised figures for Senegal.

Executive Summary

SLOW RECOVERY AMID GROWING CHALLENGES

Sub-Saharan Africa is set to enjoy a modest growth uptick, but vulnerabilities have risen and action is needed to raise medium-term growth potential. Average growth in the region is projected to rise from 2.8 percent in 2017 to 3.4 percent in 2018, with growth accelerating in about two-thirds of the countries in the region aided by stronger global growth, higher commodity prices, and improved market access. External imbalances have narrowed, but progress with fiscal consolidation has been mixed and vulnerabilities are rising: about 40 percent of low-income countries in the region are now in debt distress or assessed as being at high risk of debt distress. On current policies, average growth in the region is expected to plateau below 4 percent—barely 1 percent in per capita terms—over the medium term.

Across countries, economic outcomes are far from uniform. Oil exporters are still dealing with the legacy of the largest real oil price decline since 1970, with growth well below past trends and rising debt levels; several other economies, both resource intensive and nonresource intensive and some fragile states, continue to grow at 6 percent or more, while a number of countries are suffering from internal conflicts, with record numbers of refugees and internally displaced people. The two largest economies in the region, Nigeria and South Africa, remain below trend growth, weighing heavily on prospects for the region.

Looking forward, the impetus from the favorable external environment is likely to fade. The current growth spurt in advanced economies is expected to taper off, and the borrowing terms for the region's frontier markets will likely become less favorable, in step with the normalization of US monetary policy, which could coincide with higher refinancing needs for many countries across the region.

Turning the current recovery into sustained strong growth to improve living standards and meet social demands would require policies to both reduce vulnerabilities and raise medium-term growth prospects. Prudent fiscal policy is needed to rein in public debt, while monetary policy must be geared toward ensuring low inflation. And countries should also continue to advance structural reforms to reduce market distortions, shaping an environment that fosters private investment, and strengthen revenue mobilization to give governments the means to invest in physical and human capital, and protect social spending, even during fiscal consolidation. Reform priorities and sequencing vary with individual country characteristics and strength of fundamentals.

- Oil-exporting countries should continue to adjust their fiscal position and advance economic diversification, taking advantage of the respite provided by the uptick in commodity prices, while taking credible measures to boost non-oil revenues and enhance the efficiency of public spending. Countries that opted for exchange rate flexibility need to eliminate foreign exchange restrictions and multiple currency practices and allow their exchange rate to adjust to reflect economic fundamentals.
- Oil-importing countries, which have experienced rapid growth on the back of large public investment outlays but at the cost of rising debt, must aim to transfer the growth momentum from the public to the private sector and reduce fiscal imbalances to lower vulnerabilities that could threaten the achievement of sustainable growth over the medium term.

The risks to the outlook for the region depend on the decisiveness of policy actions. The uptick in oil prices, impending elections, and political transitions in many countries may reduce appetite for difficult reforms and could lead to further policy slippages. In addition, protracted internal conflicts continue to cloud the outlook

in several countries. At the same time, the regional outlook could significantly strengthen on the back of an improved business environment and strengthened confidence. This will occur, if the uncertainties in countries undergoing political transition dissipate and countries that are still in need of adjustment make decisive progress toward macroeconomic stabilization.

DOMESTIC REVENUE MOBILIZATION IN SUB-SAHARAN AFRICA: WHAT ARE THE POSSIBILITIES?

Domestic revenue mobilization is one of the most pressing policy challenges facing sub-Saharan African countries. Nearly all countries are seeking to raise revenues to make progress toward their Sustainable Development Goals while preserving fiscal sustainability. Despite substantial progress in revenue mobilization over the past two decades, sub-Saharan Africa is still the region with the lowest revenue-to-GDP ratio. Examining structural factors that account for this underperformance, it is estimated that the region could, on average, mobilize between 3 and 5 percent of GDP in additional tax revenues—significantly more than what the region has received each year from international aid. Key steps would be to strengthen value-added tax systems; streamline exemptions; and expand coverage of income taxes. Case studies of successful revenue mobilization episodes in the region highlight the importance of medium-term revenue strategies to strengthen the basic building blocks of effective tax administration; emphasizing efforts to broaden the tax base; and modernizing institutional processes. Developing new sources of taxation, such as property taxes, and harnessing new technologies that could facilitate access to more reliable information are also key. Moreover, since revenue mobilization is a process that needs to be sustained for years to have a durable impact, countries need to build a constituency for reform, based on a credible commitment to improved governance and transparency.

PRIVATE INVESTMENT TO REJUVENATE GROWTH

Increasing private investment is critical for the region to achieve sustainable strong growth and improve social outcomes over the medium term. While public investment in the region is at a similar level to other regions of the world, private investment in sub-Saharan Africa lags well below all other regions. Empirical work suggests that the strength of current and prospective economic activity plays a dominant role in driving private firms' decisions to invest. Beyond that, strengthening the regulatory and insolvency frameworks, increased trade liberalization, and deeper financial markets could also help lift private investment. As such reforms take time, countries have pursued other avenues in an attempt to jump-start private investment, notably public-private partnerships (PPPs), special economic zones (SEZs), and mechanisms to attract foreign direct investment (FDI). PPPs have been widely used in the region, but these partnerships need to be considered carefully in view of the risks involved. Notably, proper management of PPPs requires the adoption of institutional and legal frameworks to assess and limit risks as such projects often entail sizable contingent liabilities. SEZs, while in some cases successful in attracting investors to the region, benefit their host economies more where they establish strong links with host country firms and become better integrated in the national and regional development strategies. Recent international initiatives (for example, the G20 Compact with Africa and the Belt and Road Initiative) potentially provide another opportunity to support private investment in sub-Saharan Africa, including by fostering the institutional reforms to encourage FDI and PPPs.

1. Slow Recovery amid Growing Challenges

Sub-Saharan Africa is set to enjoy a modest growth uptick. The average growth rate in the region is projected to rise from 2.8 percent in 2017 to 3.4 percent in 2018, with growth accelerating in about two-thirds of the countries in the region. The growth pickup has been driven largely by a more supportive external environment, including stronger global growth, higher commodity prices, and improved market access. While external imbalances have narrowed, the record on fiscal consolidation has been mixed and vulnerabilities are rising: about 40 percent of low-income countries in the region are now assessed as being in debt distress or at high risk of debt distress. On current policies, average growth in the region is expected to plateau below 4 percent—barely 1 percent in per capita terms—over the medium term, highlighting the need for deliberate actions to boost growth potential.

Recent growth performance has been far from uniform. Several economies (Burkina Faso, Côte d'Ivoire, Ethiopia, Ghana, Guinea, Rwanda, Senegal, Tanzania)—a mix of resource-intensive and non-resource-intensive economies—grew 6 percent or faster in 2017 and are expected to maintain robust growth over the medium term. At the other end of the spectrum, 12 countries, home to about a third of sub-Saharan Africa's population, saw per capita incomes decline in 2017, and most of these countries are expected to see further declines in 2018. A number of countries are facing internal conflicts (Burundi, Democratic Republic of the Congo, South Sudan), resulting in record levels of refugees and internally displaced people, with adverse spillovers to neighboring countries. Nigeria and South Africa, the two largest economies in sub-Saharan Africa and its main economic engines, have been stuck in low gear and are weighing heavily on the region's overall growth.

External positions have strengthened, reflecting both global developments and in some cases improved policy frameworks. Better terms of trade contributed to the narrowing of the current account deficits in most resource-intensive countries, but demand compression also played an important role

in some countries. Record-low spreads prompted a surge in Eurobond issuances by the region's frontier markets. Stock markets, fueled by portfolio inflows, were buoyant in the region's economic hubs. Exchange rate pressure subsided in some countries seeing increased foreign exchange rate flexibility (Angola) and new foreign exchange measures (Nigeria).

Debt levels have continued to rise. Oil exporters have now, mostly, put in place policies to respond to the deep macroeconomic imbalances stemming from the historically large adverse terms-of-trade shock of 2014, but the delayed adjustment and magnitude of the shock have resulted in sharply elevated debt levels. Many other countries continue to rely on public-investment-driven growth, with rising debt levels. The associated balance sheet weaknesses are limiting the extent of the recovery, as shrinking fiscal space, rising debt, slowing private sector credit, and increasing nonperforming loans are exacerbating vulnerabilities in many countries.

Recent political developments in South Africa and Zimbabwe bode well for the economic policy environment, but lingering political uncertainties in many countries, including in those dealing with internal conflict or heightened terrorism, are deterring investment and dampening growth prospects.

Looking forward, the favorable external environment is expected to fade over time. The current growth spurt in advanced economies is expected to taper off, and the borrowing terms for the region's frontier markets will likely become less favorable, in step with the normalization of US monetary policy and an eventual return of global asset price volatility, which could coincide with higher refinancing needs for many countries across the region.

Thus, turning the current recovery into durable growth calls for domestic policy steps to both reduce vulnerabilities and raise medium-term growth potential. The former should be anchored on sustained fiscal discipline to prevent excessive

This chapter was prepared by a team led by Jaroslaw Wiecezorek, coordinated by Francisco Arizala and composed of Reda Cherif, Xiangming Fang, and Cleary Haines.

public debt accumulation and monetary policy geared toward low inflation. With the recent respite provided by the cyclical rebound in commodity prices, resource-intensive countries should guard against the temptation to defer reforms. Achieving the latter involves structural policies to reduce market distortions, shaping an environment that fosters private investment, and strengthening revenue mobilization, so that governments can invest in physical and human capital and protect social spending, even during fiscal consolidation.

Risks to the medium-term outlook for the region are associated with the decisiveness of the policy response. There are upside risks to the subdued medium-term growth prognosis for countries where policy uncertainty or lack of adjustment has delayed macroeconomic stabilization.

The issue of how to enhance domestic revenue mobilization is the focus of Chapter 2. Through a combination of empirical work and country case studies, the chapter highlights the importance of appropriate tax policy implemented by effective revenue administration institutions, and emphasizes the contribution of improved governance and corruption control to stronger revenue mobilization.

The critical role of private investment in ensuring sustainable growth over the medium term is examined in Chapter 3. Private investment in sub-Saharan Africa has remained markedly lower than in other regions. Empirical analysis highlights the importance of strengthening the regulatory and insolvency frameworks, increasing trade liberalization, and deepening access to credit. These institutional changes will take time, and the chapter also looks at other avenues countries have taken in an attempt to jump-start investment—such as public-private partnerships, special economic zones, and mechanisms to target foreign direct investment.

MACROECONOMIC DEVELOPMENTS

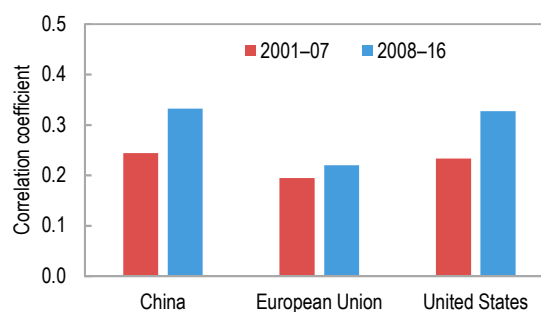
A More Supportive External Environment

The external environment for sub-Saharan Africa has further improved, with a stronger global recovery and easier financing conditions for the region's frontier markets. Commodity prices have also increased, providing some relief to oil exporters and other resource-intensive countries.

Global growth has been accelerating on a broad base. The world economy is estimated to have grown by 3.8 percent in 2017 and is expected to accelerate to 3.9 percent in 2018, reflecting stronger-than-expected growth in major advanced economies, especially in the euro area—and in the United States, partly thanks to the recently approved tax reform. Growth in China is also projected to remain solid. The improved growth prospects in all three areas provide a positive stimulus to growth in sub-Saharan Africa, given the correlation between their business cycles (Figure 1.1).

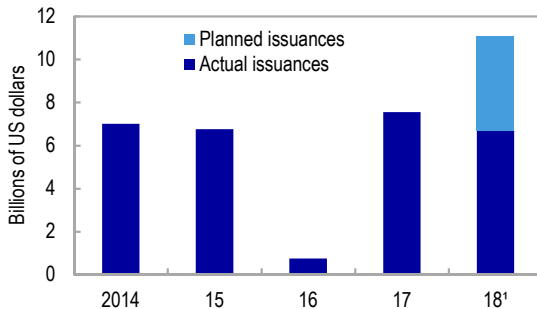
Global financial conditions remain accommodative, prompting a strong rebound in international sovereign bond issuance and sharp compression in yield spreads. Some of the region's frontier economies (Côte d'Ivoire, Nigeria, Senegal) issued a total of \$7.5 billion in 2017, 10 times the level seen in 2016 and a record high. This rapid pace of issuance continued in the first quarter of 2018—Kenya, Nigeria, and Senegal issued sovereign bonds in the amount of \$6.7 billion, and several countries stated their intention to issue at least an additional \$4.4 billion during the second quarter of 2018 (Figure 1.2). The global search for yield and increased appetite for sovereign bonds of the region's frontier markets are also reflected in much narrower spreads, both in absolute terms—sub-Saharan African frontier markets' spreads are half of what they were at their peak of about 900 basis points in 2016—and relative to emerging markets as an asset class, where the premium has narrowed from almost 600 to about 150 basis points.

Figure 1.1. Business Cycle Synchronization between Sub-Saharan Africa and China, European Union, and United States, 2001–16



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

Note: Correlations of cyclical components in real GDP derived from Hodrick-Prescott filter.

Figure 1.2. Sub-Saharan African Frontier Market Economies: International Sovereign Bond Issuances, 2014–18

Source: Haver Analytics.

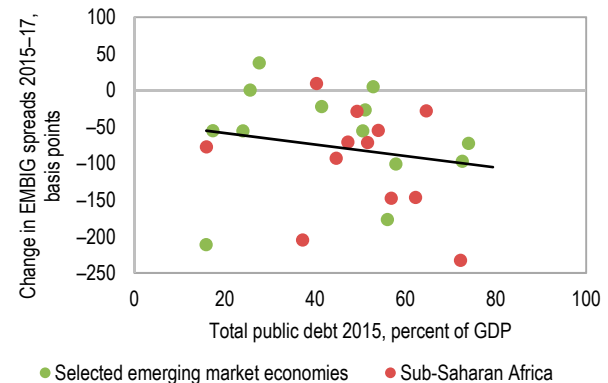
Note: Sub-Saharan African frontier market economies include Angola, Cameroon, Republic of Congo, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Kenya, Mozambique, Namibia, Nigeria, Senegal, Tanzania, and Zambia.

¹ Data are as of March 2018.

Remarkably, between 2015 and 2017, spreads compressed even for countries with high debt-to-GDP ratios (Figure 1.3).

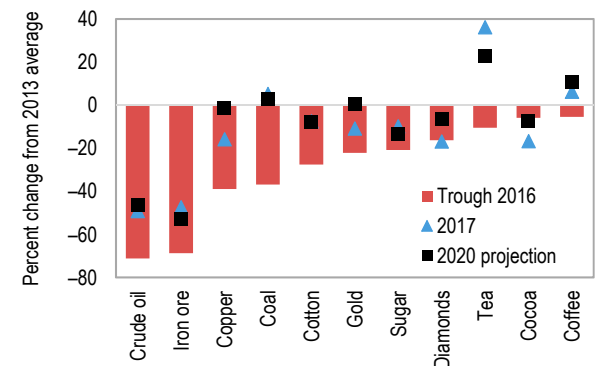
The strong investor interest is also captured in increased portfolio inflows into some, but not all, countries in 2017. Sharp increases in inflows were observed in Ghana, Nigeria, and Senegal, but levels were low relative to the recent past in Kenya and Zambia, where no Eurobonds were issued in 2017. A similar differentiation among economies is seen in the performance of regional stock markets: between April 2017 and the end of January 2018, stock market indices grew by about 10 percent in South Africa, 40 percent in Kenya, 60 percent in Ghana, and 70 percent in Nigeria, but fell in Senegal, where most of the record level of portfolio inflows were directed into Eurobond issuances.

Commodity prices have strengthened since mid-2017, providing a terms-of-trade boost to sub-Saharan African commodity exporters (Figure 1.4). Oil prices rose by about 20 percent between August 2017 and mid-December 2017 to more than \$60 a barrel. In addition, there were sizable increases in the prices of metals (aluminum, copper, iron ore) and agricultural raw materials (cotton, tea, vanilla), although some items (cocoa) witnessed price drops. With the notable exception of oil and iron ore, the prices of most commodities are now projected to approach, regain, or exceed their 2013 highs by 2020.

Figure 1.3. Sub-Saharan Africa: EMBIG Spreads and Total Public Debt, 2015–17

Sources: Bloomberg Finance, L.P.; and IMF, World Economic Outlook database.

Note: EMBIG = Emerging Markets Bond Index Global.

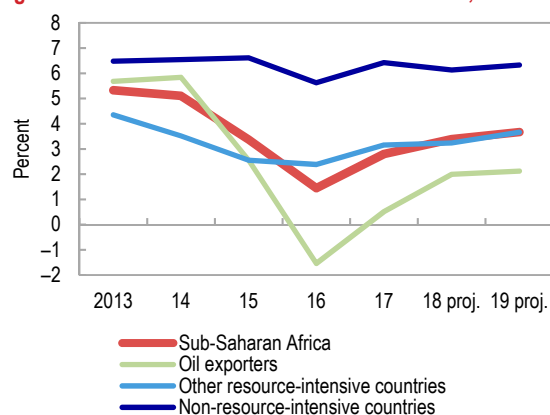
Figure 1.4. Change in Selected Commodity Prices since 2013

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 the Congo, Zambia), iron ore (Liberia, Sierra Leone, South Africa), coal (Mozambique, South Africa), and gold (Burkina Faso, Ghana, Mali, South Africa, Tanzania).

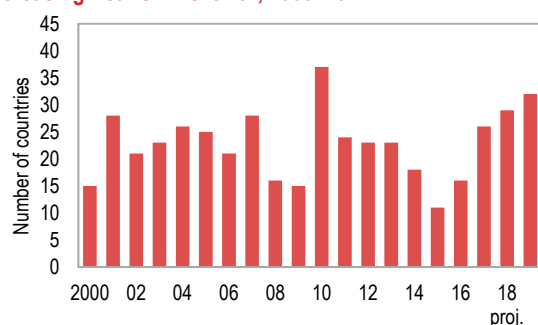
Growth Performance Is Far from Uniform

While sub-Saharan Africa is seeing a modest growth uptick, the average growth rate in the region remains close to zero on a per capita basis and well below historical trends for most country groups. Growth is expected to rise from 2.8 percent in 2017 to 3.4 percent in 2018 (Figure 1.5). While more than half of the expected pickup reflects the growth rebound in Nigeria, 29 of 45 countries are expected to see growth accelerate in 2018—the highest number since 2010 (Figure 1.6). Excluding the two largest economies (Nigeria and South Africa), growth in the rest of the region is foreseen to pick up from 4.6 percent in 2017 to 4.8 percent in 2018. Nevertheless, in 2017, income per capita is

Figure 1.5. Sub-Saharan Africa: Real GDP Growth, 2013–19

Source: IMF, World Economic Outlook database.

Note: See page 90 for country groupings table.

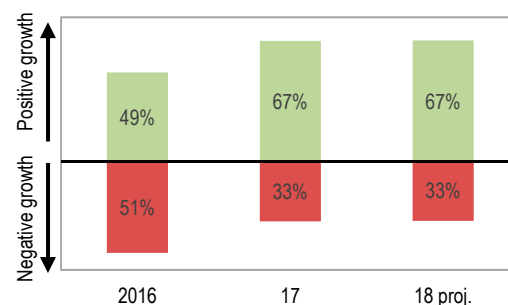
Figure 1.6. Sub-Saharan Africa: Number of Countries with Increasing Real GDP Growth, 2000–19

Source: IMF, World Economic Outlook database.

Note: Increasing growth refers to an improvement from the previous year.

estimated to have declined in 12 countries, home to about 33 percent of sub-Saharan Africa's population (320 million people) (Figure 1.7). And for most of those countries, prospects continue to suggest falling GDP per capita in 2018.

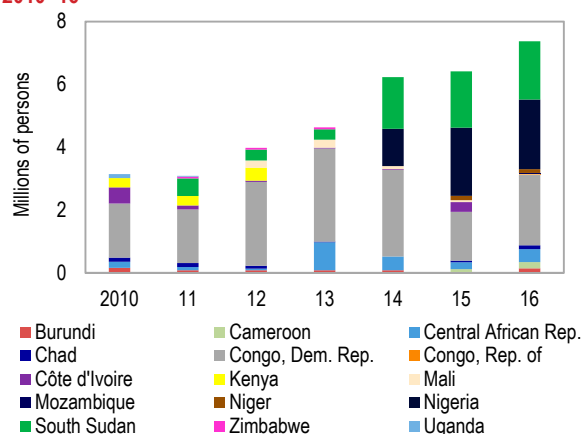
- Angola and Nigeria have seen some pickup in hydrocarbon production, but in both countries non-oil sector growth remained weak as balance sheets are still being repaired. Growth in the oil-exporting countries of the Central African Economic and Monetary Community (CEMAC) in 2017 was negative, except in Cameroon, benefiting from a more diversified economic base.
- The outlook for South Africa is set for a modest growth recovery. Growth is estimated to have reached 1.3 percent in 2017, reflecting mainly a rebound in agricultural and mining output. In 2018, growth is projected at 1.5 percent.

Figure 1.7. Sub-Saharan Africa: Share of Population Based on Real GDP per Capita Growth Performance, 2016–18

Source: IMF, World Economic Outlook database.

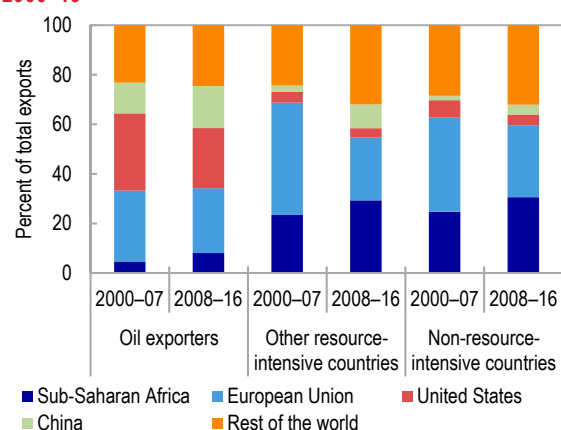
- Growth in the rest of sub-Saharan Africa (excluding oil-exporting countries and South Africa) is estimated to have reached 5.9 percent in 2017. Economic activity remains robust in fast-growing countries, such as Côte d'Ivoire and Senegal, boosted by public investment and strong agricultural production, and in Ghana, on the back of the expected increase in oil production.
- Economic activity in several countries in fragile situations (Guinea, Guinea-Bissau, Madagascar) has been helped by a strong rebound in commodity prices (aluminum, cashews, vanilla). Political developments in Liberia, Togo, and Zimbabwe weighed on their growth in 2017, but the peaceful political transition in Liberia and recent political changes in Zimbabwe point to opportunities for stronger outcomes.
- Countries affected by conflict are facing dramatic economic and humanitarian cost. Current or recent conflicts (Burundi, Democratic Republic of the Congo, South Sudan) have given rise to record levels of refugees and displaced people, with negative economic spillovers to neighboring countries. These conflicts and lingering terrorist activity in the Sahel and parts of East Africa, have resulted in food insecurity and impaired progress on human development indicators (Figure 1.8) (Box 1.1).

As intraregional linkages steadily gain strength, intraregional spillovers—through trade, remittances, and banking channels—are also having an ever-larger impact on growth outcomes (Figure 1.9).

Figure 1.8. Sub-Saharan Africa: Internally Displaced Persons, 2010–16

Source: United Nations High Commissioner for Refugees.

The recent weak economic performance in South Africa has slowed growth in neighboring countries, but countries such as Côte d'Ivoire and Kenya—which have enjoyed sustained robust growth in recent years—have played a significant role in terms of demand for regional exports and as home to regional banking groups. The regional spillovers are likely to be transmitted through various channels, including intraregional trade (Southern African Customs Union (SACU) and West African Economic and Monetary Union (WAEMU) members), banking (Botswana), and remittances (Liberia, Togo) (Box 1.2). These regional ties are likely to become stronger over the medium term if the recently launched African Continental Free Trade Area (AfCFTA) further boosts regional integration and generates substantial long-term economic benefits for African countries (Box 1.3).

Figure 1.9. Sub-Saharan Africa: Total Exports by Partner, 2000–16

Source: IMF, *Direction of Trade Statistics*.

Note: See page 90 for country groupings table.

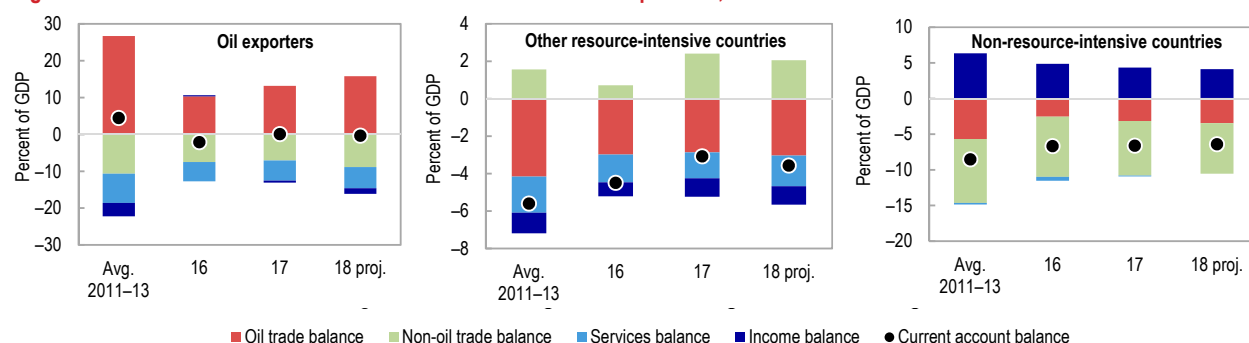
External Positions Have Strengthened

Current account deficits are estimated to have narrowed further in the region from an average of 4.1 percent of GDP in 2016 to 2.6 percent in 2017, although with significant dispersion, notably between oil exporters and importers (Figure 1.10). Most of the improvement in the current account stemmed from a compression in private sector demand.

For large oil exporters (Angola and Nigeria), external balances improved noticeably due to higher oil production, the recent uptick in oil prices, compressed imports, and foreign exchange measures (Nigeria). But non-oil exports remain weak. In the CEMAC, the current account deficit is estimated to have declined sharply from 13.8 percent of GDP in 2016 to 4.3 percent in 2017. The external adjustment has been particularly steep in the Republic of Congo, narrowing from a deficit of 74 percent of GDP in 2016 to about 13 percent in 2017, driven mainly by strong fiscal adjustment, the recovery in oil prices, and increased oil production. Elsewhere in the CEMAC, the narrowing of the current account deficit is explained by increased oil exports, some pickup in non-oil exports (Chad, Gabon, Equatorial Guinea), and lower non-oil imports (Cameroon, Gabon, Equatorial Guinea).

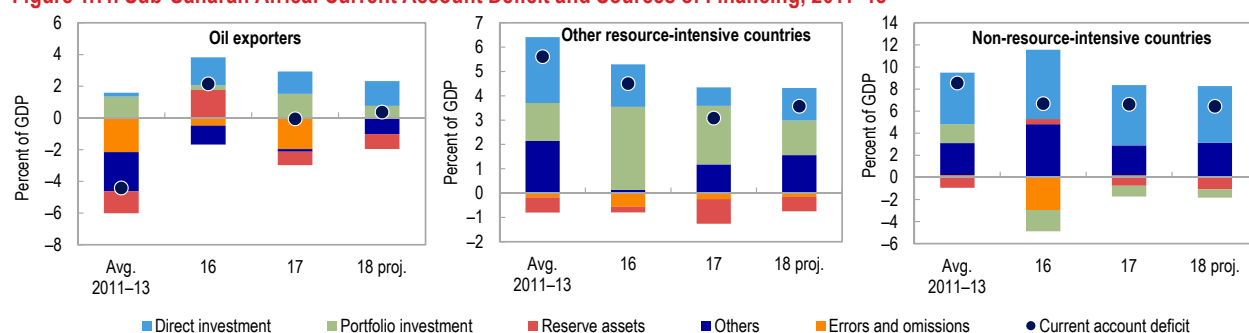
The external balances in most other resource-intensive countries appear to have improved in 2017 as well, reflecting a range of factors: weaker import growth (South Africa), stronger commodity exports and lower non-oil imports (Ghana), and import compression and a temporary increase in SACU receipts (Namibia). However, current account deficits have widened in several of those countries following deterioration in the terms of trade (Mali) or a drop in current transfers and income payments (Liberia).

In non-resource-intensive countries, current account deficits remained elevated in 2017 as a result of high food and fuel imports (Kenya), a combination of low exports and high capital goods imports (Ethiopia, Senegal), and increased imports related to public infrastructure projects (Uganda).

Figure 1.10. Sub-Saharan Africa: Current Account Balance Decomposition, 2011–18

Source: IMF, World Economic Outlook database.

Note: See page 90 for country groupings table.

Figure 1.11. Sub-Saharan Africa: Current Account Deficit and Sources of Financing, 2011–18

Source: IMF, World Economic Outlook database.

Note: See page 90 for country groupings table.

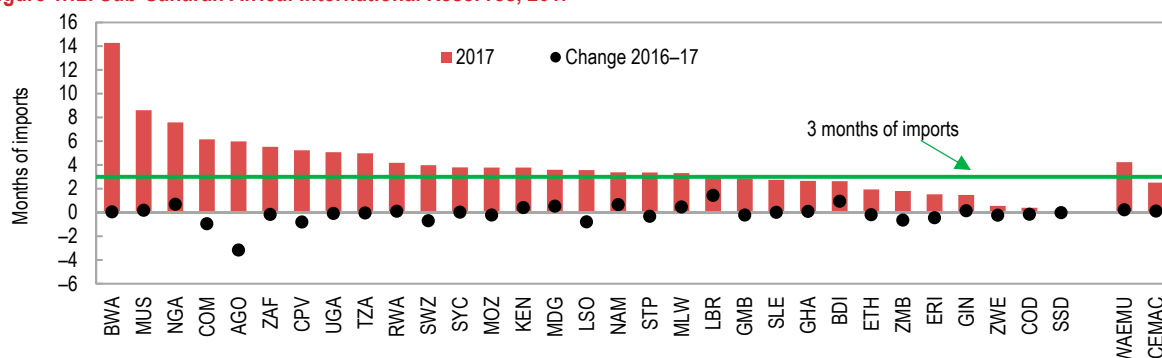
Current account imbalances have increasingly been financed through portfolio investment inflows, helping to ease pressure on reserves (Figure 1.11). In particular, oil-exporting countries' reserve levels increased in 2017 for the first time since 2013. For other resource-intensive countries, portfolio investment flows remained the major source of external financing. Non-resource-intensive countries, while experiencing net portfolio outflows, financed their deficits mainly through foreign direct investment.

External Buffers Remain Low

The improvement in current account balances in 2017 boosted international reserves in about half of the region's economies (Figure 1.12). However, many countries maintained reserves barely at or below the traditional three-months-of-imports benchmark.

For oil exporters, the buildup of reserves reflected the recovery in oil prices and other idiosyncratic factors.

- In Nigeria, gross international reserves rose to a four-year high (more than \$39 billion) at the end of 2017, favored by the improvement in the trade balance, sovereign and corporate bond issuances (including \$4.8 billion in international bond issuances), swaps, portfolio, and other private and inflows.
- In Angola, foreign exchange reserves fell sharply in 2017 as the authorities maintained a peg to the US dollar ahead of the transition to a more flexible regime in early 2018.
- In the CEMAC, international reserves have started to recover as regional institutions (Bank of the Central African States (BEAC), Central African Banking Commission (COBAC)) have implemented supportive policies to rebuild reserves, and fiscal consolidation has taken place. The recent increase in oil prices, if sustained, could lead to faster reserve accumulation.

Figure 1.12. Sub-Saharan Africa: International Reserves, 2017

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

Note: See page 90 for country groupings and page 91 for country abbreviations tables.

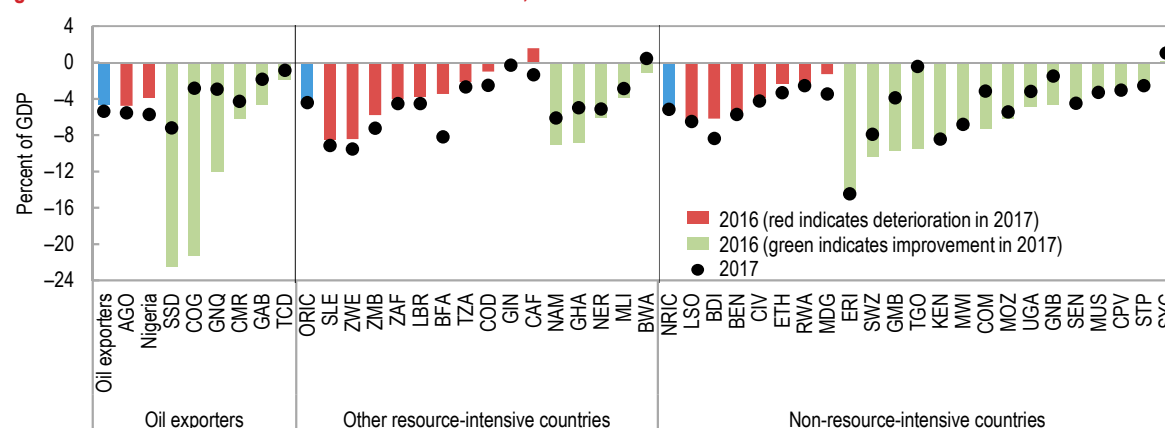
Elsewhere, easier access to international capital markets has also contributed to the buildup of reserves. In the WAEMU, after shrinking in 2016, international reserve coverage stabilized at about four months of imports at the end of 2017, helped by Eurobond issuances by Côte d'Ivoire, Senegal, and the West African Development Bank (BOAD). Meanwhile, in some countries, international reserves have dropped to alarmingly low levels. For example, South Sudan has reserves equal to only 0.1 month of imports, and in the Democratic Republic of the Congo and Zimbabwe, reserves cover only about 0.5 month of imports.

The Record on Fiscal Adjustment Is Mixed

While fiscal deficits widened for the region as a whole, from 4.6 percent of GDP in 2016 to 5.0 percent of GDP in 2017, there is significant variation across countries. Fiscal positions

deteriorated in the largest economies, but improved in most other countries (Figure 1.13). The improvement in fiscal positions reflected, in many cases, countries' continued adjustment to the sharp oil price decline in 2014, the largest in real terms since 1970 (IMF 2016).

- The fiscal position of oil-exporting countries deteriorated by 0.7 percent of GDP, as widened deficits in Angola and Nigeria outweighed the narrowing of deficits in CEMAC oil producers. The wider deficit in Angola stemmed from weak revenues and some recovery in capital spending, while in Nigeria the deficit increased between 2016 and 2017, mainly on the back of doubling capital expenditure amid low revenue collection. By contrast, CEMAC countries substantially reduced their fiscal deficits (from 7.6 percent in 2016 to 3.5 percent in 2017) through revenue mobilization efforts (Chad)

Figure 1.13. Sub-Saharan Africa: Overall Fiscal Balance, 2016–17

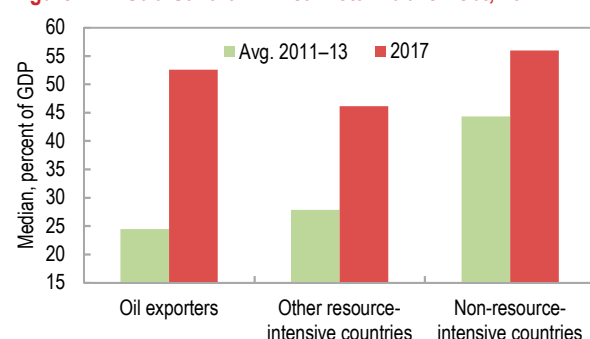
Source: IMF, World Economic Outlook database.

Note: ORIC = other resource-intensive countries; NRIC = Non-resource-intensive countries. See page 90 for country groupings and page 91 for country abbreviations tables.

and cuts in capital expenditures (Cameroon, Equatorial Guinea, Gabon, Republic of Congo) and current spending (Cameroon, Gabon). Nevertheless, a sharp and protracted contraction in Equatorial Guinea, debt distress in Chad and the Republic of Congo, and unresolved arrears in the Central African Republic—not an oil exporter—and Gabon continue to strain fiscal positions in the CEMAC area (Box 1.4).

- In other large economies, fiscal deficits continued to widen following increased current expenditures and revenue underperformance (South Africa) and revenue slippages (Ethiopia). Other economies also experienced a deterioration in their fiscal accounts in 2017, including several resource-intensive (Burkina Faso, Liberia, Zambia, Zimbabwe) and non-resource-intensive countries (Burundi).
- In the WAEMU, fiscal positions remained more relaxed than anticipated as the buildup of reserves from recent issuances of Eurobonds appears to have blunted the momentum of fiscal consolidation in the region. In 2017, only one member country met the overall fiscal deficit convergence criterion (below 3 percent of GDP), and fewer than half are projected to meet it by 2019.
- Nevertheless, several countries consolidated their fiscal positions in 2017 both in the other resource-intensive (Ghana, Mali, Namibia) and in the non-resource-intensive groups (The Gambia, Togo), including because of unintended underspending on capital expenditures (Uganda).

Figure 1.14. Sub-Saharan Africa: Total Public Debt, 2011–17



Source: IMF, World Economic Outlook database.

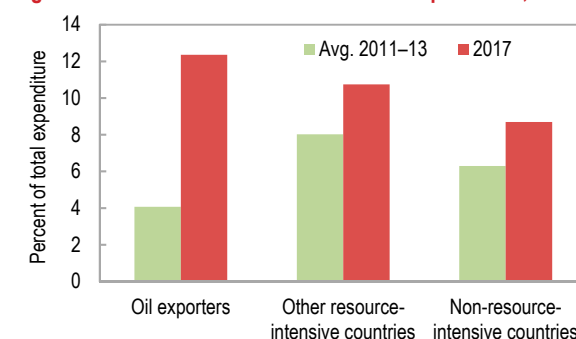
Note: See page 90 for country groupings table.

With fiscal deficits still large in many countries, debt levels have continued to rise (Figure 1.14). Compared to 2011–13, the median public debt level for all three country groups have significantly increased, especially in oil-exporting countries.

In part reflecting the recent debt buildup, the composition of public spending has shifted, with a marked increase in the share of interest payments. This shift in composition, reflected in either higher deficits or the diversion of resources away from more productive spending, has been particularly pronounced among oil-exporting countries. Average interest payments increased from 4 percent of expenditures in 2013 to 12 percent in 2017, owing notably to large increases in Angola, Chad, and Gabon (Figure 1.15). The proportion of interest payments in total spending has also increased among other resource-intensive countries and in many non-resource-intensive countries, partly because of the substantial increases in debt stocks (Côte d'Ivoire, Ghana, Namibia, Senegal, Seychelles, Togo, Uganda, Zambia).

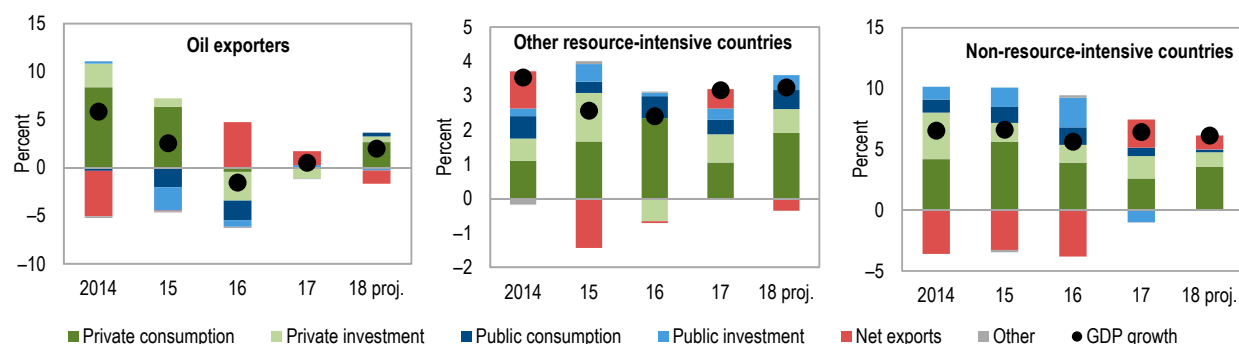
Although fiscal deficits have widened across all country groups since 2015, the public-sector contribution to growth has evolved differently in oil-exporting countries than in other sub-Saharan countries. In the former, the collapse of oil revenues led to tighter government spending, which had a strong contractionary effect on growth in 2015–16 (Figure 1.16). By contrast, in other resource-intensive countries and in non-resource-intensive countries, public spending (on consumption and investment) continued to support growth.

Figure 1.15. Sub-Saharan Africa: Interest Expenditure, 2011–17



Source: IMF, World Economic Outlook database.

Note: See page 90 for country groupings table.

Figure 1.16. Sub-Saharan Africa: Real GDP Growth Decomposition, 2014–18

Source: IMF, World Economic Outlook database. Note: See page 90 for country groupings table.

Inflation Pressures Have Receded

Regionwide, annual inflation fell from 12.5 percent in 2016 to just over 10 percent in 2017, and is expected to drop further in 2018 thanks to falling food prices and policy tightening by oil exporters (Figure 1.17).

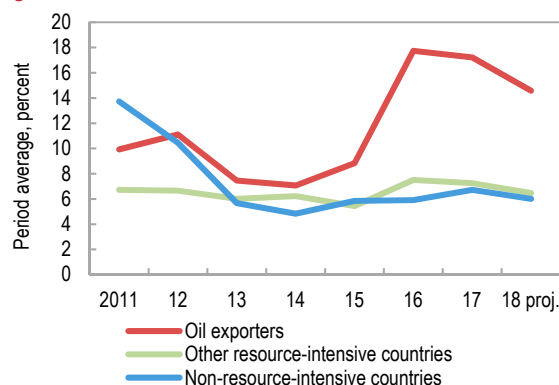
Monetary policy played an important role in taming inflation in hard-hit oil-exporting countries. In Angola, monetary policy was tight for most of 2017 as reserve money contracted throughout the year, in step with the decline in net international reserves (Figure 1.18). This contributed to tapering inflation from 42 percent in 2016 to 26.3 percent in 2017. In Nigeria, tighter monetary policy also helped contain inflation, as open market operations were used to reduce excess liquidity. In the CEMAC, the BEAC maintained a tight monetary policy stance, increased its policy rate by 50 basis points in March 2017, and maintained strict control on bank refinancing. Monetary conditions also

remained tight in other countries facing high or accelerating inflation (Kenya).

By contrast, monetary policy has been accommodative in countries where economic activity has weakened or inflation has been receding, including in countries that had experienced drought-related inflation spikes in 2016 and early 2017 (Rwanda, South Africa, Tanzania, Uganda). In some cases, exchange rate movements have also contributed to easing inflation pressures and enabled a more accommodative policy stance (Rwanda, Zambia).

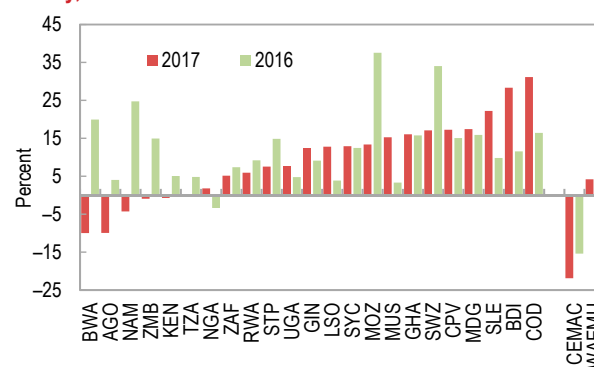
More Flexibility in Exchange Rate Systems

Exchange rate policies in Angola and Nigeria have shifted toward more flexibility—such as reduction of the number of foreign exchange windows in the case of Nigeria—helping lower external imbalances. In January 2018, Angola allowed the kwanza to depreciate by about 40 percent against

Figure 1.17. Sub-Saharan Africa: Inflation, 2011–18

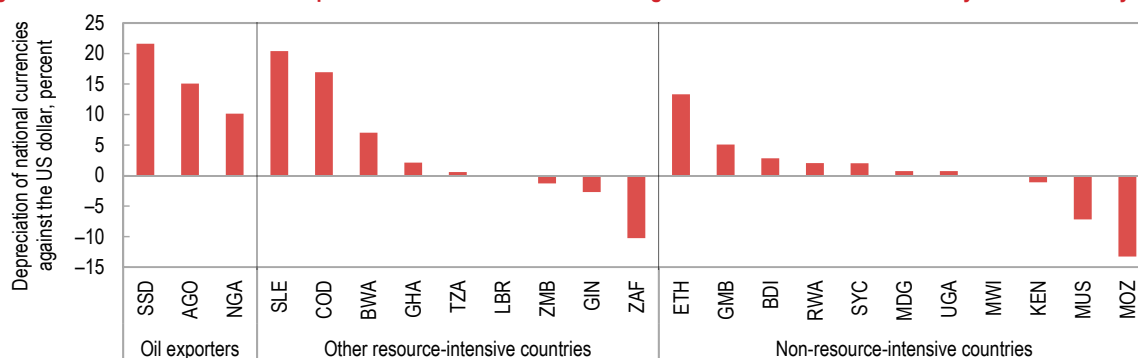
Source: IMF, World Economic Outlook database.

Note: See page 90 for country groupings table.

Figure 1.18. Sub-Saharan Africa: Average Change in Base Money, 2016 and 2017

Source: IMF, International Financial Statistics.

Note: See page 90 for country groupings and page 91 for country abbreviations tables.

Figure 1.19. Sub-Saharan Africa: Depreciation of National Currencies against the US Dollar from January 2017 to January 2018

Sources: Bloomberg Finance, L.P.; and country authorities.

Note: Positive indicates a depreciation. See page 90 for country groupings and page 91 for country abbreviations tables.

the US dollar. With increased availability of foreign exchange, the parallel official exchange rate spread decreased from 150 to 100 percent. In Nigeria, the introduction of a new investor and exporter foreign exchange (IEFX) window in April 2017 and higher foreign exchange inflows—related to increased oil exports and portfolio inflows—have improved foreign exchange availability and helped narrow the parallel market exchange rate premium, from its 60 percent peak in February 2017 to 20 percent in early 2018.

Other countries experienced large movements in their exchange rates, including depreciations reflecting the deterioration of economic conditions (Democratic Republic of the Congo, Liberia) and appreciations (Mozambique—through a partial reversal of a large depreciation in 2016) (Figure 1.19).

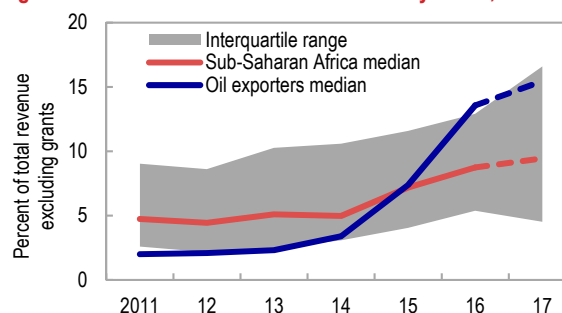
CHALLENGES AND RISKS

Debt Vulnerabilities Have Continued to Build Up

Public debt continued to rise in sub-Saharan Africa in 2017, despite the growth pickup and improved external environment. About 40 percent of Poverty Reduction and Growth Trust (PRGT) eligible low-income developing countries in the region are now in debt distress or at high risk of debt distress. Looking ahead, debt dynamics are susceptible to fiscal slippages, subdued growth outcomes, exchange rate depreciations, and tighter financing conditions.

The median level of public debt in sub-Saharan Africa at the end of 2017 exceeded 50 percent of GDP. Debt-to-GDP ratios deteriorated mainly due to large primary deficits and interest bills. Additional factors in some cases were negative growth (Chad, Republic of Congo, Equatorial Guinea); currency depreciations (The Gambia, Sierra Leone); reporting of previously undisclosed debt (Republic of Congo, Mozambique); and below-the-line operations, including the accumulation of arrears, incomplete recording of public transactions, operations of state-owned enterprises, and carryover of unspent appropriations above and beyond the annual budgetary process (Cabo Verde, Equatorial Guinea, Gabon, The Gambia, Senegal, Sierra Leone).

With rising debt stocks, interest payments have also been increasing, eating up a growing share of revenues (Figure 1.20). For sub-Saharan Africa as a whole, the median interest-payments-to-revenue ratio nearly doubled from 5 to close to 10 percent between 2013 and 2017, and for oil-exporting countries, it increased from 2 to more than

Figure 1.20. Sub-Saharan Africa: Interest Payments, 2011–17

Source: IMF, World Economic Outlook database.

Note: Shaded area refers to 25–75 percentile range.

15 percent over the same period. The largest increases occurred in Angola, Benin, Chad, the Republic of Congo, Gabon, Mozambique, Nigeria, Swaziland, Uganda, and Zambia.

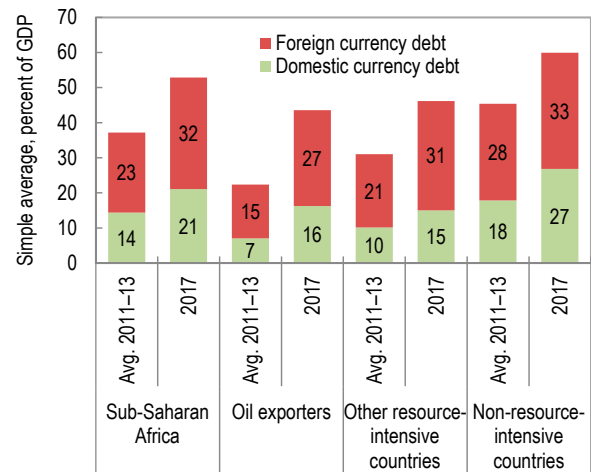
Increased reliance on foreign currency borrowing is another source of vulnerability. Foreign-currency-denominated public debt increased by about 40 percent from 2010–13 to 2017 regionwide (Figure 1.21) and accounted for about 60 percent of total public debt in 2017 on average. The recent increase partly reflects the rebound in Eurobond issuance by sub-Saharan African frontier markets. The share of foreign-currency-denominated debt varies from about 10 percent of total debt in South Africa to 100 percent in Comoros and Zimbabwe. While interest rates on foreign-currency-denominated debt are generally lower than domestic interest rates in sub-Saharan Africa, reliance on borrowing in foreign currency exposes debtor countries to exchange rate volatility, and heightens refinancing and interest rate risk.

The favorable external market conditions create an opportunity for improving the debt maturity structure and implementing other strategic debt management operations, but countries need to remain vigilant not to overborrow in a context of rising external debt service and gross financing needs (Figure 1.22). The increased availability of external financing should not detract countries from their medium-term fiscal plans (Figure 1.23).

Furthermore, with the rise in debt accompanied by an increasing share of commercial, domestic, and nontraditional sources, borrowing countries' exposure to market risk has risen, with increased challenges for debt resolution in the countries that find their debt burdens difficult to manage.

Indeed, several countries, mostly resource-intensive countries in fragile situations, have accumulated external arrears (Figure 1.24). Debt sustainability has deteriorated among sub-Saharan African PRGT eligible low-income developing countries (Figure 1.25). As of the end of 2017, six countries have been assessed to be in debt distress (Chad, Eritrea, Mozambique, Republic of Congo, South Sudan, Zimbabwe). The previous moderate ratings for Zambia and Ethiopia were changed to “high risk of debt distress.”

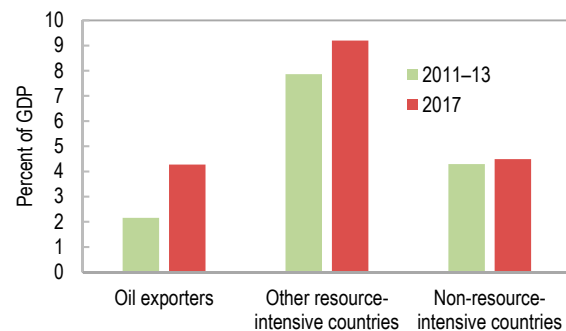
Figure 1.21. Sub-Saharan Africa: Public Sector Debt Currency Decomposition, 2011–17



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

Note: See page 90 for country groupings table.

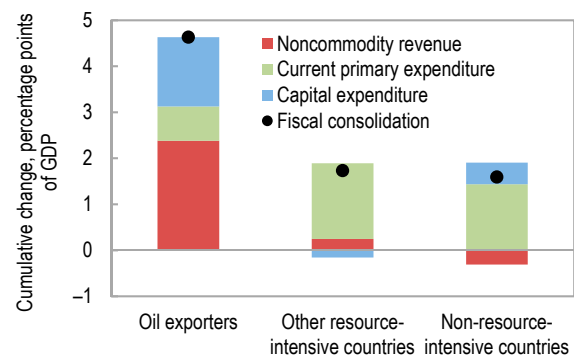
Figure 1.22. Sub-Saharan Africa: External Debt Service, 2011–17



Source: IMF, World Economic Outlook database.

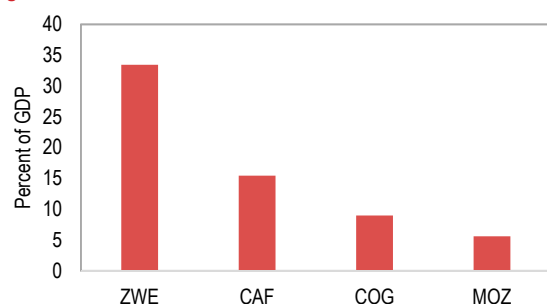
Note: See page 90 for country groupings table.

Figure 1.23. Sub-Saharan Africa: Medium-Term Fiscal Plans, 2018–22



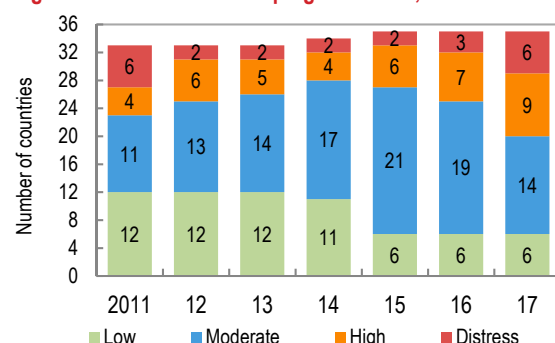
Sources: IMF, World Economic Outlook database; and IMF staff calculations.

Note: Excludes Burundi, Eritrea, and South Sudan due to data availability. See page 90 for country groupings table.

Figure 1.24. Sub-Saharan Africa: External Arrears, 2017

Source: IMF, World Economic Outlook database.

Note: See page 91 for country abbreviations table.

Figure 1.25. Sub-Saharan Africa: Debt Risk Status for PRGT Eligible Low-Income Developing Countries, 2011–17

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

Note: Debt risk ratings for Cabo Verde begin in 2014 and for South Sudan in 2015. PRGT = Poverty Reduction and Growth Trust.

While the causes of sliding into debt distress are country specific, most of the countries in debt distress are those in fragile situations or those facing adjustment to a very large shock to the price of their major export commodity.

Rising Nonperforming Loans Also Threaten Recovery

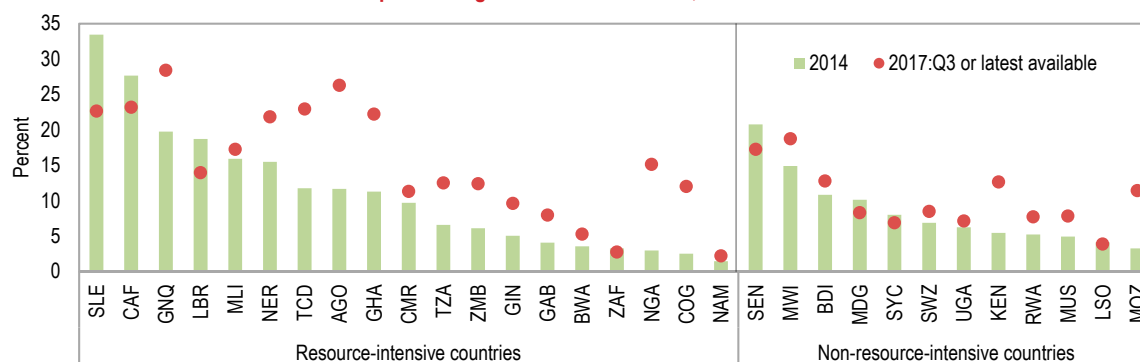
Although banking systems have been generally stable, with adequate capital and liquidity buffers, nonperforming loan ratios have surged across the region (Figure 1.26). The increases in nonperforming loans were particularly large among resource-intensive countries, where weak economic activity has translated into a decline in credit quality (Angola, Republic of Congo, Mozambique) and where government arrears have continued to affect the banking sector (Zambia). Nonperforming loans tend to be concentrated in a few banks (Angola and Nigeria) and, in several instances, have been incurred predominantly by public entities

(CEMAC). This is consistent with evidence that periods of declining commodity prices tend to be associated with deteriorating financial sector conditions in commodity-dependent countries, including higher numbers of nonperforming loans and more banking crises (IMF 2015a).

The broad-based deceleration in private sector credit growth raises additional concerns (Figure 1.27). In 2017, private sector credit growth was negative in real terms in many countries and, in several cases (Angola, Gabon, Zambia), it was negative even in nominal terms. With many factors at play simultaneously, in some countries demand-side factors predominated, with the private sector still struggling with the legacy of the crisis, while in other countries supply-side factors were more important, reflecting a combination of tight liquidity (WAEMU), government arrears (Gabon), high levels of nonperforming loans (Angola), crowding out by the public sector (Zambia), or interest rate controls (Kenya). The slowing down of private sector credit poses a threat to recovery in the affected countries, especially where fiscal space became constrained by the rising public debt burden.

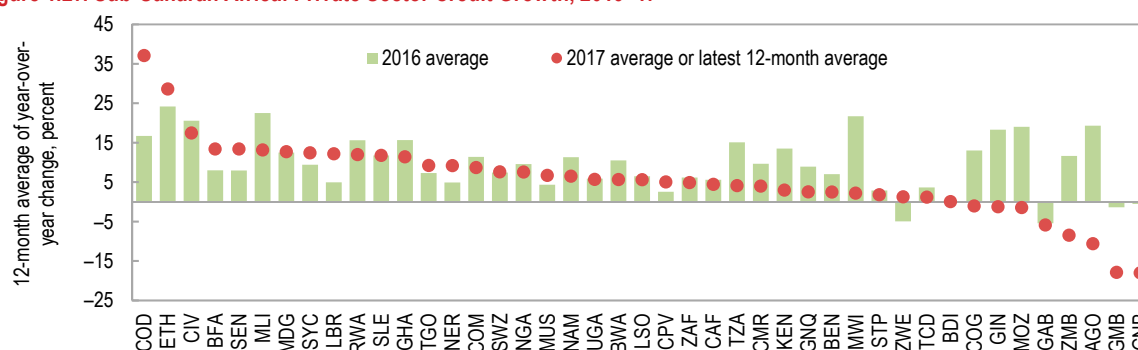
In many of these countries, the government's reliance on domestic banks to carry the rising public debt could crowd out the private sector and undermine banking sector stability. Besides tackling fiscal consolidation, these countries should address this emerging bank-sovereign nexus by rebalancing the incentives in place that favor holding government securities and discourage credit to the private sector (for example, tax deductibility and exemptions); implementing macroprudential measures to limit exposure to sovereign debt; and gradually tightening central bank refinancing of commercial banks (IMF 2017a). In the medium term, enhancing transparency in the corporate sector and reducing information asymmetry (for example, by implementing proper accounting standards, and setting up credit bureaus and property titling), and improving the resolution framework for banks would encourage exposure to the private sector.

Countries where rising nonperforming loans weigh on the recovery must take swift action to address rising vulnerability. The concentration

Figure 1.26. Sub-Saharan Africa: Bank Nonperforming Loans to Total Loans, 2014–16

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

Note: See page 90 for country groupings and page 91 for country abbreviations tables.

Figure 1.27. Sub-Saharan Africa: Private Sector Credit Growth, 2016–17

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

Note: See page 91 for country abbreviations tables.

of credit should also be tackled where the rise in nonperforming loans has been driven by a few entities. In parallel, safeguards to address liquidity pressures in the banking sector, enhanced review of asset quality, and prompt recapitalization of weaker banks should help preserve the banking sector's ability to lend to the private sector.

Fiscal Positions and Debt Dynamics Are Expected to Improve Gradually

In 2018, some fiscal consolidation is expected among non-resource-intensive countries, driven mostly by revenue mobilization efforts (Ethiopia, Lesotho, Mozambique) and cuts in current primary expenditures (The Gambia, Madagascar, Malawi). Similarly, but to a lesser extent, non-resource-intensive countries are expected to strengthen their fiscal positions, with planned increases in revenue mobilization and current expenditure cuts also creating some room for higher capital expenditures (Niger, Zimbabwe). Among oil-exporting countries,

in some cases, modest improvements in fiscal positions are expected to be driven by the pickup in oil revenue helped by price increases and the recovery of production (Nigeria).

The planned fiscal consolidation, together with a further pickup in growth, underlie an expected gradual reduction in debt over the medium term. If either factor fails to materialize, debt vulnerabilities could become more acute. The likelihood that envisaged fiscal consolidations will be implemented and sustained can be enhanced by paying careful attention to the distributional consequences of the adjustment and the need to protect priority spending—a key feature of recent IMF programs (see Box 1.5). Moreover, in designing the fiscal adjustment, preference should be given to measures with low short-term multipliers to mitigate the negative impact on growth with accompanying fiscal reforms to promote long-term growth (IMF 2015b, 2017b).

The Outlook for Oil Exporters Remains Challenging

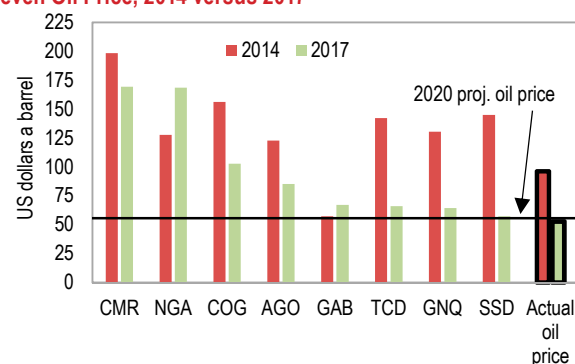
Despite recent increases, oil prices remain too low to balance the budgets of most oil exporters. The break-even oil price, the theoretical price at which the budget is balanced for a given level of production, declined between 2014 and 2017 for all sub-Saharan African oil-exporting countries except Gabon and Nigeria. In most cases however, the break-even oil price is still well above the current and projected price of oil (Figure 1.28).¹ The drop in the break-even oil price reflects the extent of fiscal consolidation—both reductions in expenditure envelopes and increases in nonoil revenues—as well as real depreciation vis-à-vis the US dollar. In Gabon and Nigeria, the increase in the break-even price can, in part, be explained by sizable drops in production volumes and, in the case of Gabon, also by an increase in government expenditure in real terms.

Risks to the Outlook

External risks. The expected monetary policy normalization in advanced economies could tighten financing conditions for many sub-Saharan African sovereigns, especially where public debt levels are already high, and often constrain the availability of financing for the private sector. Moreover, the recent surge in foreign portfolio investment to the region's capital markets could be reversed. Weaker-than-expected growth in key advanced economies (for example, as a result of inward-looking policies gaining the upper hand) and large emerging market economies, especially in China, would reverberate throughout the region, affecting not only commodity prices and demand for commodity exports but also foreign direct investment inflows and other sources of financing.

Domestic risks. Political uncertainty and security challenges continue to weigh heavily on the economic outlook in some countries. Impending elections and political transitions in many countries may reduce appetite for difficult reforms and could lead to further policy slippages. While recent political developments in some countries (Angola, South Africa, Zimbabwe) could durably benefit the

Figure 1.28. Sub-Saharan African Oil Exporters: Fiscal Break-even Oil Price, 2014 versus 2017



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

Note: See page 91 for country abbreviations table.

economic policy environment, continued policy uncertainty is dampening investment in many countries. In addition, lingering internal conflicts continues to be a latent risk in several countries (Burundi, Democratic Republic of Congo, South Sudan, and parts of the Sahel) bearing the socio-economic costs of the rising number of internally displaced people and refugees. Also, if economic conditions deteriorate, governments could be tempted by inward-looking policies, which would hinder growth. However, there is also a considerable upside risk if the current uncertainties resolve in favor of an improved business climate, if the economies experience a larger-than-anticipated confidence boost, or if policy reforms advance faster than expected (Nigeria, South Africa).

POLICIES

Ensuring Macroeconomic Stability

Ensuring macroeconomic stability is necessary to lay the groundwork for transforming the current recovery into sustainable growth. Prudent fiscal policy is needed to rein in the buildup of public debt, while monetary policy must be geared toward ensuring low inflation. Moreover, external buffers should be strengthened in countries that are well positioned to take advantage of the current global growth pickup and favorable external conditions. Beyond these general objectives, macroeconomic policies and supportive reforms should be tailored to sub-Saharan African countries' structural characteristics and cyclical positions.

¹ The break-even price is harder to interpret for Cameroon, given that oil represents a relatively small share of government revenue—about 13 percent in 2017—a very high price of oil would be needed to balance the budget.

- To achieve a sustainable growth pickup, oil-exporting countries should continue to adjust their fiscal positions and advance economic diversification, taking advantage of the respite provided by the uptick in commodity prices. Boosting non-oil revenues and enhancing the efficiency of public spending will also be essential to ensure macroeconomic stability over the medium term. Countries that opted for exchange rate flexibility need to eliminate foreign exchange restrictions and multiple currency practices and allow their exchange rate to adjust to reflect economic fundamentals.
- The oil-importing countries, which have been growing on the back of large public investment outlays—often resulting in substantial debt accumulation—must aim to hand over the investment momentum from the public to the private sector and reduce fiscal imbalances to ensure sustainable growth over the medium term.

Revenue Mobilization to Reduce Debt Vulnerabilities and Build Fiscal Space

Sub-Saharan Africa has enormous needs in terms of infrastructure and social development. With debt vulnerabilities rising in the region, sub-Saharan African countries will need to further rely on sustainable sources of financing, making domestic revenue mobilization one of the most urgent policy challenges for the region. As discussed in Chapter 2, sub-Saharan African countries could mobilize about 3 to 5 percent of GDP in additional tax revenues in the next few years, making room for spending on infrastructure and human capital (Gaspar and Selassie 2017). Successful revenue mobilization efforts require an appropriate tax policy design—including the expansion of the base for value-added and direct taxes—implemented by effective revenue administration institutions. In addition, pursuing revenue administration reforms in the context of a medium-term plan is a strategy that has proved successful, even in countries starting from low-capacity implementation. Moreover, policies targeting improvement in

governance and control of corruption, and ensuring efficient and transparent public spending, can go a long way in terms of motivating citizens to pay their fair share of taxes, ultimately favoring revenue mobilization.

Sustainable Growth Requires Reinvigorating Private Investment

With countries seeking to transition to sustainable growth paths, nurturing a dynamic private sector is a key priority. As discussed in Chapter 3, sub-Saharan Africa has historically the lowest level of private investment as a share of GDP among regions with similar levels of development. Policies should ensure that there is a favorable economic and institutional environment supported by high-quality infrastructure and a skilled labor force. Essential measures include ensuring macroeconomic stability, strengthening the regulatory and insolvency frameworks, increasing trade liberalization, and deepening access to credit. Innovative financing structures, such as public-private partnerships, can also be considered as long as an appropriate assessment of the contingent liabilities for the public sector is assured.

The Long-Term Challenge: Can Sub-Saharan Africa Catch Up?

Turning the current recovery into a sustainable growth spell is imperative to ensure a sustainable improvement in living standards and social development indicators. Yet, under current policies, medium-term growth in the region is projected to fall far short of the levels experienced in the 2000s and, at the current rate of population growth, also well below of what is needed to lift the living standards of the region's population.

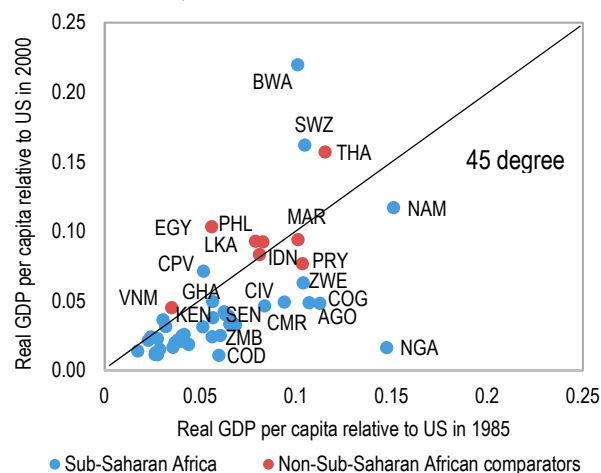
Income convergence has proved an elusive goal for many countries. Between 1985 and 2000, most low-income sub-Saharan economies were unable to close the per capita income gap relative to the frontier (that is, the United States) and, in this respect, they were not very different from most other low-income comparator countries

(Figure 1.29).^{2,3} But, in the 2000s, when growth accelerated in sub-Saharan Africa, most comparator countries from other regions achieved even higher growth rates. This enabled most of them to narrow significantly the income gap relative to the United States, which most sub-Saharan African countries have not been able to accomplish thus far and, on current projections, seem less well-positioned to accomplish in the years to come (Figure 1.30).

There have been many commonalities but also many differences between the economic strategies adopted by the sub-Saharan African countries and fast-growing low-income countries from other regions. During the high-growth years, sub-Saharan Africa was energized by the wave of trade and capital account liberalizations, a boom in commodity prices, and debt relief providing much-needed fiscal space. At the same time, the fast-growing comparators were less dependent on commodities and typically relied more on the easier trading and capital account environment to attract foreign direct investment in support of export diversification (mainly toward manufacturing) and structural transformation.

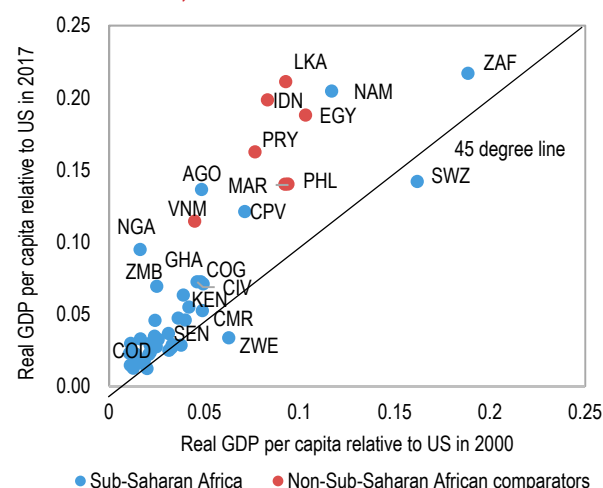
While many sub-Saharan African countries, especially those that are not resource intensive, have also achieved significant progress in export diversification and structural transformation, the region's commodity exporters have seen increased specialization in exports of primary commodities (IMF 2017c). In fact, major oil discoveries explain several exceptionally high increases in GDP per capita (Angola, Chad, Equatorial Guinea, Nigeria). Nevertheless, some other sub-Saharan African countries—Burkina Faso, Ethiopia, Ghana, Rwanda, and Tanzania—have also achieved relatively high growth rates since the mid-1990s.⁴ Although they benefited directly or indirectly from higher commodity prices, their sustained high growth was not driven solely by the exploitation of natural resources.

Figure 1.29. Sub-Saharan Africa: Real GDP per Capita Relative to the US, 1985 and 2000



Sources: Penn World Tables 9.0; IMF, World Economic Outlook database; and IMF staff calculations.
Note: See page 91 for country abbreviations table.

Figure 1.30. Sub-Saharan Africa: Real GDP per Capita Relative to the US, 2000 and 2017



Sources: Penn World Tables 9.0; IMF, World Economic Outlook database; and IMF staff calculations.
Note: See page 91 for country abbreviations table.

² These countries are Egypt, Indonesia, Sri Lanka, Morocco, the Philippines, Paraguay, Thailand, and Vietnam. They managed to grow from low-income to middle-income status without sizable commodity exports.

³ Being above (respectively below) the 45-degree line indicates that an economy is converging (respectively diverging); the distance to the line indicates the speed of convergence (or divergence).

⁴ The sample countries were chosen on the basis of average real output growth greater than 5 percent during 1995–2016 and real per capita GDP growth of more than 3 percent over the same period. Angola, Cabo Verde, and Equatorial Guinea also meet these criteria. Angola is excluded from the sample because it is heavily dependent on oil exports, while Cabo Verde and Equatorial Guinea are excluded due to the high volatility in their output growth.

The analysis of growth experiences in sub-Saharan Africa reveals many common characteristics. These include improved macroeconomic policies and stability, strong policymaking institutions, high investment in both physical and human capital, effective use of foreign aid, and deeper financial markets (IMF 2013). Sustaining growth in sub-Saharan African countries has been found to be associated with a supportive external environment—whether better terms of trade or favorable global financial conditions—and improvements in the quality of institutions, as well as sound fiscal management to prevent excessive public debt accumulation, monetary policy geared toward low inflation, outward-oriented trade policies, and macro-structural policies to reduce market distortions at the domestic level (IMF 2017d). And, to the extent that the growth strategy is to be anchored on economic diversification, the right policy mix should be tailored to the country-specific circumstances to tap the existing strengths—as illustrated by the success of Botswana—while enabling the private sector to expand.⁵

In this context, the challenge for sub-Saharan Africa is that growth models that proved successful elsewhere could become more difficult to emulate given current trends. The rapid robotization of manufacturing and the risk of a wave of inward-looking policies may make it more difficult for sub-Saharan African countries to compete in manufacturing. It is therefore of utmost importance to identify and resolve the obstacles and distortions that are holding back private sector activity in order to stimulate productivity growth whether it be in

existing sectors or in new sectors of the economy. In addition, the business environment should be improved by implementing reforms that foster governance, financial market deepening, and trade liberalization.

An additional challenge for sub-Saharan African countries aiming to emulate the successes in other regions is to harness the demographic dividend (IMF 2015c). The implications of current trends include a rapid increase in the working-age population and a demographic transition; in most other parts of the world, similar transitions have been associated with higher saving and investment, raising potential and current growth. However, to harness such a dividend, sub-Saharan African economies would have to create on average about 18 million jobs a year until 2035. Deliberate policies would be needed to encourage gradual structural transformation, allowing resources to move from the informal low-productivity sector to higher-productivity activities.

Finally, while a sustained acceleration in growth is important, it will not by itself result in the improved living standards and social outcomes that the region desires. The rapid growth in per capita income experienced in sub-Saharan Africa during 2000–14 has been accompanied by some progress in improving social outcomes—undernourishment rates have fallen from over 25 percent of the population to around 20 percent; poverty headcount rates have fallen from 60 to 40 percent; and school enrollment has increased by 60 percent. But much remains to be done.

⁵ Macroeconomic stability, access to credit, good infrastructure, a conducive regulatory environment, and a skilled workforce, are all associated with higher economic diversification (IMF 2017c).

Box 1.1. Grappling with Rising Insecurity in the Sahel Region

A surge in terrorism in the Sahel region (see Figure 1.1.1) compounds existing challenges for a subregion of about 150 million inhabitants that is already grappling with high rates of poverty, climate change vulnerability, and acute shortages of physical and human capital. In addition to the human costs—roughly 30 million people are suffering from food insecurity and 5 million are refugees and internally displaced persons—the terrorist activities have resulted in increasing military and other security-related outlays. Accommodating the additional expenditure needs while ensuring macroeconomic stability and debt sustainability, and preserving fiscal space for other expenditures needed for high and sustainable growth is a major challenge. Key steps to address it include strengthening revenue mobilization, improving governance, and increasing the efficiency of public investment.

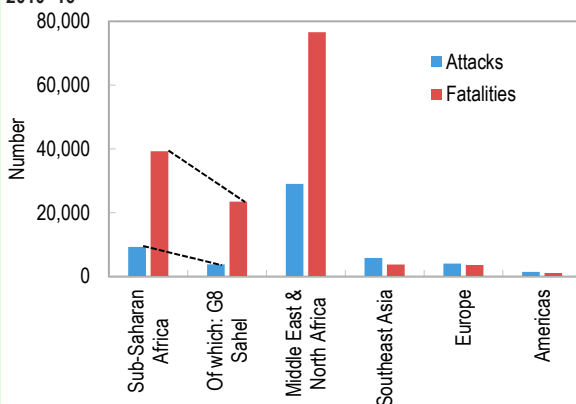
Figure 1.1.1. The Sahel Region



Source: IMF staff.

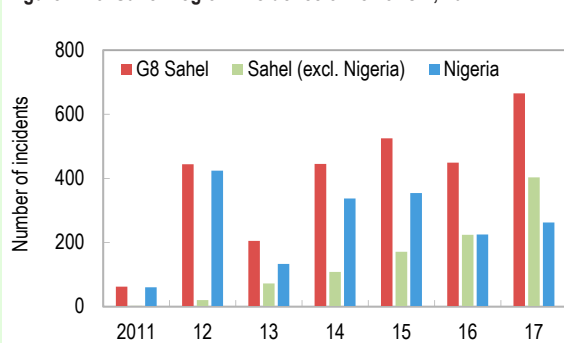
The incidence of terrorism in the Sahel region is high in both absolute and relative terms: the region experiences more than half of all attacks within sub-Saharan Africa and, except for the Middle East and North Africa, levels

Figure 1.1.2. Selected Regions: Regional Distribution of Terrorism, 2010–16



Source: Global Terrorism Dataset.

Figure 1.1.3. Sahel Region: Incidence of Terrorism, 2011–17



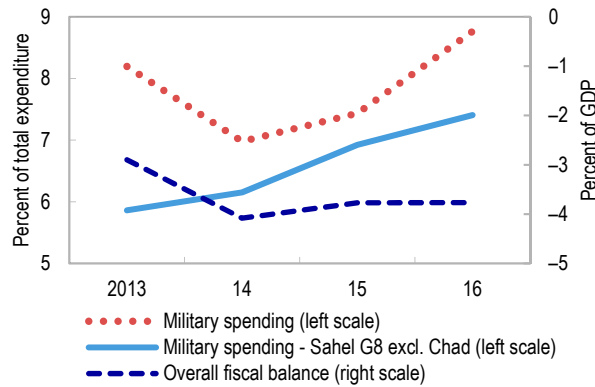
Sources: Control Risks; and IMF staff estimates.

of terrorism far greater than in other larger and more populous regions (Figure 1.1.2). Most countries in the Sahel region have experienced spikes in terrorist activity at different points in time, causing asynchronicities in fiscal and economic effects. And the general trend has been a rise in terrorist activity in recent years, most notably for the countries other than Nigeria. In 2017, for the first time, these countries together experienced more attacks than Nigeria (Figure 1.1.3).

The collapse of the Libyan government in 2011 helped arm extremist militant groups and weaken governance. Mali was the first country to be affected, and, despite the signing of the Algiers peace agreement in mid-2015 to formally end the conflict, attacks from jihadists continue to spill across borders to other Sahel countries. Niger, Chad and northern Cameroon also experienced attacks from Boko Haram in northeastern Nigeria, which have escalated in violence and displaced many people. Senegal and Mauritania, which have largely been spared from terrorist attacks, are the exception.

Increased terrorist activity imposes significant macroeconomic and fiscal costs. The share of military expenditure in public expenditure has been on the rise. At the same time, the commodity-producing countries in the Sahel have seen large falls in tax revenues as oil and uranium prices collapsed. Efforts to raise domestic nonresource revenues have been hampered by slowing economies and, particularly in the case of Niger, a fall in customs revenue following disruptions to traditional trade routes due to the conflict (Figure 1.1.4).

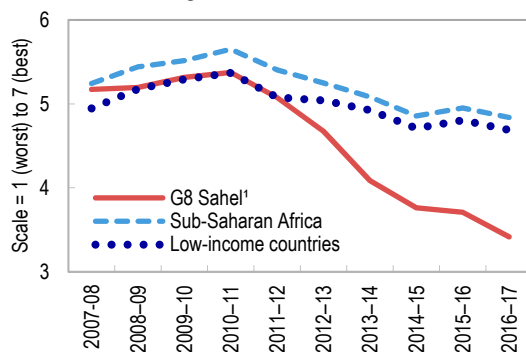
This box was prepared by Dalia Hakura, Trevor Lessard, and Shirin Nikaein Towfighian.

Box 1.1. (continued)**Figure 1.1.4. Sahel Region: Military Spending and Fiscal Balance, 2013–16**

Sources: IMF, World Economic Outlook database; Stockholm International Peace Research Institute; and IMF staff estimates.

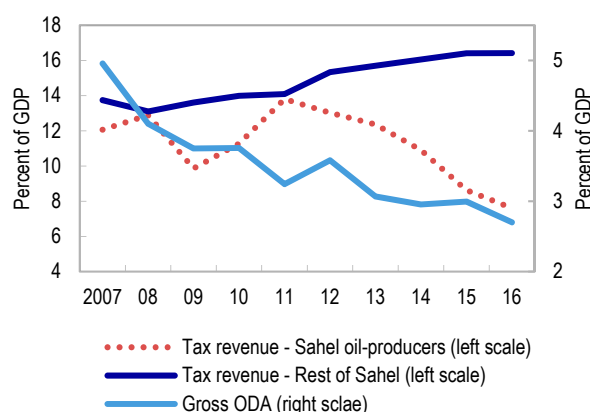
Beyond the direct fiscal costs, the business environment has deteriorated, with most Sahel countries experiencing a sharper increase in terrorism-related business costs in recent years (Figure 1.1.5). At the same time, support from development partners has been declining (Figure 1.1.6).

Against this backdrop, Sahel countries need to continue to pursue their development agendas to achieve high and sustainable growth. Efforts should be centered on creating fiscal space for priority security, social, and infrastructure spending, which is essential for boosting long-term growth, ensure greater inclusion, and improve people's livelihoods to break the cycle of extremism and violence. This will require strengthening domestic revenue mobilization and boosting the efficiency of public investment. Other actions to strengthen governance and transparency are also important. Meanwhile, given the vastness of the Sahel and the entrenched nature of security threats, a prolonged, calibrated, and coordinated expansion of security operations is envisaged as a comprehensive response to the Sahel crisis. The associated fiscal costs will continue to place a heavy burden on the ability of national authorities to deliver on their sustainable development goals.

Figure 1.1.5. Selected Regions: Business Costs of Terrorism, 2007–17

Source: Global Competitiveness Index.

¹ Data for Niger are not available.

Figure 1.1.6. Sahel Countries: Revenue and Official Development Aid, 2007–16

Sources: IMF, World Economic Outlook database; Organisation for Economic Co-operation and Development; and IMF staff estimates.

Note: ODA = official development aid.

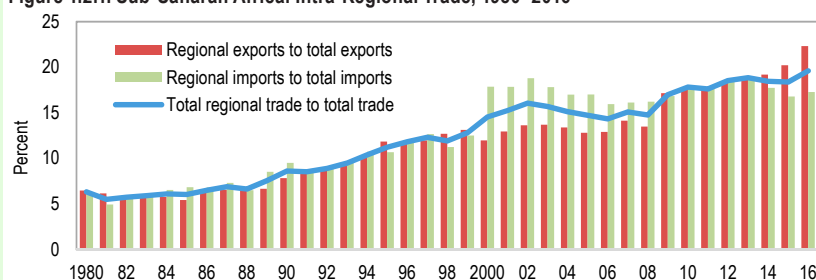
Box 1.2. Regional Spillovers: A Steady Strengthening of Diverse Linkages

Regional spillovers in sub-Saharan Africa occur through a variety of channels, including trade, banking relations, remittances, and conflict (see Box 1.1). After close to two decades of strong economic activity, growth in sub-Saharan Africa decelerated markedly beginning in mid-2014, reaching its lowest level in 2016. While most economies that had suffered a slowdown appear to be rebounding, in some countries—including Nigeria and South Africa, the region's largest economies—growth remains subdued. Assessing the strength and the pattern of regional spillovers helps explain the extent to which the current economic conditions in the largest economies spill over to the rest of sub-Saharan Africa.

Regional trade linkages are steadily gaining strength. Regional trade represented 6 percent of total exports in 1980 before taking off in the early 1990s, and eventually reaching 20 percent in 2016 (Figure 1.2.1). These developments are partly explained by faster growth in sub-Saharan Africa compared to the rest of the world on average and partly by subregional trade agreements that have helped reduce tariff barriers and foster economic

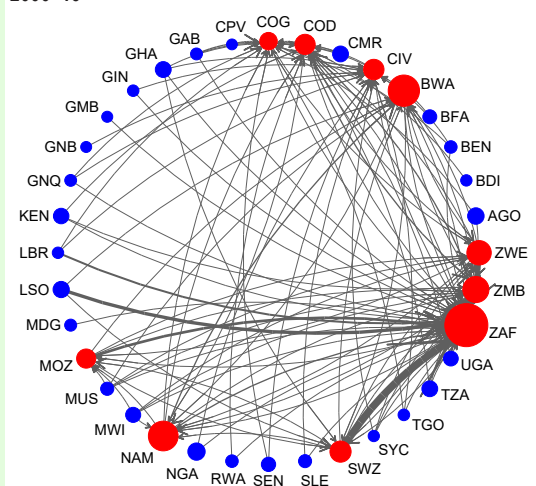
integration. Most regional trade and improvements in trade integration have been taking place within, rather than between, zones of economic integration such as the SADC, the EAC, the WAEMU and the CEMAC.¹ Nevertheless, compared with advanced economies, regional trade remains low, inhibited by weak infrastructure and transport linkages, misaligned regulatory regimes, and a preponderance of informal trade.

Figure 1.2.1. Sub-Saharan Africa: Intra-Regional Trade, 1980–2016



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

Figure 1.2.2. Sub-Saharan Africa: Intra-Regional Trade, 2000–16



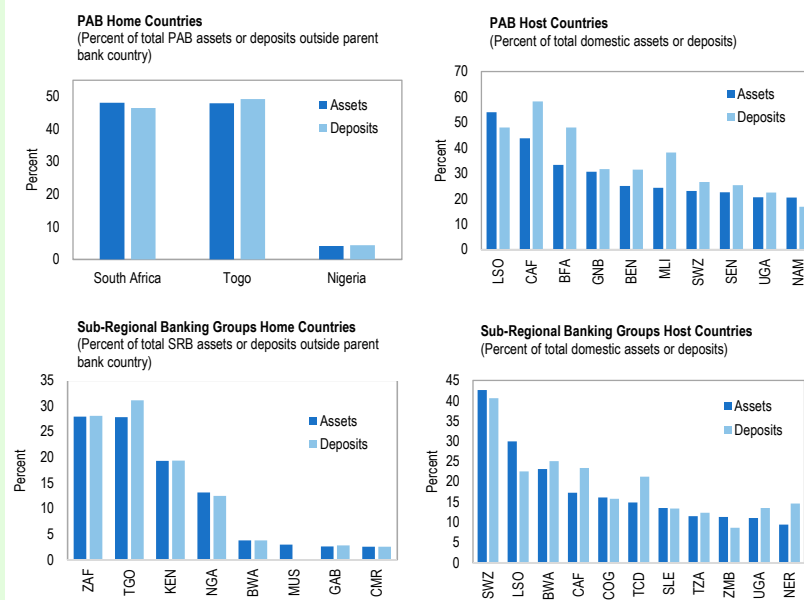
Sources: IMF, *Direction of Trade Statistics*; IMF, World Economic Outlook database; and IMF staff calculations.

Note: The thickness of the arrows refers to the size of bilateral exports in percent of GDP of the exporting country. The top 10 destinations are featured in red, the other countries in blue. See page 91 for country abbreviations table.

Trade linkages are a primary source of intraregional growth spillovers. Demand for regional exports is highly concentrated, with 10 sub-Saharan African countries representing 65 percent of total regional demand for intraregional exports and a significant share of the exporting countries' economies (Figure 1.2.2). Empirical work suggests a spillover of about 0.11 percent to a country's GDP growth for every percentage point change in the growth of the trading partners (Arizala and others 2018). Thus, an economic deceleration in importing countries, especially large ones like South Africa, has the potential to weaken regional export demand and become a source of negative spillovers.

This box was prepared by Matthieu Bellon and Margaux MacDonald.

¹ SADC is the Southern African Development Community; EAC is the East African Community; WAEMU is the West African Economic and Monetary Union; CEMAC is the Central African Economic and Monetary Union.

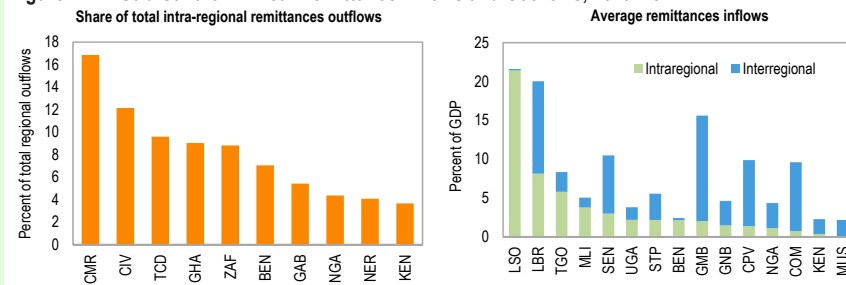
Box 1.2. (continued)**Figure 1.2.3. Pan-African Banks and Sub-Regional Banks: Home and Host Countries, 2016**

Sources: Fitch Connect; IMF, *International Financial Statistics*; and IMF staff calculations.

Note: PAB = pan-African banks; SRB = sub-regional banks. See page 91 for country abbreviations table.

Pan-African and subregional banks are increasingly active in sub-Saharan Africa and represent a second important spillover channel.² Pan-African banks and subregional banks are highly concentrated, with banking groups based in South Africa, Togo, and Nigeria home to all pan-African bank assets and about 70 percent of subregional bank assets (Figure 1.2.3). These banks have primarily expanded across sub-Saharan Africa as subsidiaries, via the acquisition of smaller existing banks or, to a lesser extent, by establishing branches. The foreign subsidiaries are widely dispersed, and tend to have a larger presence in smaller countries, implying that any spillovers via banking groups could be far-reaching. Growth rates of the countries where banks are headquartered are correlated with credit growth in those countries where pan-African and

subregional banks operate. This could be explained by deposit sharing, syndicated lending, or reputational linkages between parent banks and their subsidiaries, if the subsidiary is systemically important in its host country.

Figure 1.2.4. Sub-Saharan Africa: Remittance Inflows and Outflows, 2010–15

Source: World Bank, Migration and Remittances database.

Note: See page 91 for country abbreviations table.

for 55 percent of total outflows (Figure 1.2.4, left panel). Some recipient countries are substantially exposed to remittance inflows (Figure 1.2.4, right panel). Growth spillovers between countries linked through remittance flows are estimated to be of comparable strength to those between trading partners (Arizala and others 2018). This suggests that West African countries, for example, can expect increased remittance inflows from fast-growing large remittance senders such as Côte d'Ivoire and Ghana.

Remittances between countries in sub-Saharan Africa are gaining in relative importance. Remittance inflows to sub-Saharan Africa have reached elevated levels in some countries. Furthermore, the contribution of regional remittances increased to one-third of the total in 2015. The origin of these flows is concentrated, with the top five senders accounting

² Pan-African banks refer to sub-Saharan African banking groups majority owned and headquartered in sub-Saharan Africa and operating in 10 or more sub-Saharan African countries. Subregional banks refer to sub-Saharan African banking groups majority owned and headquartered in sub-Saharan Africa operating in between 3 and 10 sub-Saharan African countries.

Box 1.3. The African Continental Free-Trade Area (AfCFTA) Agreement: What to Expect

In addition to increased trade flow both in existing and new products, the recently launched AfCFTA could generate substantial long-term economic benefits for African countries. These benefits include increased efficiency and productivity from improved resource allocation; higher cross-border investment flows and technology transfers; and deeper trade integration. To ensure these benefits, African countries will need to reduce their wide infrastructure gaps and improve the business climate. At the same time, measures should be taken to mitigate the differential impact of trade liberalization on certain groups as activities migrate to locations with comparatively lower costs.

Key Elements of the AfCFTA

On March 21, 2018, representatives of a large number of member countries of the African Union (AU) signed the African Continental Free Trade Area (AfCFTA) agreement.¹ This agreement comes five years after the AU heads of state decided to move to the AfCFTA, and almost two years after negotiations began. Once fully implemented, the AfCFTA is expected to cover all 55 African countries, with a combined GDP of about \$2.2 trillion (based on IMF, World Economic Outlook database) and a population of over 1 billion. The agreement will become effective once at least 22 member countries have ratified it. The AfCFTA builds on negotiations of the Tripartite Free Trade Area (TFTA), composed of the Southern African Development Community (SADC); Common Market for Eastern and Southern Africa (COMESA); and East African Community (EAC), and aims to achieve four objectives: (1) creating a continental customs union; (2) expanding intra-African trade; (3) resolving the challenges of overlapping memberships in regional economic communities (RECs); and (4) enhancing competitiveness. The AfCFTA also seeks to build on the level of integration attained by existing RECs, which are expected to contribute to its institutional structure. In the long-run, the RECs' trade functions are expected to be consolidated at the continental level.

Phase I of the AfCFTA agreement provides a framework for the liberalization of trade in goods and services, and a mechanism for dispute settlement. For trade in goods, the agreement sets the path for eliminating tariffs on 90 percent of product categories.² For the remaining 10 percent of product categories, countries can implement tariff reductions over a longer period, in the case of sensitive goods, or maintain the same tariff, for excluded products. Member countries have also agreed to the liberalization of trade in services through a request-and-offer approach and based on seven identified priority sectors; logistics and transport, financial services, tourism, professional services, energy services, construction, and communications.³ Separate negotiations, which are expected to begin in late 2018, will be needed for Phase II of the AfCFTA. This phase will focus on competition policy, investment, and intellectual property rights.

Current State of Trade in Africa

The patchwork of intra-African trade agreements includes eight RECs, and four subregional groupings.⁴ Nonetheless, Africa conducts much of its export trade, dominated by commodities, with countries outside the continent.

This box was prepared by Paolo Cavallino, Nana Hammah, Garth Nicholls, and Hector Perez-Saiz

¹ See <https://au.int/>

² International Centre for Trade and Sustainable Development (ICTSD). <https://www.ictsd.org/bridges-news/bridges-africa/news/talking-cfta-with-albert-muchanga-the-au%E2%80%99s-commissioner-for-trade>.

³ International Centre for Trade and Sustainable Development (ICTSD). https://www.ictsd.org/sites/default/files/research/trade_in_services_negotiations_digital_0.pdf.

⁴ The regional economic communities are Arab Maghreb Union (AMU); Community of Sahel-Saharan States (CEN-SAD); Common Market for Eastern and Southern Africa (COMESA); East African Community (EAC); Economic Community of Central African States (ECCAS); Southern African Development Community (SADC); Economic Community of West African States (ECOWAS); and Inter-Governmental Authority on Development (IAD). The subregional groupings are Economic and Monetary Community of Central Africa (CEMAC); Indian Ocean Commission (IOC); Southern African Customs union (SACU); and Southern African Development Community (SADC). See Sebahizi (2017).

Box 1.3. (continued)

In 2016, 18 percent of Africa's total trade was conducted within the continent. Much of it was driven by the SADC and the EAC, which had the highest levels of intraunion trade (over 20 percent of total trade) compared with other groupings (Figure 1.3.1). In 2015, manufactured goods accounted for only 19 percent of Africa's exports to the rest of the world. At the same time, trade within Africa is dominated by manufactured goods, and financial and retail services.⁵ Tariffs and nontariff barriers among African countries remain high. For example, in 2016, the applied average most-favored-nation tariff for African countries, at 14.5 percent, was about twice that for the European Union.⁶ Furthermore, the maximum tariff rate on any product in sub-Saharan Africa was close to 400 percent, while the simple average tariff across all products was slightly less than 10 percent, and duty-free line items represented only 28½ percent of all tariff lines.⁷

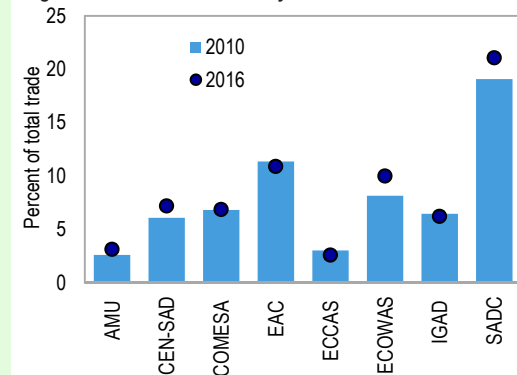
Potential Benefits of the Agreement

African countries can overall expect to reap four key benefits from the AfCFTA. First, the AfCFTA is expected to invigorate intraregional trade. Mevel and Karingi (2012) estimate that the removal of all tariff barriers within the continent and a 50 percent reduction of nontariff barriers could increase intra-African trade by almost 130 percent within five years. Second, although the effect of greater trade integration on output is likely to be small in the short run, it has been estimated that the above changes, combined with improved trade facilitation, could increase their GDP by as much as 5 percentage points in 15 years (Chauvin and others 2016). Third, Anderson and others (2015) show that the dynamic interaction between growth and capital accumulation can increase the static gains from trade liberalization by more than 60 percent. Finally, the AfCFTA could be a stepping stone toward deeper trade integration. Mevel and Karingi (2012) estimate that the creation of a continental customs union, in addition to the AfCFTA, could increase African exports to the rest of the world by 4 percent within five years. But these potential gains are unlikely to be uniform as activity migrates to locations with comparatively lower costs within the region. Mitigating the differential effects would require countervailing measures (for example, training program for workers) to ensure a smooth reallocation of labor and capital. Furthermore, the elimination of tariffs will lead to significant tariff-revenue losses for governments at a time when fiscal positions need to be strengthened, suggesting the need for further progress in domestic revenue mobilization.

Nontariff Barriers to Trade in Africa

Despite the potential economic benefits of the AfCFTA, fully realizing these benefits would require a reduction in infrastructure gaps and an improvement in the business environment in Africa. Table 1.3.1 shows that several indicators related to the quality of ports, air transportation, and other measures of infrastructure efficiency are relatively low in Africa compared with other regions. The reduction of ground transportation costs is especially critical to encouraging intraregional trade, given the geographic configuration of the continent (World Bank 2009). The table also shows low scores for the region in terms of customs efficiency and other administrative procedures required for international trade.

Figure 1.3.1. Sub-Saharan Africa: Intra-Regional Trade by Regional Economic Community



Source: United Nations Conference on Trade and Development.

Note: See page 90 for country groupings table.

⁵ United Nations Economic Commission for Africa (UNECA).

<https://www.uneca.org/stories/eca-urges-africa-push-ahead-continental-free-trade-area>.

⁶ World Trade Organization. https://www.wto.org/english/tratop_e/tariffs_e/tariff_data_e.htm.

⁷ World Bank and United Nations Conference on Trade and Development – World Integrated Trade Solution (WITS). <https://wits.worldbank.org/CountrySnapshot/en/SSF/textview>.

Box 1.3. (continued)

In addition, an enabling business environment is particularly relevant to facilitating intraregional trade. Various indicators compiled by the World Bank show room for improvement in decreasing the cost and time necessary to create new businesses. Finally, financial depth and inclusion is lower in Africa compared with other regions, so access to trade finance or bank funding to create or expand businesses will be key to promoting the AfCFTA agenda.

Table 1.3.1. Barriers to Trade in Africa

Variable	Africa	Sub-Saharan Africa	Advanced Economies	North America	South America	Central America	Asia
Level of infrastructures:							
Container port traffic (WDI)	0.09	0.07	0.75	0.11	0.12	0.38	0.65
Air transport passengers, per capita (WDI)	0.23	0.25	2.6	1.6	1.43	0.93	1.18
Quality of port infrastructure, (1=low to 7=high) (WDI)	3.64	3.64	5.35	5.21	3.65	4.15	4.17
Liner shipping connectivity index (WDI)	14.38	12.72	50.64	58.51	24.16	16.36	35.11
Infrastructure efficiency score (LPI)	2.32	2.34	3.75	3.73	2.56	2.43	2.92
Customs efficiency score (LPI)	2.35	2.39	3.58	3.53	2.52	2.5	2.88
International shipments efficiency score (LPI)	2.52	2.52	3.56	3.4	2.76	2.81	3.01
Timeliness efficiency score (LPI)	2.87	2.86	4.09	3.88	3.21	3.1	3.44
Overall logistics efficiency score (LPI)	2.49	2.51	3.74	3.68	2.77	2.69	3.05
Trading costs:							
Burden of customs (1=inefficient to 7=efficient) (WDI)	3.6	3.6	5	4.6	3.5	3.7	4.3
Time to export (days) (DB)	29.3	30.9	10.2	9.8	19.8	15.4	20
Time to import (days) (DB)	36.4	38.5	9.3	9.7	24.3	15.3	21.6
Cost to export (USD per container) (DB)	2,149	2,302	1,054	1,395	1,809	1,181	1,026
Cost to import (USD per container) (DB)	2,819	3,056	1,102	1,570	2,020	1,329	1,092
Other:							
Start business (days) (DB)	31.2	33.3	11.2	6.5	72.4	26.9	30.5
Start business (cost as % of income per capita) (DB)	69.7	74	4.1	7.2	27	39.8	24.1

Sources: World Bank, Doing Business Indicators; World Bank, Logistics Performance database; and World Bank, World Development Indicators.

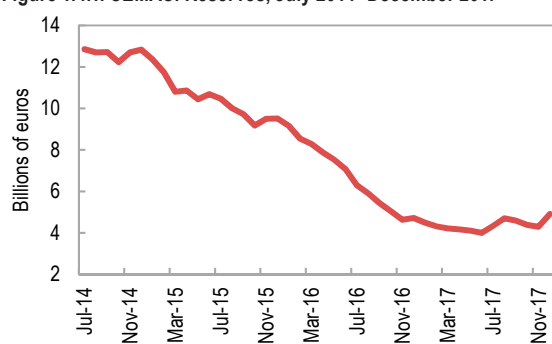
Box 1.4. CEMAC: Implementation of the Regional Economic Strategy and Road Ahead

The national authorities and regional institutions of the Central African Economic and Monetary Community (CEMAC) have started implementing the regional strategy, adopted in December 2016 (See Box 1.2 in IMF 2017c) to help avert the depletion of international reserves and continue to support the monetary union arrangement. The member countries' fiscal adjustment efforts—along with the regional central bank's tight monetary stance and strict enforcement of foreign exchange regulations, external financing in support of the national programs, and higher oil prices—have contributed to stabilizing international reserve coverage, at 2.5 months of imports at the end of 2017 (Figure 1.4.1). This progress allowed for the completion of IMF program reviews with three CEMAC member countries (Cameroon, Central African Republic, Gabon) in December 2017. Reaching agreement on debt restructuring between the Chadian government and its external creditors paved the way for the conclusion of the IMF program review with Chad. Meanwhile, program negotiations with Republic of Congo and Equatorial Guinea are ongoing.

At the national level, fiscal consolidation efforts are underway, but risks remain. As envisaged at the outset of the regional strategy, these efforts focused primarily on cuts in nonpriority spending, with overall primary spending declining from 27.5 percent of non-oil GDP in 2016 to 22.8 percent of non-oil GDP in 2017. While this streamlining will continue over the medium term, measures to increase non-oil revenue should play a more prominent role in fiscal consolidation starting in 2018. Also, most of the windfall from higher oil revenues following the recent increase in international oil prices would need to be saved and used to increase fiscal and external buffers or to accelerate the repayment of domestic budgetary arrears relative to program assumptions. Overall, fiscal consolidation efforts would provide for a reduction of the overall fiscal deficit (excluding grants) across CEMAC member countries from 4.2 percent of GDP in 2017 to 0.7 percent of GDP in 2020, while preserving social protection programs (Figure 1.4.2). This adjustment will in turn allow both for the repayment of budgetary arrears and, along with the gradual recovery in nominal growth, for a gradual reduction in public debt ratios from 2018 onward, from about 52 percent of GDP at the end of 2017 to 49 percent of GDP at the end of 2020. With the budgetary financing mix shifting toward external financing, domestic debt is expected to drop as a share of GDP from close to 20 percent at the end of 2017 to less than 14 percent at the end of 2020, while external debt would remain broadly stable. While the overall objectives of the regional adjustment strategy are broadly being attained, there are indications that fiscal consolidation is experiencing initial challenges in some countries, highlighting the risks of possibly weaker reform efforts in the face of political or social resistance.

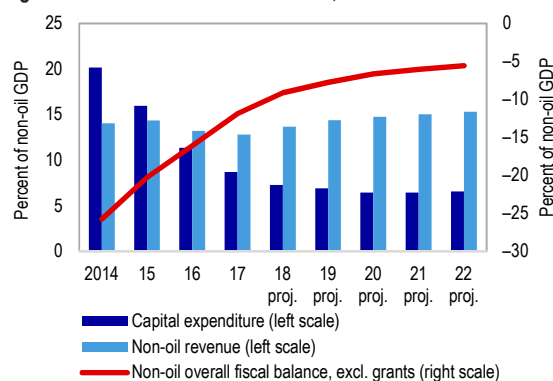
These efforts are supported by the regional central bank's (BEAC's) tight monetary stance and decision to eliminate statutory advances. The expansion of the BEAC's advances to governments in response to the fall in oil prices had allowed public spending to remain well above the level consistent with internal stability. With unchecked tightening of monetary aggregates and a high import content of public spending on infrastructure,

Figure 1.4.1. CEMAC: Reserves, July 2014–December 2017



Sources: Central African Economic and Monetary Community (CEMAC) authorities; and IMF staff calculations.

Figure 1.4.2. CEMAC: Fiscal Indicators, 2014–22



Sources: Central African Economic and Monetary Community (CEMAC) authorities; and IMF staff calculations.

This box was prepared by Edouard Martin.

Box 1.4. (continued)

this practice has put considerable downward pressure on foreign reserves. The elimination of new central bank credit to government at the end of 2017 is therefore a major step toward restoring fiscal and monetary discipline in the region. In 2018, the central bank will pursue its efforts to modernize its monetary policy operations framework, with a view to anchoring it on the policy rate (rather than monetary aggregates) as the intermediate target and strengthening the transmission mechanism. The BEAC will notably (1) simplify its monetary policy instruments; (2) base liquidity management on the projection of autonomous factors; (3) strengthen the framework for required reserves; (4) adjust its collateral framework; and (5) set up an emergency liquidity assistance (ELA) framework. Last, the central bank will support the development of financial markets, including through promoting the establishment of financial sector databases (on financial information, payment incidents, and credit risks) and of a credit bureau.

The regional banking supervisor has adopted an action plan to improve the effectiveness of bank supervision. This plan aims to help the banks address high nonperforming loans (including by clarifying and better enforcing the provisioning rules), strengthen the implementation of certain prudential regulations (including the risk concentration and connected party lending rules), and resolve banks in difficulty. The supervisor will also continue to implement its strategy plan, which aims primarily at implementing risk-based supervision.

These stabilization policies, which have been essential to avert a deeper crisis, need to be complemented by structural reforms to support more inclusive and sustained growth over the medium term. In this regard, the regional Program of Economic and Financial Reforms outlines specific measures aimed at reducing the region's excessive dependence on oil exports and related revenues. Measures to enhance the business environment include (1) the establishment of trade courts to facilitate the settlement of commercial disputes; (2) the creation of one-stop shops to reduce the time and cost for creating a new company; and (3) the establishment of incubators to facilitate the creation of new businesses through sharing best practices. Actions aimed at deepening regional integration include (1) the harmonization and reduction of custom exemptions through a revised customs code; (2) full implementation of the Common External Tariff; and (3) enacting the freedom to establish companies. Efforts are also necessary to improve governance, fiscal transparency, and public financial management. Implementation of all these reforms, together with enhancing investor confidence by sustained macroeconomic stabilization, would lead to a gradual pickup in non-oil GDP growth of the CEMAC region to 4.8 percent in 2021.

Box 1.5. Protecting Social Spending in IMF-Supported Programs

Since 2009, almost all IMF-supported programs in sub-Saharan African countries have included quantitative targets or structural benchmarks to preserve or increase social spending, comprising mostly outlays on health, education, and social protection. These program features seem broadly effective in protecting or enhancing social and other priority spending.

The new architecture of IMF facilities in low-income countries adopted in 2009 explicitly aims at assisting them in achieving a stable and sustainable macroeconomic position consistent with strong and durable poverty reduction and growth.¹ Under this new architecture, all instruments—Extended Credit Facility, Standby Credit Facility, Rapid Credit Facility, and Policy Support Instrument—should support policies that safeguard social and other priority spending. Such policies are expected to be reflected in the Letter of Intent.

Almost all programs approved since 2009 have included quantitative targets—typically a floor on social or, more precisely defined, priority spending—or structural benchmarks on social sectors.² During 2006–09, about 50 percent of the programs approved under the Poverty Reduction and Growth Facility included a floor on social spending; since 2009, about 90 percent of IMF-supported programs approved for low-income countries, of which about 95 percent of programs approved were for sub-Saharan African countries, included such a floor. Some programs have included stronger safeguards of social and priority spending, for instance by excluding social spending from the fiscal deficit target or providing the possibility to adjust the target to accommodate larger-than-budgeted amounts of social spending (for example, Malawi, Grenada). Beyond an indicative target, some other programs have included structural benchmarks on social protection measures better targeting the most vulnerable groups, increasing the coverage of the cash transfer system, or redesigning the social safety net system.³

Although the definition of social and priority spending varies across countries, it typically covers outlays on health, education, and social protection. Health and education spending is derived from the functional budget classification of those two sectors. Social protection spending includes specific programs to support vulnerable groups, such as maternity and child benefits, women's and old-age group benefits, youth employment benefits, and social security transfers (for example, Armenia, Honduras, Mali, Mauritania). In some instances, safeguarded spending includes projects with an implicit link to poverty or inequality reduction, such as projects on agriculture, rural electrification, sanitation, gender, and the environment (for example, Burkina Faso, Côte d'Ivoire, Ghana, Guinea-Bissau, Togo). The quantitative floors were often designed to consider only domestically financed social and other priority spending, lest shortfalls in external financing cause the targets to be missed.

The application of indicative targets to monitor program implementation was broadly effective in protecting or enhancing social and other priority spending. The floors on social spending were met in more than two-thirds of the programs; this figure is broadly unchanged when examining only the programs with fiscal consolidation. Based on a sample of countries for which data on the indicative targets and other economic aggregates can clearly be compared, the share of social spending protected by these floors increased between 2010 and 2017 by about 2.5 percentage points of total spending (from an average of about 23.5 percent to 26 percent) and by about 1 percentage point of GDP (from an average of 6 percent to 7 percent) (Figures 1.5.1 and 1.5.2). These results are consistent with earlier studies that demonstrated that spending in social sectors, such as health and education, have effectively expanded under programs supported by the IMF in low-income countries.⁴

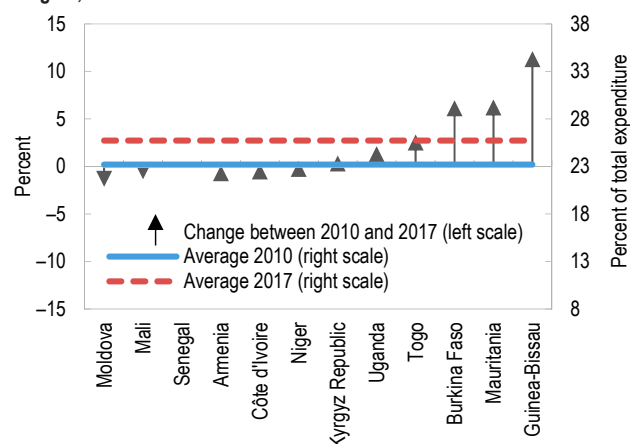
This box was prepared by Alice Mugnier, Ivohasina F. Razafimahefa, and Sampawende J. Tapsoba.

¹ IMF (2009).

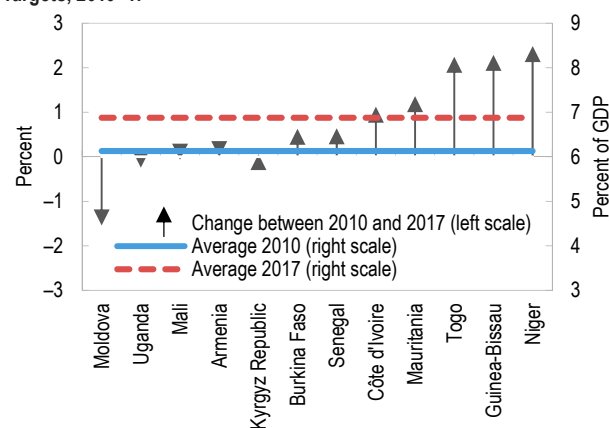
² IMF (2017e).

³ IEO (2017).

⁴ Clements, Gupta, and Nozaki (2011).

Box 1.5. (continued)**Figure 1.5.1. Selected Countries: Change in Social Spending Indicative Targets, 2010–17**

Source: Country authorities; IMF, World Economic Outlook database; and IMF staff calculations.

Figure 1.5.2. Selected Countries: Change in Social Spending Indicative Targets, 2010–17

Source: Country authorities; IMF, World Economic Outlook database; and IMF staff calculations.

Annex 1.1. Fiscal Break-even Oil Price: Definition and Decomposition

Definition and Interpretation

The fiscal break-even oil price is a standard measure used to assess fiscal vulnerability in oil-exporting countries. It is an approximate measure of the oil price needed to balance the budget. This indicator is illustrative and does not necessarily mean that a balanced budget is the appropriate fiscal target.

The fiscal break-even oil price is defined as follows (all variables are expressed in US dollars):

$$\text{Breakeven price} = NOFB^{USD} \left(\frac{\text{oil price}}{\text{fiscal oil revenue}} \right),$$

in which $NOFB^{USD}$ is the non-oil fiscal balance. The fiscal break-even oil price can be defined as the non-oil fiscal balance divided by the number of oil barrels allotted to the government—that is, fiscal oil revenue divided by the oil price. The fiscal break-even oil price could be interpreted as the oil price needed to balance the budget, assuming that non-oil revenue does not depend on oil price and that the relationship between fiscal oil revenue and oil price is linear.

Decomposition of Changes in the Fiscal Break-even Oil Price

We suggest a novel method to study the contribution of various factors to the dynamics of fiscal break-even oil price. This calculation of the fiscal break-even oil price produces the relative contributions of real exchange rate depreciation and fiscal adjustment to the changes in the break-even price.

The definition of the fiscal break-even oil price can be rewritten as:

$$\text{Breakeven price} = (e * p) \left(\frac{NOFB^{LCU}}{p} \right) \left(\frac{\text{oil price}}{\text{fiscal oil revenue}} \right),$$

in which the non-oil fiscal balance $NOFB^{LCU}$ is the non-oil fiscal balance in local currency units, e is the nominal exchange rate vis-à-vis the US dollar, and p is the GDP deflator of the oil exporter studied (alternatively the consumer price index could be used). We examine the changes in the fiscal break-even oil price in constant US dollars by dividing it by the US GDP deflator p^* (alternatively the US consumer price index could be used) as follows:

$$\frac{\text{Breakeven price}}{p^*} = \left(\frac{e * p}{p^*} \right) \left(\frac{NOFB^{LCU}}{p} \right) \left(\frac{\text{oil price}}{\text{fiscal oil revenue}} \right).$$

Taking the difference in logarithms of the fiscal break-even oil price in constant US dollars would show that the fiscal break-even oil price is equal to the difference in logarithms of the real exchange rate vis-à-vis US dollar (depreciation) plus the difference in the logarithm of the non-oil fiscal balance in constant local currency (fiscal adjustment) and a component reflecting the contribution of changes in the (log) volumes of oil exports and/or changes in the oil taxation schedule.

$$\Delta \ln \left(\frac{\text{Breakeven price}}{p^*} \right) = \Delta \ln \left(\frac{e * p}{p^*} \right) + \Delta \ln \left(\frac{NOFB^{LCU}}{p} \right) - \Delta \ln \left(\frac{\text{fiscal oil revenue}}{\text{oil price}} \right).$$

REFERENCES

- African Union. 2017. December 8th Press Release. <https://au.int/en/pressreleases/20171208/statement-chairperson-commission-african-union-continental-free-trade-area>.
- Anderson, J., M. Larch, and Y. Yotov. 2015. "Growth and Trade with Frictions: A Structural Estimation Framework." NBER Working Paper 21377 National Bureau for Economic Research, Cambridge, MA.
- Arizala, F., M. Bellon, M. MacDonald, M. Mlachila, and M. Yenice. 2018. "Regional Spillovers in Sub-Saharan Africa—Exploring Different Channels." IMF Spillover Note, International Monetary Fund, Washington, DC.
- Chauvin, N., P. Ramos, and G. Porto. 2016. "Trade, Growth, and Welfare Impacts of the CFTA in Africa." Proceedings of CSAE Conference: Economic Development in Africa, Oxford.
- Cherif, R., F. Hasanov, and M. Zhu (eds.). 2016. "Breaking the Oil Spell: The Gulf Falcons' Path to Diversification." International Monetary Fund, Washington, DC.
- Clements, B., S. Gupta, and M. Nozaki. 2011. "What Happens to Social Spending in IMF-Supported Programs?" International Monetary Fund, Washington, DC.
- Gaspar, V., and A. Selassie. 2017. "Taxes, Debt and Development: A One-Percent Rule to Raise Revenues in Africa." IMF Blog, International Monetary Fund, Washington, DC. <https://blogs.imf.org/2017/12/05/taxes-debt-and-development-a-one-percent-rule-to-raise-revenues-in-africa/>
- Independent Evaluation Office of the International Monetary Fund (IEO). 2017. "The IMF and Social Protection." Washington, DC.
- International Monetary Fund (IMF). 2009. "A New Architecture of Facilities for Low-Income Countries." IMF Policy Paper, Washington, DC.
- . 2013. "Drivers of Growth in Non-resource-Rich Sub-Saharan African Countries." Chapter 2, *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, October.
- . 2015a. "Dealing with the Gathering Clouds" Chapter 1, *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, October.
- . 2015b. "Fiscal Policy and Long-Term Growth." IMF Policy Paper, Washington, DC.
- . 2015c. "How Can Sub-Saharan Africa Harness the Demographic Dividend?" Chapter 2, *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, October.
- . 2016. "Time for a Policy Reset" Chapter 1, *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, April.
- . 2017a. "The Quest for Recovery" Chapter 1, *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, October.
- . 2017b. "The Impact of Fiscal Consolidations on Growth in Sub-Saharan Africa." Chapter 2, *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, October.
- . 2017c. "Economic Diversification in Sub-Saharan Africa." Chapter 3, *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, October.
- . 2017d. "Restarting Sub-Saharan Africa's Growth Engine." Chapter 2, *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, April.
- . 2017e. "Social Safeguards and Program Design in PRGT and PSI-supported Programs". IMF Policy Paper, Washington, DC.
- International Centre for Trade and Sustainable Development (ICTSD). 2017. "Talking CFTA with Albert Muchanga, the AU's Commissioner for Trade and Industry." <https://www.ictsd.org/bridges-news/bridges-africa/news/talking-cfta-with-albert-muchanga-the-au%E2%80%99s-commissioner-for-trade>.
- . 2017. "Trade in Services Negotiations: A Southern African Perspective." https://www.ictsd.org/sites/default/files/research/trade_in_services_negotiations_digital_0.pdf.
- Mevel, S., and S. Karingi. 2012. "Deepening Regional Integration in Africa: A Computable General Equilibrium Assessment of the Establishment of a Continental Free Trade Area Followed by a Continental Customs Union." Proceedings of the African Economic Conference.
- Sebahizi, P. 2017. "Update on the Continental Free Trade Area negotiations." Presentation at the African Prosperity Conference.
- United Nations Conference on Trade and Development (UNCTAD). 2015. "Elements of Modalities for the African Continental Free Trade Agreement (CFTA). Some Key Issues for Consideration." http://unctad.org/en/PublicationsLibrary/ditc2015misc3_en.pdf.
- United Nations Economic Commission for Africa (UNECA). 2016. "ECA Urges Africa to Push ahead with Continental Free Trade Area." <https://www.uneca.org/stories/eca-urges-africa-push-ahead-continental-free-trade-area>.
- World Bank. 2009. "Transport Prices and Costs in Africa. A Review of the International Corridors." Washington, DC.

2. Domestic Revenue Mobilization in Sub-Saharan Africa: What Are the Possibilities?

Domestic revenue mobilization is one of the most pressing policy challenges facing sub-Saharan African countries. While the reasons may vary according to country-specific circumstances, there are three aspects of domestic revenue mobilization that make it so important.

- First, sub-Saharan African countries need to increase their resources to invest in programs that support the achievement of the Sustainable Development Goals. This includes efforts to reduce poverty and inequality, ensure adequate health and education, and develop basic infrastructure to support more inclusive growth. Despite recent progress, the region still faces massive development challenges. The chapter highlights that the region as a whole could mobilize about 3 to 5 percent of GDP, on average, in additional revenues. This would represent about \$50–80 billion, substantially more than the estimated \$36 billion in official development assistance received by sub-Saharan African countries in 2016.
- Second, at a time when public debt levels have been rising rapidly, domestic revenue mobilization should be a key component of any fiscal consolidation strategy. Absent adequate efforts to raise domestic revenues, fiscal consolidation tends to rely excessively on reductions in public spending, which can have a more negative impact on growth (IMF 2017) and can become politically more difficult to implement in practice and sustain over time.

- Third, developing adequate capacity to collect taxes is also a way to strengthen institutions and build state capability. Since tax collection is one of the most basic functions of the state, developing capacity in this area can also support institutional development in other areas (Gaspar, Jaramillo, and Wingender 2016). This can operate through several channels. For example, an emphasis on clear and fair tax laws and regulations can support a related focus on public finance management to convince citizens that government taxation will be used to fund reasonably efficient and transparent spending programs. Similarly, establishing a revenue authority with highly trained professional staff can support organizational innovations as countries extend successful reform efforts to other government areas.¹

This chapter analyzes revenue collection efforts in sub-Saharan Africa compared with other regions, with a special emphasis on nonresource revenues.²

The chapter argues that sustained revenue mobilization is difficult because it requires consistent institutional development over time as well as attention to basic processes and reforms where reversals are frequent. In addition, robust reforms are those that focus not only on ways to increase revenue collection, but also take into account how to do so in ways that consider the efficiency and equity impact of particular policy choices. Technical assistance can support reform efforts, but it requires strong political will, usually based on a well-defined medium-term strategy. The chapter is organized in three sections.

This chapter was prepared by a team led by Alex Segura-Ubiergo and composed of Chuling Chen, John Hooley, Gabriel Leost, Toomas Orav, Miguel Pereira Mendes, Ashan Rodriguez, and Manuel Rosales.

¹ The process of development of state capability is very complex and depends on a number of factors. Low state capability is often used as an argument to justify limited state capacity to collect taxes, but the experience of some post-conflict countries (for example, Liberia and Mozambique) suggests that building tax collection institutions may produce positive institutional spillovers by helping to build state capability in other areas (for example, statistical agencies, public finance management reform groups, etc.). Research by Prichard and Leonard (2010) also supports this hypothesis.

² The chapter emphasizes mobilization of nonresource revenues. Resource revenues fluctuate with natural resource production levels and commodity prices, and are much less subject to control by domestic policymakers. Adequate collection and management of resource revenues pose other challenges regarding fiscal regimes and fiscal frameworks that have been studied elsewhere (for example, IMF 2012).

- The first section describes developments in revenue-to-GDP and tax-to-GDP ratios in sub-Saharan Africa compared with other regions. It shows a substantial improvement in sub-Saharan African revenue mobilization over the past three decades. However, the region still has, on average, the lowest revenue-to-GDP ratio compared with other regions. The section also shows how low efficiency of some of the most important sources of taxation, such as the value-added tax (VAT) and the corporate income tax (CIT), are significant constraints to better performance. It also discusses other potential sources of additional revenue collection, including the role of excise and property taxes.
- The second section analyzes some of the structural conditions that may account for the lower tax-to-GDP ratios in sub-Saharan Africa, including the level of development, trade openness, sectoral structure, income distribution, and institutional quality. It shows that sub-Saharan African countries could, on average, mobilize about 3 to 5 percent of GDP in additional tax collection, through a combination of reforms that improve the efficiency of current systems (including through the reduction of tax exemptions), and through institutional changes (such as improvements in governance and measures to control corruption).
- The third section analyzes lessons from revenue mobilization case studies. It emphasizes the elements of successful medium-term strategies for revenue mobilization and the importance of political economy factors, such as building broad-based support for the reform process through proactive outreach strategies to both the public and private sectors. The results are consistent with findings from other recent research in this area (for example, Akitoby and others, forthcoming).

Finally, the chapter also discusses the role of new technologies (that is, digitalization) to empower tax policymakers with quicker access to more reliable information and to deepen the tax base (Box 2.1). The section also discusses the economic impact of revenue mobilization on growth and income distribution (Box 2.2) focusing on the Central African Economic and Monetary Community (CEMAC) countries, where these issues have become particularly important since the sharp drop in commodity prices starting in 2014.

TRENDS IN REVENUE MOBILIZATION IN SUB-SAHARAN AFRICA

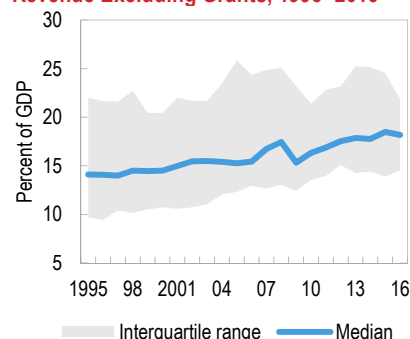
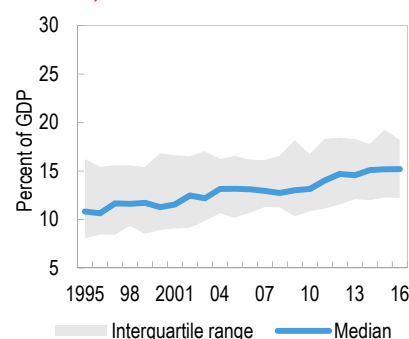
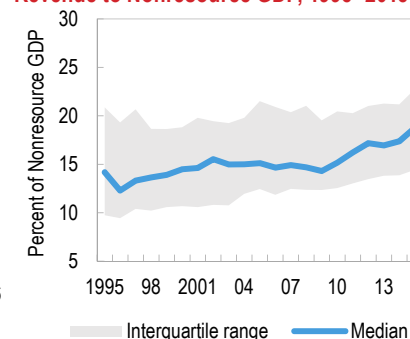
Steady and Widespread Progress

Over the past three decades, many sub-Saharan African countries have achieved substantial gains in revenue mobilization. For the median sub-Saharan African economy, total revenue excluding grants increased from around 14 percent of GDP in the mid-1990s, to more than 18 percent in 2016, while tax revenue increased from 11 to 15 percent (Figures 2.1. to 2.3).³ These trends have been driven primarily by nonresource revenues (Figure 2.3), which have increased particularly sharply in the past 10 years. In contrast, revenues from natural resources, while representing important sources of overall revenue for many sub-Saharan African countries, have not increased substantially. These revenues have also been volatile, particularly during the episodes of commodity price swings in the late 2000s and since 2014.

Recent progress in revenue mobilization has also been broad. Since the mid-1990s, 15 sub-Saharan African countries have successfully transitioned to tax-to-GDP ratios of about 13 percent and above, the minimum ratio that recent research has suggested can be associated with a significant acceleration in growth and development (Figure 2.4).⁴

³ Based on a fixed sample of 40 sub-Saharan African economies for which data are available from 1995 through 2016. Given the skewed distribution of revenue ratios across the region (see Figure 2.4), the median provides a more representative picture of revenue trends than the mean.

⁴ The tipping point estimated in Gaspar, Jamarillo, and Wingender (2016) is a minimum tax-to-GDP ratio of 12.88 percent to enable the state to perform some of its most important functions, especially adequate spending on developmental programs. While this threshold is statistically significant, the precise number should be interpreted with caution, as it may vary country by country. With nontax revenues typically averaging 2 percent of GDP, a tax-to-GDP revenue of 13 percent, and an overall revenue ratio of 15 percent of GDP, should be viewed as a minimum threshold to allow the state to perform basic functions. Ratios should also be interpreted with care given ongoing GDP rebasing developments in some countries.

Figure 2.1. Sub-Saharan Africa: Total Revenue Excluding Grants, 1995–2016**Figure 2.2. Sub-Saharan Africa: Tax Revenue, 1995–2016****Figure 2.3. Sub-Saharan Africa: Nonresource Revenue to Nonresource GDP, 1995–2015**

Source: IMF, World Economic Outlook database. Source: IMF, World Economic Outlook database. Sources: IMF, World Economic Outlook database; IMF Fiscal Affairs Department Sub-Saharan Africa Tax Revenue database.

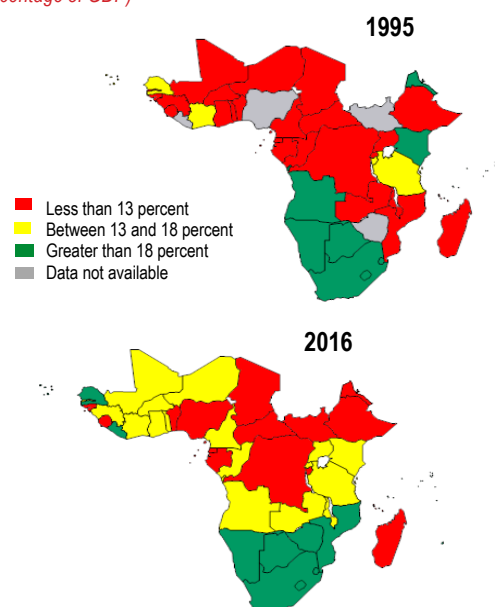
Two-thirds of sub-Saharan African countries now have revenue ratios above 15 percent, compared with fewer than half in 1995.

The sources of sub-Saharan Africa's gains in revenue mobilization have been mainly an increase in direct and indirect taxes (Figure 2.5). Indirect taxes have received a boost from the introduction of the VAT in several countries. In contrast, the revenue from taxes on imports has declined as a share of GDP, reflecting increased trade liberalization over the period.

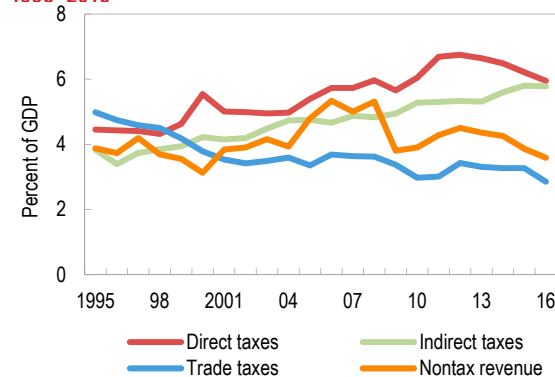
Global Context

Despite sub-Saharan Africa's recent progress in revenue mobilization, the region still has the lowest revenue-to-GDP ratio compared to other regions in the world. The good news is that there are signs of convergence. Over the past three decades, the increase in sub-Saharan Africa's revenue ratio has been double that for all emerging market and developing economies (Figure 2.6).

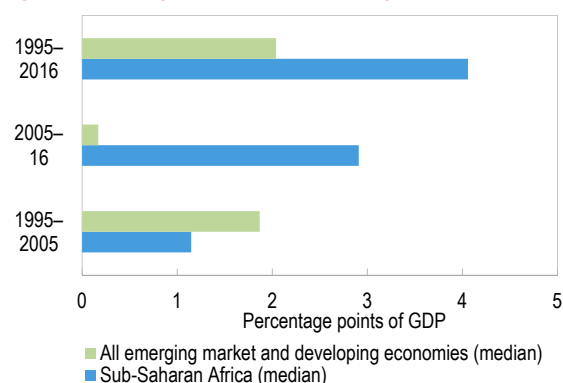
Nonetheless, the median revenue-to-GDP ratio among all emerging market and developing economies is 23 percent, 5 percentage points higher than for sub-Saharan Africa. The region performs slightly better in terms of tax revenue, with a median tax-to-GDP ratio only 2 percentage points lower than that of all emerging market and developing economies, although it still has the second lowest ratio among all regions (Figure 2.7).

Figure 2.4. Sub-Saharan Africa: Tax Revenue to GDP (Percentage of GDP)

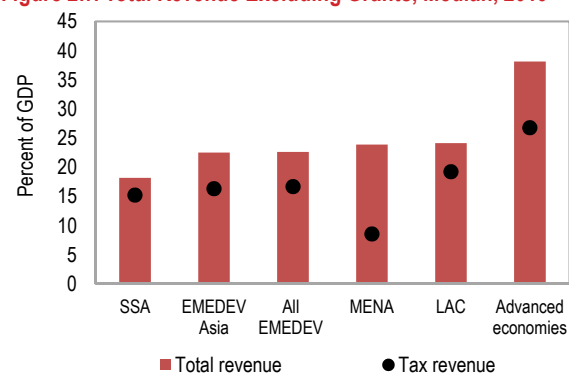
Source: IMF, World Economic Outlook database.

Figure 2.5. Sub-Saharan Africa: Sources of Revenue, 1995–2016

Source: IMF Fiscal Affairs Department Sub-Saharan Africa Tax Revenue database.

Figure 2.6. Change in Revenue Excluding Grants

Source: IMF, World Economic Outlook database.

Figure 2.7. Total Revenue Excluding Grants, Median, 2016

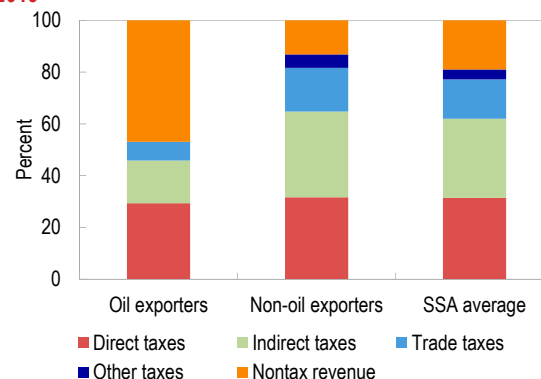
Source: IMF, World Economic Outlook database.

Note: EMEDEV = Emerging market and developing economies; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = sub-Saharan Africa.

Regional Context

There are different patterns of revenue mobilization among sub-Saharan African economies. Oil exporters and fragile states differ from other economies in the region in both the level and sources of their revenue collection.

- Oil exporters.** The average revenue-to-GDP ratio was 27 percent in oil-exporting economies over 2000–16, compared with 18 percent for non-oil economies. Oil exporters tend to have lower non-resource-revenue-to-GDP ratios, possibly reflecting reduced tax effort in nonresource revenues (Thomas and Treviño 2013). But, this is more than offset by substantial resource revenues from both nontax sources (bonuses, royalties, and production sharing revenue) and direct taxes (corporate tax on oil companies' profits). On average, nontax revenue accounts for almost half of oil-exporters'

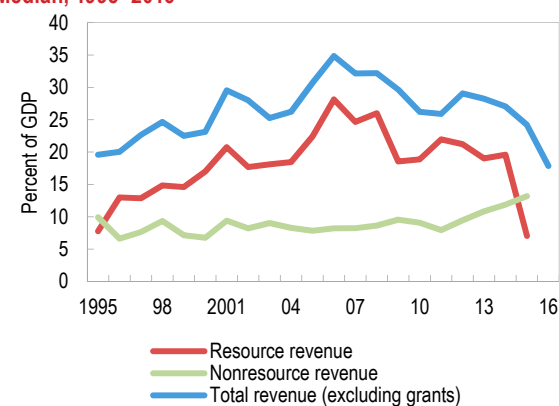
Figure 2.8. Sub-Saharan Africa: Decomposition of Revenue, 2016

Source: IMF Fiscal Affairs Department Sub-Saharan Africa Tax Revenue database.

Note: SSA = sub-Saharan Africa.

revenue, compared with less than 20 percent for non-oil exporters (Figure 2.8). Revenues are also more volatile for oil exporters—during 2000–16 the standard deviation of total revenue for oil exporters was seven times that of non-oil exporters. Declines in world oil prices can dramatically affect the level of resource revenue, while nonresource revenue is difficult to mobilize quickly to offset the impact on total revenue (Figure 2.9). Indeed, the decline in the world oil price since 2014 has led to a sharp fall in the overall revenue to GDP ratio for oil exporters, from 31 percent in 2012 to 18 percent in 2016.

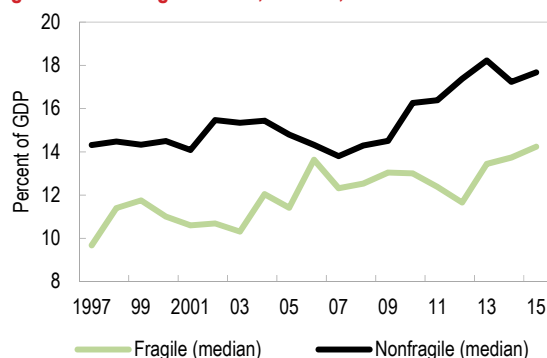
- Fragile states.** Revenue mobilization is particularly difficult in fragile states, where institutions are often weak and the security and governance

Figure 2.9. Sub-Saharan Africa: Revenue, Oil Exporters, Median, 1995–2016

Sources: IMF, World Economic Outlook database; and IMF Fiscal Affairs Department Sub-Saharan Africa Tax Revenue database.

Note: Data on resource and nonresource revenues are available to 2015 only.

Figure 2.10. Sub-Saharan Africa: Nonresource Revenue, Fragile and Nonfragile States, Median, 1997–2015



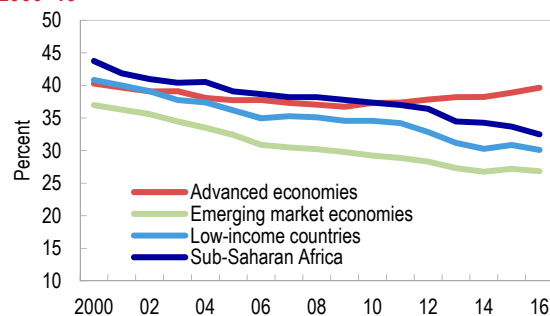
Sources: IMF, World Economic Outlook database; and IMF Fiscal Affairs Department Sub-Saharan Africa Tax Revenue database.

situation is challenging. Although several fragile states benefit from natural resource revenues, they all tend to struggle in non-resource-revenue mobilization. The median non-resource-revenue-to-GDP ratio was less than 14 percent in 2015, compared with 18 percent for nonfragile states (Figure 2.10).

Other Characteristics of Sub-Saharan African Tax Systems

In most regions of the world, there has been a trend in recent years toward reducing rates for the CIT and the personal income tax (PIT). In sub-Saharan African countries, the average top PIT rate has been reduced from about 44 to 32 percent since 2000 (Figure 2.11), while average top CIT rates have been reduced by more than 5 percentage points during the same period (Figure 2.12).

Figure 2.11. Personal Income Tax Rate, Average Top Rate, 2000–16



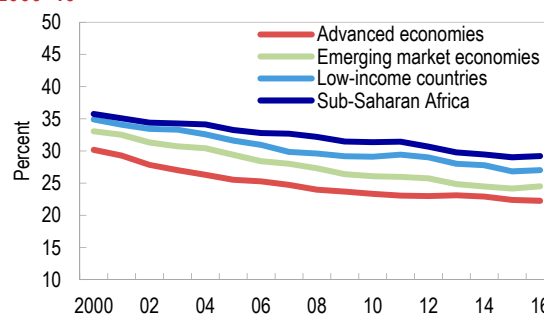
Source: IMF Fiscal Affairs Department Tax Rates database.

Despite this decline in rates,⁵ total direct taxes (PIT and CIT) as a percentage of GDP have been trending upward, though substantial potential remains in this area given the low level of productivity (Figures 2.13–2.16).⁶ On average, sub-Saharan African countries' CIT productivity lags that of advanced and emerging market economies.

There are substantial differences in the productivity of the CIT among sub-Saharan African countries, with some showing the highest productivity due to more streamlined tax incentives. Different fiscal regimes for special economic zones (SEZs) are among several factors (such as differences in the tax base and administrative effort) impacting CIT productivity. Some countries, such as Senegal and South Africa, offer a reduced tax rate of 15 percent for companies located in SEZs, while others with lower productivity or lower tax collection as a share of GDP offer a zero CIT rate, including Côte d'Ivoire, Rwanda, and Tanzania.

Substantial progress has also been made regarding the collection of indirect taxes. Most sub-Saharan African countries have introduced a VAT, replacing general sales taxes. The main advantage of a VAT is that it avoids tax cascading (tax paid on tax) by taxing only the value added at each stage of the supply chain. Sub-Saharan African countries that continue to rely on sales taxes should look to introduce a modern VAT. These include Angola, Comoros, Guinea-Bissau, Liberia, and São Tomé and Príncipe. However, before the introduction of the VAT, countries need to develop a capacity to

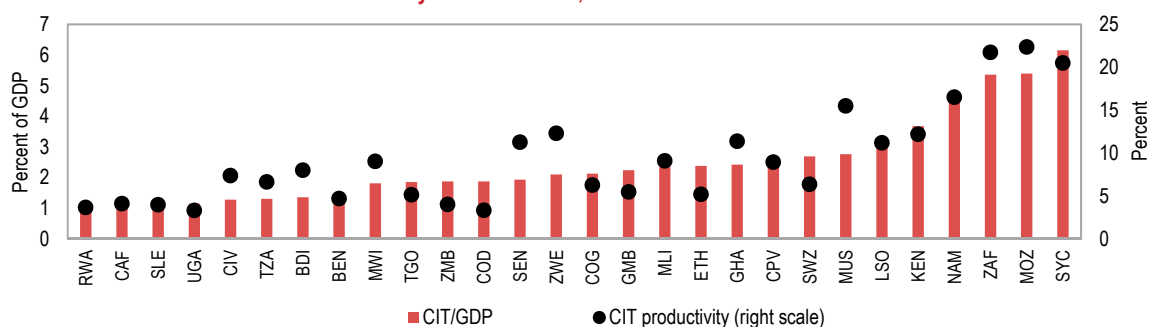
Figure 2.12. Corporate Income Tax Rate, Average Top Rate, 2000–16



Source: IMF Fiscal Affairs Department Tax Rates database.

⁵ Despite the reduction in rates, the tax burden on households can still sometimes be substantial given the existence of fees, ad hoc taxes, and contributions imposed by various levels of government and/or officials.

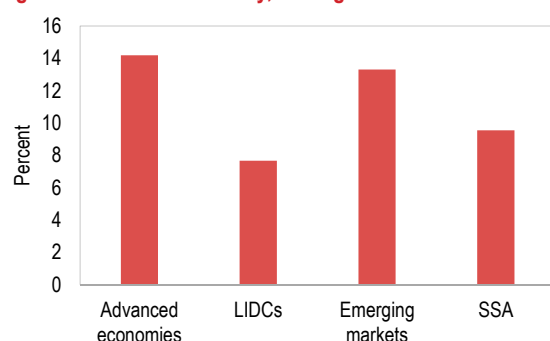
⁶ CIT productivity is defined as the tax yield in percent of GDP relative to the standard CIT rate and given by: $CIT\ Productivity = (CIT\ Revenue\ as\ a\ share\ of\ GDP) / (CIT\ rate)$.

Figure 2.13. Sub-Saharan Africa: CIT Productivity and CIT to GDP, 2016 or Latest Available

Sources: World Revenue Longitudinal database; IMF Fiscal Affairs Department Tax Rates database; and IMF, World Economic Outlook database.
 Note: CIT = corporate income tax. See page 91 for country abbreviations table.

administer the credit/debit system, which suggests that the process cannot be rushed.

One advantage of focusing on the VAT is that it is more growth friendly than other types of taxes, especially direct taxes (IMF 2015a). In most cases this can be best achieved by a focus on the efficiency of the VAT, rather than through increases in VAT rates, as this is less likely to have a negative impact on growth (Box 2.2). At the same time, in countries where the rate is below 13 percent, a 2 percent rate increase would have virtually no negative impact on growth, while in countries with a rate between 13 and 18 percent, a 1 percent increase would not have much effect on economic activity. With rates above 18 percent, even small increases in the VAT rate can have a substantial negative impact on growth (Gunter and others forthcoming).

Figure 2.14. CIT Productivity, Average

Sources: World Revenue Longitudinal Database; and IMF Fiscal Affairs Department Sub-Saharan Africa Tax Revenue database.

Note: CIT = corporate income tax; LIDCs = low-income developing countries; SSA = sub-Saharan Africa;

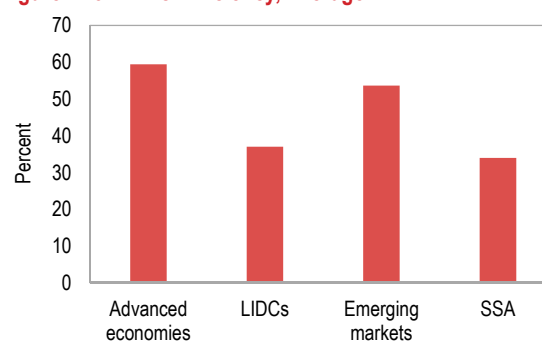
⁷ VAT C-efficiency is defined as actual VAT collections as a share of its potential base (that is, consumption) and is given by $\text{VAT C-Efficiency} = (\text{VAT Revenue}) / ((\text{Total final consumption net of VAT revenue}) * \text{VAT rate})$.

⁸ Zero-rating can have a more negative impact on collections than exemptions. In this case, the final consumption good is not taxed, and the seller can claim a VAT refund for the VAT paid on its inputs. When a good is “exempt,” the government does not tax its final sale, but producers cannot claim a VAT refund for the VAT they paid on the inputs used in the production process.

At the same time, the focus on the VAT also requires greater attention to pro-poor spending and social protection measures. Countries should use part of the resources raised through the VAT to ensure that any potentially negative distributional impact is adequately offset on the expenditure side.

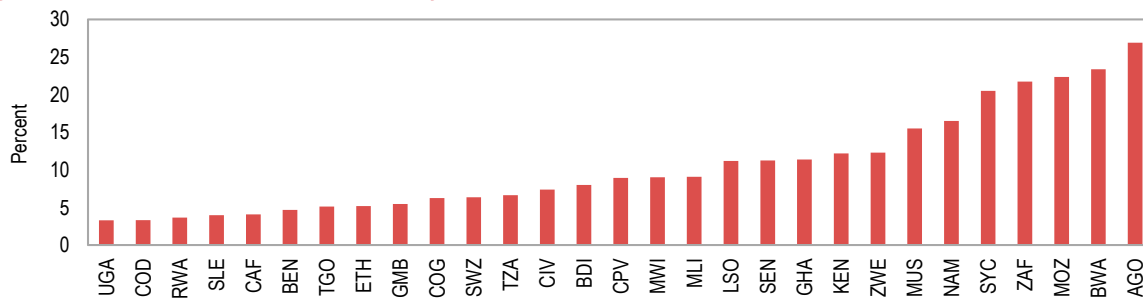
In those sub-Saharan African countries that have adopted a VAT, its efficiency is relatively low compared with other regions (Figure 2.15) and varies widely across the region (Figure 2.17).⁷ Several factors explain this performance:

- Narrow tax bases due to the proliferation of exemptions and zero rating for goods and services.⁸ While all countries have some exemptions and zero-rated goods and services, there are substantial differences across countries.

Figure 2.15. VAT C-Efficiency, Average

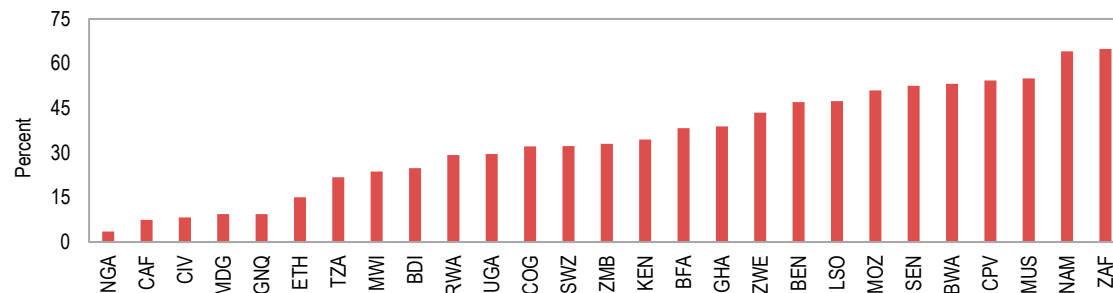
Sources: World Revenue Longitudinal Database; and IMF Fiscal Affairs Department Sub-Saharan Africa Tax Revenue database.

Note: LIDCs = low-income developing countries; SSA = sub-Saharan Africa; VAT = value-added tax; VAT C-Efficiency = actual VAT collections as a share of potential base.

Figure 2.16 Sub-Saharan Africa: CIT Productivity, 2016 or Latest Available

Sources: World Revenue Longitudinal database; and IMF staff estimates.

Note: CIT = corporate income tax. See page 91 for country abbreviations table.

Figure 2.17. Sub-Saharan Africa: VAT C-Efficiency, 2016 or Latest Available

Sources: World Revenue Longitudinal database; and IMF staff estimates.

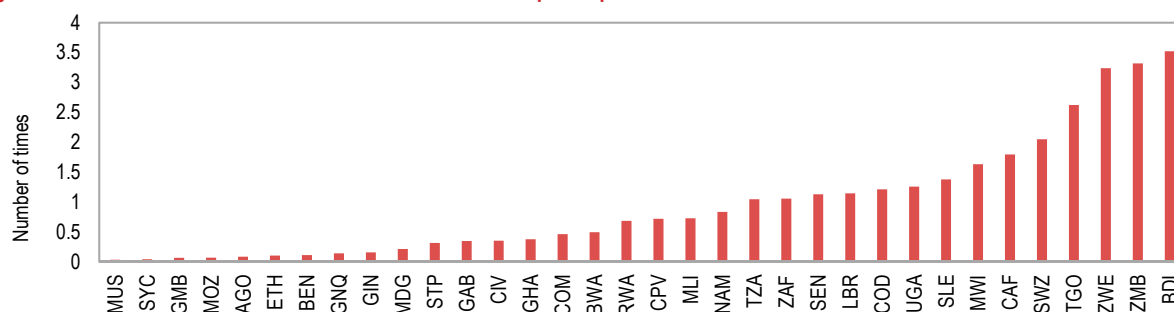
Note: VAT C-Efficiency = actual VAT collections as a share of potential base; VAT = value-added tax. See page 91 for country abbreviations table.

For example, Lesotho, Mauritius, Senegal, and South Africa have relatively short lists compared with countries such as Cameroon, Malawi, and Zambia, which have more extensive lists of exemptions.

- Different thresholds for which a taxpayer is required to register (Figures 2.18 and 2.19). While it is usually advisable to have a relatively high threshold to allow the tax administration to focus on the larger taxpayers, more mature tax administrations can choose lower thresholds. Substantial differences can also be observed for the PIT thresholds. Burundi, Zambia, and Zimbabwe have very generous exempted thresholds that exceed three times their per capita GDP, compared with countries such as Botswana, Senegal, South Africa, and Tanzania, where exempted thresholds are similar to the level of per capita GDP.
- Weaknesses in VAT refund systems. The VAT is a tax on consumption that requires both timely and accurate refunds. A variety of systems are used in sub-Saharan Africa, including the use

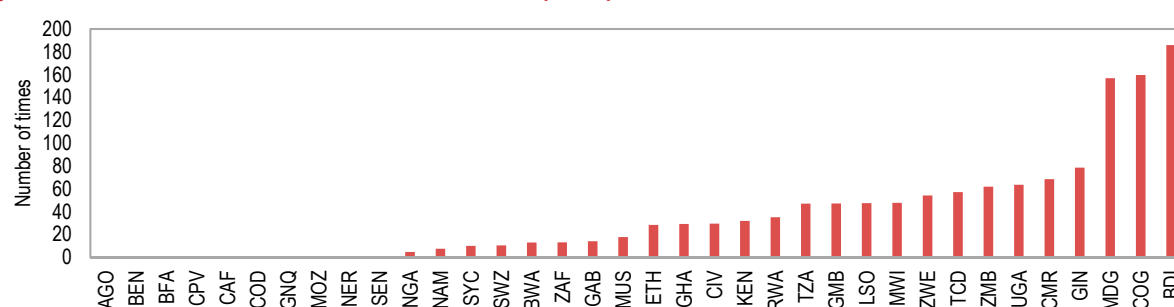
of VAT credits against future tax payments (Ghana, Kenya, Madagascar, Malawi, Mali, Mozambique, Senegal), VAT refunds on a quarterly basis (Cameroon, Chad, Equatorial Guinea), and refunds following an audit verification (Mozambique, Namibia). While the latter system can help to reduce refund fraud, administrative delays can result in a buildup of unpaid claims adversely impacting the private sector, as has been the case in Zambia and Zimbabwe. In this context, tax administrators should consider settling refunds out of gross VAT receipts by establishing escrow accounts to satisfy future refunds and mitigate potential problems in cash management. The use of risk-based audit verification approaches, whereby audits are selective and based on an assessment of risks, can help expedite the settlement of VAT refunds.

In addition to a sound VAT, sub-Saharan Africa also stands to benefit by tapping underexploited taxes, accelerating customs administration reforms, and reviewing policies regarding international corporate taxation. More specifically,

Figure 2.18. Sub-Saharan Africa: PIT Threshold Relative to per Capita GDP

Sources: IMF Fiscal Affairs Department Tax Rates database; and IMF, World Economic Outlook database.

Note: PIT= personal income tax. See page 91 for country abbreviations table.

Figure 2.19. Sub-Saharan Africa: VAT Threshold Relative to per Capita GDP

Sources: IMF Fiscal Affairs Department Tax Rates database; and IMF, World Economic Outlook database.

Note: VAT= value-added tax. See page 91 for country abbreviations table.

- The excise tax is an underexploited revenue source. In 2015, on average, sub-Saharan African countries collected 1.4 percent of GDP from all forms of excise taxes, less than half the level in emerging Europe (Figure 2.20). There are also wide differences in excise collection across sub-Saharan Africa, with several countries, including Benin, Côte d'Ivoire, Madagascar, Mozambique, Nigeria, and Sierra Leone, collecting excise revenues of less than 1 percent of GDP (Figure 2.21). While specific advice will depend on country-specific circumstances, excise taxes are relatively simple to implement and do not require fundamental changes to the tax system (IMF 2011). Countries need to evaluate the products that can be subject to excise taxes (typically petroleum, cigarettes, alcohol, motor vehicles and sometimes telecommunications) and the amount of tax levied, either through a specific tax (a monetary amount based on quantities)—which is typically better suited to address externalities, tends to produce a more predictable revenue stream and is simpler to administer—or ad valorem (based on the value or price of the product), which can in some cases result in lower consumption prices (Delipalla and Keen 1991).
- Property taxation is also underused. Property tax revenues are quite limited in sub-Saharan Africa, but the case for property taxation is clear: it provides a stable and reliable source of revenue that is less susceptible to short-term economic fluctuation, and it is difficult to evade, since property taxes can be secured by the property itself. A further benefit is improved service delivery and accountability where property taxes are collected by the local administration.⁹ Previous studies (Norregaard 2013) suggest that sub-Saharan African countries can raise 0.5 to 1 percent of GDP via property taxation, and it is becoming more common across sub-Saharan Africa. Yet many countries still rely solely on one-time payments (for example, Botswana, Lesotho,

⁹ In Lesotho, property taxation accounts for half of local government revenue (IMF 2011) and in Cabo Verde this is 70 percent (Norregaard 2013).

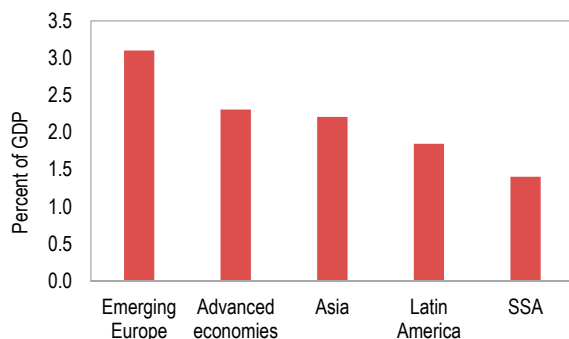
Malawi, Swaziland, and Zimbabwe, among others, depend on stamp duties or registration fees on property sales). The rollout of recurrent property taxation will require significant capacity-building around property registries and annual appraisal systems, as well as stronger coordination between central and subnational governments, but relatively rapid progress is possible in urbanized areas where information exists on ownership and reference valuations and can be supplemented by harnessing modern technology to, for example, derive geo-spatial data by global positioning systems.

- Customs administration is key. Customs administrations collect VAT on imports, trade taxes, and excise taxes on imported goods. In 2015, on average, sub-Saharan African countries collected a third of their nonresource revenue through customs at their border (Figure 2.22). With a smaller number of taxpayers involved in international trade activities—as compared with a larger number of taxpayers involved in domestic

operations—customs administration reforms can deliver results on revenue mobilization in a relatively short timeframe. At the same time, better customs administration is also critical for boosting trade. Such reforms have often included the modernization of customs processes (that is, digitalization of transactions and payments) and measures to combat corruption and fraud (that is, strengthening clearance procedures and creating anti-smuggling units). Channeling goods through a few major ports with adequate custom controls can also facilitate custom administration and reduce potential for leakage.

- Cross-border tax rules need to be reviewed. Sub-Saharan African countries need to stay abreast of evolving international corporate practices. With companies increasingly reliant on debt relative to equity, thin capitalization rules have been adopted to limit tax deductions on interest. By the end of 2016, thin capitalization rules across sub-Saharan Africa had set debt-to-equity (or “gearing”) ratios of up to 4:1, but recent international trends suggest that countries with rules allowing for ratios above 2 could look to further limit interest deductions (Botswana, Equatorial Guinea, Namibia, Rwanda, Tanzania, Zambia, Zimbabwe). An additional international tax issue is intragroup transactions, also known as transfer pricing, which can distort taxable income. These new regulations typically embed the “arm’s length” principle to ensure that transfer prices are transacted on a market-value basis. To limit tax avoidance, tax rules and monitoring frameworks covering transactions between related parties need to be introduced where they are absent.

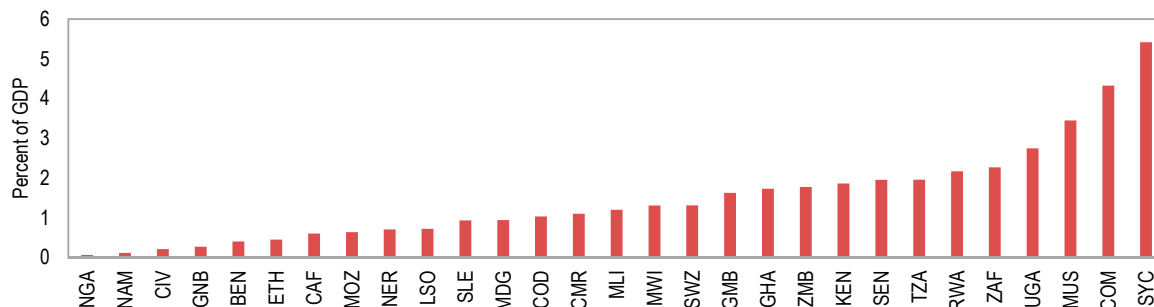
Figure 2.20. Excise Taxes, 2015, Average



Sources: World Revenue Longitudinal database; and IMF Fiscal Affairs Department Sub-Saharan Africa Tax Revenue database.

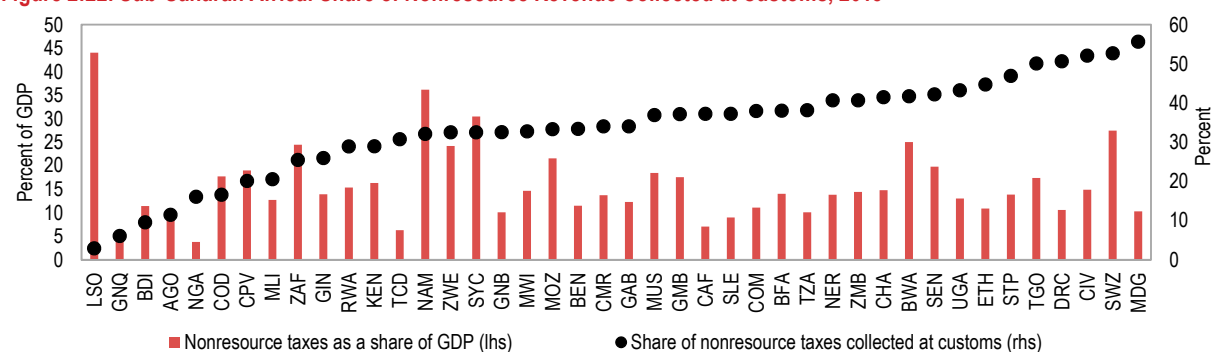
Note: SSA = sub-Saharan Africa.

Figure 2.21. Sub-Saharan Africa: Excise Taxes, 2015



Sources: World Revenue Longitudinal database; and IMF Fiscal Affairs Department Sub-Saharan Africa Tax Revenue database.

Note: See page 91 for country abbreviations table.

Figure 2.22. Sub-Saharan Africa: Share of Nonresource Revenue Collected at Customs, 2015

Sources: World Revenue Longitudinal database; and IMF Fiscal Affairs Department Sub-Saharan Africa Tax Revenue database.

Note: lhs = left scale; rhs = right scale. See page 91 for country abbreviations table.

STRUCTURAL FACTORS AFFECTING TAX EFFORT AND POTENTIAL

One way to assess the amount of additional taxes that a state can potentially collect is to compare its tax-to-GDP ratio with that of other countries with similar characteristics, including the level of economic and institutional development. This type of analysis can be done using the notion of a “tax frontier.” The tax frontier (or theoretical tax capacity) can be defined as the highest level of tax revenue (usually measured in percent of GDP) that a country can be expected to achieve given certain underlying macroeconomic and institutional conditions. The distance between actual tax revenues or tax effort and the tax frontier in a particular year measures the theoretical tax gap or tax potential. Tax potential reflects the tax revenue gains that a country could achieve through tax policy changes or improvement in the efficiency of collection. Estimates should be used with care, as they can be sensitive to modeling assumptions and estimation techniques.

Following Fenochietto and Pessino (2010, 2013), the tax frontier for sub-Saharan African countries can be computed using a stochastic panel data model that covers 121 countries during 2002–16 (Annex 2.1). The model uses a set of independent variables commonly found to be associated with the level of tax revenue. These include income per capita, trade openness, the share of agriculture in GDP, income inequality and public spending on education. To assess the impact of institutions, some variables measuring corruption and government effectiveness are also included. Countries

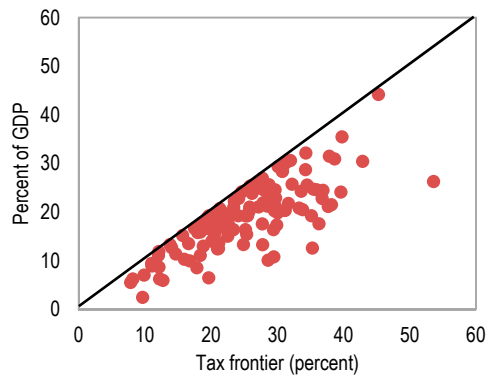
differ widely in the height and distance to the frontier, as explained later (Figures 2.23 and 2.26).

Consistent with other studies, the analysis finds that higher income levels, more trade openness, higher spending on education, and better government effectiveness are associated with higher tax-to-GDP ratios. Similarly, countries with lower income inequality, and lower corruption levels also tend to have higher tax ratios. These factors determine the height of the frontier for each country.

The average tax frontier for Sub-Saharan African countries is around 7½ percentage points of GDP lower than the average tax frontier for the rest of the world. This is not surprising given the fact that sub-Saharan African countries have lower levels of economic and institutional development than countries in other regions. However, deeper analysis identifies nuances in the assessment of revenue mobilization across sub-Saharan Africa.

In particular,

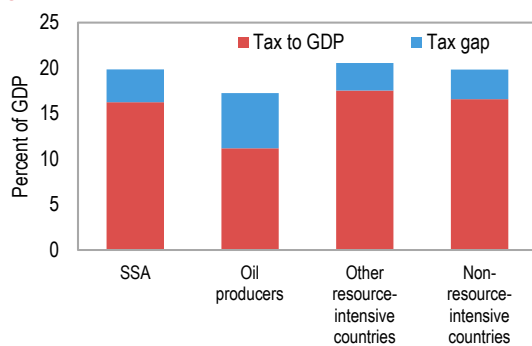
- The average tax gap is slightly lower in sub-Saharan Africa than elsewhere. This means that controlling for the effect of structural factors that affect tax collection, sub-Saharan African countries are not showing, on average, higher levels of inefficiency in their tax collection efforts than other regions (Figure 2.24). The average tax gap (or tax potential) for sub-Saharan African countries ranges between 3 and 5 percent of GDP. Addressing inefficiencies in sub-Saharan African countries may be a more pressing priority than in other regions given that overall tax revenues are lower and hence the cost of this inefficiency is arguably higher.

Figure 2.23. Sub-Saharan Africa: Tax Efforts

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

- While improvements in the functioning of tax systems can help close tax gaps, this may not be enough to attain key fiscal objectives such as supporting higher levels of public spending to achieve the Sustainable Development Goals. Additional revenue mobilization would also require reforms to tackle the underlying structural factors—notably corruption, government effectiveness, and inequality—that are currently acting as constraints.

While the tax frontier is on average similar across country groups in sub-Saharan Africa, large variations exist in tax effort and tax gaps. Oil producers have the lowest tax effort and highest average tax potential, at 5 percent of GDP or more. This suggests that revenue performance in these countries is relatively weak, while other resource and nonresource countries show lower levels of tax potential of about 3 percent of GDP. A similar pattern exists for non-sub-Saharan countries, but with substantially different tax frontiers (Figures 2.24 and 2.25).

Figure 2.24. Sub-Saharan Africa: Tax Frontier and Gap

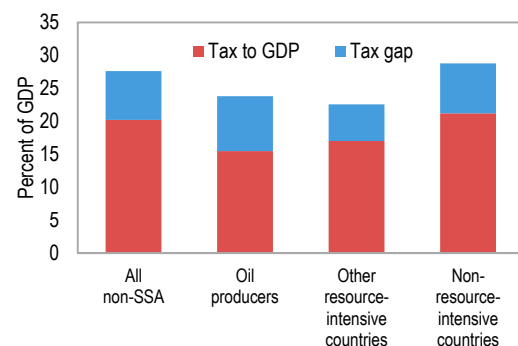
Sources: IMF, World Economic Outlook database; and IMF staff estimates.

Note: SSA = sub-Saharan Africa.

The results suggest that most sub-Saharan African countries still have considerable potential to collect higher taxes through reforms (Figure 2.26). Also, the relatively lower tax frontier in sub-Saharan Africa implies that improvement in macroeconomic fundamentals and institutional factors could raise the tax frontier, and hence increase the possibilities to mobilize greater tax revenue. Regression analysis comparing the tax frontiers based on changes in income inequality, corruption, and government effectiveness show that policies addressing institutional weakness could also help boost revenue collection. This can operate through several channels, including an increase in tax compliance, as citizens realize the government is more likely to use their taxes for more transparent and efficient spending programs (IMF 2015b).

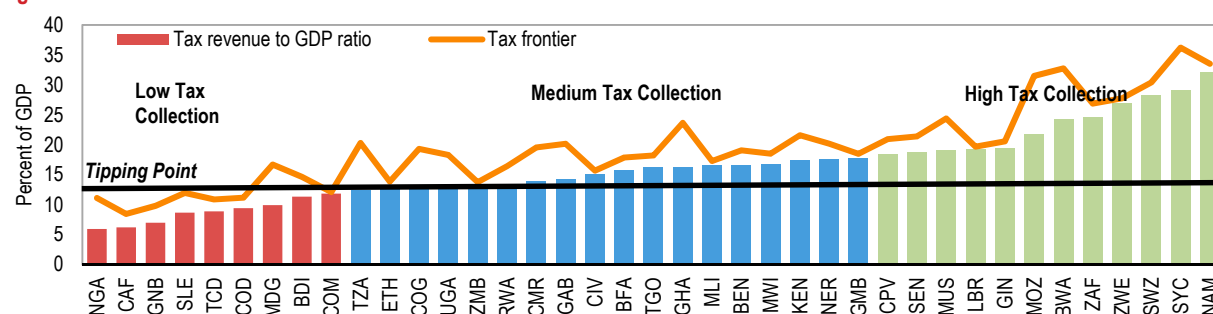
It is also useful to consider the revenue mobilization challenges facing countries with different tax collection levels.

- Countries with low tax collection levels that have not reached a minimum threshold of about 12½ to 13 percent of GDP (earlier referred to as a “tipping point”) will need reforms to increase the efficiency of collection but will also need to find ways to push the tax frontier to a higher level. For example, Nigeria could double its tax-to-GDP ratio and exceed 10 percent of GDP with reforms to improve the efficiency of the system, but it would be difficult to surpass the tipping point without improving the structural factors that could push its tax frontier to a higher level. This could be achieved, for example, with policies that reduce corruption and improve

Figure 2.25. Non-Sub-Saharan Africa: Tax Frontier and Gap

Sources: IMF, World Economic Outlook database, and IMF staff estimates.

Note: SSA = sub-Saharan Africa.

Figure 2.26. Sub-Saharan Africa: Tax Ratio and Tax Frontier

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

Note: Figure is computed based on 2015 data to ensure data coverage of key variables in the model. Recent GDP rebasing (for example, Liberia) has not been incorporated in the analysis. See page 91 for country abbreviations table.

governance, or by increasing the level of spending on education, which could simultaneously help to reduce inequality and create incentives to collect more taxes (for example through increases in the VAT rate) to finance the new spending levels.

- Countries with medium tax collection levels (tax-to-GDP ratio in the 13–18 percent of GDP range) tend to have larger tax gaps. These countries could mobilize, on average, about 3½ percent of GDP in additional revenues through reforms aimed at improving the efficiency of their current systems; for example, through a thorough review of existing taxes and exemptions. At the same time, there are some countries, such as Côte d'Ivoire, Ethiopia, and Mali, that seem to be relatively close to the tax frontier. In these cases, efficiency gains could produce more limited results, and the focus should also be on structural reforms to push the frontier to a higher level. While some of the factors that affect the frontier move slowly over time (GDP per capita) or are difficult to change quickly given capacity constraints, policies that focus on more inclusive growth or tackle corruption can help in this regard.
- For countries with higher tax collection levels (over 18 percent of GDP), the tax frontier is already at a relatively elevated level. As illustrated in the next section, these are countries that have already invested substantially in

developing stronger tax collection institutions despite still-modest per capita income levels (Liberia, Mozambique) or that have higher levels of development and good governance (Botswana, Mauritius, Namibia, Seychelles). In this group of countries, despite having already achieved comparatively high tax-to-GDP ratios, there is still an average distance to the frontier of about 4 percent of GDP, suggesting that there is potential to mobilize additional revenues. However some countries may maintain lower taxes as a public policy choice; for example, on the desired size of government.

LESSONS FROM SUCCESSFUL REVENUE MOBILIZATION EPISODES

This section aims to identify lessons from success stories in revenue mobilization efforts. It focuses on nonresource revenues, where specific policy actions are under the control of country authorities, and finds that strong political commitment, as well as comprehensive reform strategies focused on building basic institutions and the tax base, are prerequisites for success. A simple algorithm is used to identify episodes of strong and steady improvement in nonresource revenues. In this instance, a successful episode is defined as a total increase of 2 percentage points of nonresource GDP over a three-year period, with no substantial declines in the revenue ratio within or immediately following the period.¹⁰

¹⁰ To help ensure that the episode is due to underlying rather than ephemeral factors, the algorithm rules out instances where the mobilization episode is preceded by large drops in nonresource revenue, possibly suggesting a bounce-back recovery, and rules out episodes that are followed by an immediate deterioration of performance during the subsequent two years. The algorithm also excludes episodes in countries with revenue ratios above 20 percent (relatively strong performers) and those that remained below 10 percent of GDP.

Sustained revenue mobilization is difficult. Using a data set covering 44 sub-Saharan African countries from 2000–16, the analysis finds only six episodes of sustained revenue mobilization (Figure 2.27).¹¹ The nonresource revenue gain during the three-year episodes ranges from 2.2 to 8 percent of nonresource GDP, with an average annual increase of 1.2 percentage points and an average total revenue gain of 3.5 percentage points. In all cases, gains continued in subsequent years, with increases averaging 1 percentage point a year over the next three years. Data for 2016 indicate that the current level of revenue is at least at the same level it was at the end of the episode, and on average 3.4 percent of GDP higher than the episode end point, suggesting that the previous gains have become permanent.

Success is possible in a variety of circumstances and initial conditions. Successful episodes reflect a diverse cross section of countries, ranging from relatively low to medium levels of tax effort (Figure 2.28), and including a range of geography, income levels, fragility, and resource intensity (Table 2.1). One common factor is that countries tended to experience robust growth during the revenue mobilization episode (possibly indicating

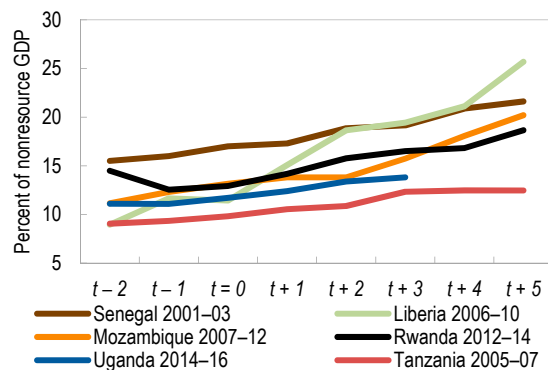
tax buoyancy as a factor in revenue gains). However, an acceleration in growth was not required. In fact, only Liberia saw a significant acceleration in growth, while growth in other countries decelerated modestly from an average growth rate of 6.7 percent prior to the episode to 5.7 percent during the episode. Most episodes overlapped with intensified engagement with the IMF in the form of both lending and nonlending programs and substantial technical assistance efforts.

The reform process does not follow a set template, but rather seems tailored to country circumstances (Table 2.2). However, all cases point to the need for a broad range of tax policy and revenue administrative reforms prior to and during the episode.¹²

Pursuing a Comprehensive Reform Strategy

Each country in the study embarked on a comprehensive and multiyear reform strategy. There are some common elements, including a focus on basic institutions, measures to broaden the tax base, and modernization of tax administration institutions.

Figure 2.27 Sub-Saharan Africa: Nonresource Revenue Mobilization Episodes



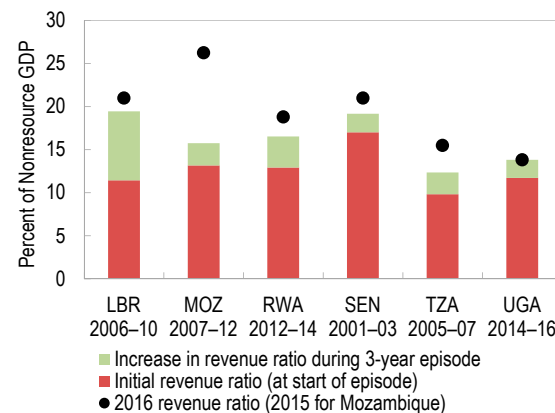
Sources: IMF, World Economic Outlook database; and IMF Fiscal Affairs Department Sub-Saharan Africa Tax Revenue database.

Note: $t + 1$ is the first year of the revenue mobilization episode.

¹¹ Oil producers are omitted from the group of case studies in view of the potentially large spillover impact of cyclical commodity price swings on economic activity and nonresource revenues.

¹² A review of country cases where revenue mobilization exceeded 2 percentage points of GDP over three years, but where such gains were not sustained over subsequent years, suggests a variety of factors can undermine robust performance. In Benin and The Gambia (2005–07), the post-episode deterioration in revenues stemmed from the same exogenous shock, that is the 2008 global financial crisis. In the cases of Burkina Faso (2010–13), Burundi (2009–11), Malawi (2008–10), and Mali (2013–15), the reversals resulted from a combination of factors, including weakening political stability and internal security, or policy changes with a negative impact on revenue mobilization. In the cases of Comoros (2010–12) and Ghana (2009–11), endogenous factors explain the failure to sustain revenue gains, such as reduced receipts from changes to the Comorian citizenship program, and weakening tax administration in Ghana.

Figure 2.28 Sub-Saharan Africa: Nonresource Revenue Mobilization Episodes



Sources: IMF, World Economic Outlook database and IMF Fiscal Affairs Department Sub-Saharan Africa Tax Revenue database.

Table 2.1. Sub-Saharan African Revenue Mobilization Episodes: Background Information

Country	Episode	Income	Resource Intensity	Fragile	IMF Program	Real Growth		Macroeconomic Objectives	Fiscal Objectives
						Preceding 5-Year Average	In Episode		
Liberia	2006–10	Low	Other	Yes	Yes	–2.3	7.6	• Sustain economic reconstruction by creating a stable macroeconomic environment	• Strengthen revenue collection and expenditure control to channel resources to poverty reduction; ensure transparency and accountability
Mozambique	2007–12	Low	Non	No	Yes	9.1	6.9	• Consolidate macroeconomic stability; strengthen the financial sector and improve the lending environment	• Strengthen revenue, enhance efficiency and transparency of government operations, and improve social service delivery
Rwanda	2012–14	Low	Non	No	Yes	8.0	7.0	• Consolidate macroeconomic stability while reducing aid dependency	• Maintain a sustainable fiscal position while increasing domestic revenues
Senegal	2001–03	Mid	Non	No	Yes	4.1	4.0	• High and equitable growth via better service delivery and a more attractive investment climate	• Expand infrastructure and social services while safeguarding macroeconomic and debt sustainability
Tanzania	2005–07	Low	Other	No	Yes	6.3	6.5	• Contain inflation and support broad-based growth via infrastructure investment	• Steadily increase the revenue ratio to bolster macroeconomic performance and reduce aid dependency
Uganda	2014–16	Low	Other	No	Yes	5.9	4.2	• Support the reform agenda for growth, focused on institutions, financial sector, and investment climate	• Scale up investment; broaden and deepen tax base; PFM effectiveness; preparing for oil

Sources: IMF Article IV Reports; IMF Technical Assistance Reports; IMF Staff Memorandum; and IMF World Economic Outlook database.

Note: PFM = public financial management.

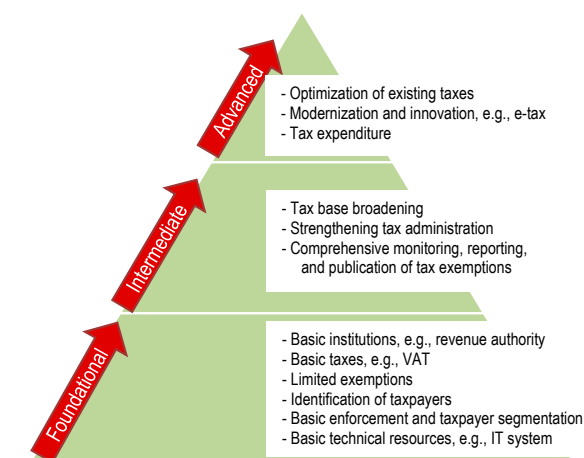
A key element was an emphasis on the basic building blocks of the tax system. The apparatus of national taxation can be conceived of as a pyramid, where foundational institutions provide the base for more complex administrative and technological transformations (Figure 2.29). While the sequencing depends on country circumstances, all the countries invested significant effort in the basic building blocks of an effective and modern tax policy and administration, such as a taxpayer identification number, a semiautonomous revenue authority, the VAT, and taxpayer segmentation. Ex post assessments have found that the introduction of such reforms has been associated with increased revenue in a wide range of sub-Saharan African countries (Ebeke, Mansoor, and Rota Graziosi 2016). These institutions were largely well entrenched before the revenue

mobilization episodes. The exceptions were Liberia and Mozambique, two countries emerging from prolonged internal conflict. Liberia was still in the incipient stages of rebuilding, but quickly embarked on a broad reform agenda to introduce several elements of these building blocks. Mozambique was more advanced, having pursued a broad reform agenda since the mid-1990s that started with overhauls of customs and domestic indirect taxes and introduction of a VAT, before shifting to establishment of a revenue authority and a large taxpayer unit early in the episode. Although these institutions were already established in the other countries, the record indicates continued attention to improve their functioning, notably in the form of reorganizations and medium-term strategies to strengthen capacity and coverage.

45

Note: CIT = corporate income tax; PIT = personal income tax; VAT = value added Tax; ITAS = Integrated Tax Administration System; RRA = Rwanda Revenue Authority; ASYCUDA = Automated System for Customs Data; SIGTAS = Standard Integrated Government Tax Administration System; WAEMU = West African Economic and Monetary Union.

Liberia 2006-10	Mozambique 2007-12	Rwanda 2012-14	Senegal 2001-03	Tanzania 2005-07	Uganda 2014-16
Prior reforms	Outsourcing of customs administration (1996); VAT and excise taxes adopted (1999); tax incentives code (2002); reform of income tax (2003)	Revenue Authority (1998); VAT (2001); RRA functional reorganization (2003); SIGTAS (2003-07); income tax reform (2005); excise tax amended (2006); segmentation (2009)	VAT (1980); VAT administration computerization (1993); large taxpayer unit (2000); WAEU common external tariff (2006)	Revenue authority (1996); VAT (1998); Trade tariffs reduced (1999); Large Taxpayers Department (2007); Taxpayer ID number	Revenue Authority (1991); VAT (1996); Large taxpayers office (2005); Medium taxpayers office (2009); PIT top rate increase (2012)
2005 Created single tax operation	2004 PIT rate increased from 20 to 27.5 percent	2010 RRA starts collecting social security contributions, improving coverage	2000 Single rate VAT at 18 percent	2003 Revenue authority adopts medium-term corporate plan for modernization	2012 Roll out e-tax services to upcountry stations; taxpayer education on e-tax
2006 Strengthen large-taxpayer audit function; increase large taxpayer base	2004 Organic Law for Tax Tribunals	2011 Customer satisfaction survey to inform strategic focus	2000 Management of central and local government taxes in a single directorate	2004 New tax law: self assessment, simplify small business tax, restore capital gains tax	2013 Issuance of national IDs
2006 Web posting of financial statements of revenue-generating agencies	2006 PIT rate increased to 32 percent	2012 Revised investment code to reduce exemptions	2000 Single taxpayer registration system at tax and customs departments	2004 Double VAT threshold, increase presumptive tax	2013 Increase fuel excise and new levy on mobile money transfers
2007 Broadened tax base by voiding tax concessions and duty exemptions	2008 Established Revenue Authority, developed medium-term strategic plan	2012 Electronic single window system at customs	2001 Study on revenue impact, beneficiaries, and legal basis of tax exemptions	2004 Implement function-based large taxpayers dept, expand coverage	2013 Improve risk profiles for taxpayer segments focusing on key actors
2007 Implement new taxpayer identification number	2008 Specific taxes on fuel increased, automatic quarterly adjustment	2012 Introduced special tax regime for small and micro enterprises	2003 Integration of the IT systems of the tax, customs, and treasury directorates	2005 VAT and income tax administration under Domestic Revenue Department	2013 Transition to ASYCUDA World
2008 Reorganize domestic tax administration by taxpayer segmentation	2008 Large taxpayers unit created; expanded large taxpayer base	2012 E-filing and e-payment systems; pension and medical insurance in e-Tax system	2003 Single taxpayer ID number	2005 Amended Investment Act, limits fiscal stability clauses to at most 5 years	2014 Publication of tax exemption beneficiaries; tax procedure code
2010 Restart taxpayer audits	2009 Initiated payment of taxes through banks	2013 Medium-term revenue mobilization plan	2003 Synthetic tax for small businesses in lieu of the VAT, the CIT, and the business licensing fee	2005 Publicize beneficiaries of tax exemptions under voucher scheme	2014 National-subnational coordination on taxpayer identification
2010 Developed new Investment Act	2010 Revisions to excise taxes on alcohol and tobacco	2013 One-stop border posts	2004 Streamlined Investment Code to focus on priority industries	2006 ASYCUDA++, create risk management database and post-customs audit policy	2014 CIT expanded to eligible property, interest earned on loans to certain sectors
2010 Automated administration of tax (ITAS)	2011 Deployed registration system for VAT module of e-Tax system	2014 New property tax legislation	2004 New software for property tax base; digitalization of land and forest registry	2006 Index excises on non-petrol items, e.g. alcohol, tobacco, and mobile airtime	2014 VAT gap analysis and strategy; review VAT register and ledger
2010 Customs automation (ASYCUDA) and roll out of one-stop customs at ports	2013 Simplified tax system for small taxpayers	2014 Expanding use of electronic billing machines	2005 Simplified CIT and reduced its effective rate from 35 to 33 percent	2007 Establish dedicated units at six RA offices to serve medium-sized taxpayers	2014 Eliminate specific statutory income and VAT exemptions; cut number of zero rate goods
2010 Lowered CIT/PIT from 35 percent to 25 percent, broadly aligned to region		2014 Revised exemption and zero-rating schedules under the VAT code			2015 Higher VAT threshold
2010 Increased taxes and excise on alcohol, airfries, cell phone usage, and hotels		2014 Tax expenditure budget			2015 Established National Targeting Centre
		2014 The RRA starts collecting decentralized taxes			
			Foundational reforms		
			Intermediate reforms		
			Advanced reforms		

Figure 2.29 Progression of Tax Policy and Administrative Reforms

Source: IMF staff estimates.

All countries paid special attention to measures to build the tax base, simplify the tax system, and tackle exemptions and incentives. The countries in the study appear to have made limited use of tax policy rate adjustments. The focus was instead on measures to improve the effectiveness of tax policies and expand the tax base. All countries adopted measures to reduce base-narrowing exemptions by voiding or suspending certain tax exemptions (Liberia, Uganda), revising investment codes (Mozambique, Rwanda, Senegal, Tanzania), and eliminating distortions on value-added taxation (Rwanda, Senegal, Uganda). Measures were also adopted with an aim to reach certain “hard to tax sectors” by introducing simplified tax regimes for small businesses (Mozambique, Rwanda, Senegal, Tanzania), making changes to VAT thresholds to better target high-value businesses (Tanzania, Uganda), expanding the network of withholding agents (Uganda), and strengthening specialized taxes, such as those on property and investment income (Rwanda, Senegal).

A focus on institutional development and modernization was also at the core of the reform program. This included efforts to improve tax administration processes, particularly to refocus core operations, and developing effective information and communication technology (ICT) systems. This initiative included efforts to customize services and enforcement to different taxpayer segments (small, medium, and large) by deploying specialized units, among other things. In fact, all countries in the

study adopted some form of taxpayer segmentation, with Rwanda, Tanzania, and Uganda dedicating resources to, and initiating specific risk-based compliance strategies for, different taxpayer segments. ICT reforms have helped these SSA countries to leapfrog from basic infrastructure to recent technologies as part of broader efforts to reduce compliance costs, and to simplify taxpayer registration, filing and payment, audit, collection enforcement, and appeals (Box 2.1). Platforms were also developed to combine domestic tax and customs operations, and to simplify customs clearance operations. All countries in the study appear to have been fast adopters of automating systems across domestic tax and customs administration. Several rolled out their first e-tax platforms during 2011–13. Rwanda further advanced with the introduction of mobile tax payments, integration of social contributions into the e-tax system, and the rollout of electronic billing machines to underpin the buoyancy of the VAT.

Need for Strong and Sustained Political Commitment

Clearly, a sound reform strategy that seeks to build effective and modern institutions is essential, but so too is political commitment to carry out reforms. Progress on revenue mobilization is usually slow, requiring perseverance to implement reforms. Transparency can be a helpful tool to maintain the momentum of reform.

Gains are usually incremental over prolonged periods of time. Countries that are rebuilding institutions following internal conflict can rebuild a fractured revenue base relatively quickly with the help of an ambitious reform plan, as was the case with Liberia, where the nonresource revenue ratio rose by 2.6 percentage points each year over three years. However, the norm appears to be that the dividend from structural reform accrues more slowly. Among this group of strong performers, where considerable progress had been made on several foundational reforms even before the revenue episode, average annual increases in nonresource revenue were about 0.9 percentage point of GDP a year during the episode. After the episode, gains tended to slow to 0.7 percentage point, although there has been considerable variation in the outcomes.

As a result, perseverance and the capacity to sustain reform momentum over time are essential. Higher and more reliable revenue streams are achieved over a period of several years. It is therefore not surprising that the countries studied here each pursued a broad range of policy and administrative reforms over a prolonged period, highlighting the importance of strong political commitment. Such reforms are ultimately a product of the political process, and are likely to face resistance from entrenched interests. Sustained commitment is needed to enact new laws, effect policy changes, and find sufficient resources for effective implementation. Elements that have supported implementation include the following:

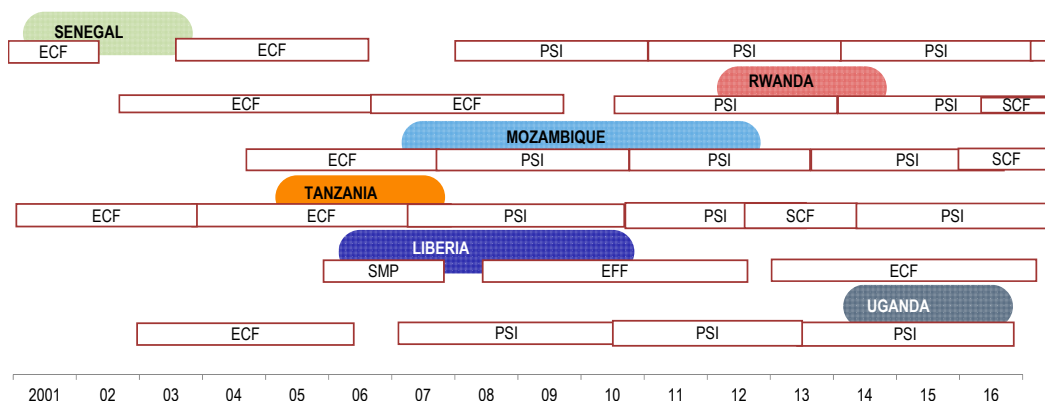
Medium-term revenue strategies. A multi-year revenue mobilization strategy enhances the impetus and commitment for reform. Such plans were adopted ahead of, or concurrently with, the mobilization episodes in Senegal (2003), Tanzania (2003), Mozambique (2006), and Rwanda (2013). An important aspect to ensure the success of the strategy is the focus on taxpayer-centric policies to improve compliance, which typically includes more consultation with the private sector and more accountability and responsiveness of tax authorities to taxpayers.

- **Stability.** Peace and stability are preconditions for success. Fragile countries subject to frequent coups d'état, armed conflict, or the incapacity of the state to maintain law and order in a substantial part of the territory tend to have very low tax-to-GDP ratios (often below 10 percent

of GDP). At the same time, consistent commitment of the political leadership to the reform strategy played a key role in several cases. While ministerial-level changes can energize reforms, they often result in delays or disruptions as plans are reassessed. The mobilization episodes in Mozambique and Senegal coincided with long-tenured ministers of finance, both in office for more than 10 years. The other case studies had at most two ministers of finance in the years leading up to and during the episode. Rapid turnover in key revenue administration staff, or inadequate attention to human resource management (for example, not providing adequate training or some degree of autonomy to the revenue authority), can also prevent progress.

- **Technical assistance and IMF engagement.** All countries received prolonged technical assistance from the IMF and maintained IMF-supported programs containing a substantial emphasis on revenue mobilization efforts (Figure 2.30). An intensified engagement with the IMF, as was the case across this group of countries, can provide a useful sounding board in the development and implementation of a strategy. However, it cannot substitute for steadfast political will. In the cases under study, there were considerable technical challenges in the implementation of revenue mobilization measures, as well as delays in implementation of structural reforms related to the elimination of tax exemptions in the cases of Liberia, Rwanda, and Uganda.

Figure 2.30. Revenue Mobilization Episodes and IMF Supported Programs, 2001–16



Source: Monitoring of Fund Arrangements (MONA) database.

Note: ECF = Extended Credit Facility; EFF = Extended Fund Facility; PSI = Policy Support Instrument; SMP = Staff-Monitored Program; SCF = Standby Credit Facility.

Transparency and outreach can play a decisive role. Explaining the importance of reform objectives to the public and private sectors can build support for the reforms and help develop a change in the taxpayers' culture and in taxpayer compliance. Several of the countries emphasized outreach strategies to help build support for key reforms. Tanzania and Uganda regularly published the names of beneficiaries of tax breaks to help support efforts to reduce the prevalence of exemptions, and Uganda published a VAT compliance gap analysis. Liberia published the financial accounts of revenue-generating agencies to address mismanagement of public funds. Rwanda and Uganda launched taxpayer education programs to foster compliance and improve service delivery.

CONCLUSION AND POLICY IMPLICATIONS

Sub-Saharan African countries could mobilize on average up to 5 percent of GDP in additional tax revenues in the next few years. Historical experience suggests that the conditions for success require attention to many factors related to policy design, institutional development, and political support. Not surprisingly, economic and political stability are preconditions for success.

Policy design is key, and inadequate tax policies cannot be offset by institutional reforms. If a country does not have a sound VAT, provides excessive tax incentives, and does not have a framework to ensure tax compliance, there is little the revenue administration can do to close tax gaps. Successful experiences in revenue mobilization have relied on efforts to implement broad-based VATs, gradually expand the base for direct taxes (CIT and PIT), and implement a system to tax small businesses and levy excises on a few key items (IMF 2011). While the specifics may vary by country, these are basic tax policy principles that have endured the test of time. Attention to contemporary issues like the role of property taxes or modern technologies is useful, but getting the basics right is a precondition for success.

Institutional development and ongoing revenue administration reforms based on a medium-term plan are essential. Countries have shown progress

when they focus on adequate risk management (that is, allocating resources where revenue potential is greatest) and taxpayer segmentation (starting with a large taxpayer office). This requires developing the capacity to study which economic sectors offer the greatest potential, building a reliable registry of the largest taxpayers, and developing the capacity to conduct well-targeted audits. In countries with very low tax-to-GDP ratios, the potential gains from institutional reforms are larger, but the capacity to implement them is also more limited. However, the experience of Liberia and Mozambique, two postconflict countries, suggests that sustained reforms over time are possible even when the initial level of capacity is low.

Improving governance, controlling corruption, and focusing on the efficiency and transparency of public spending also appear to be preconditions for success. The level of tax compliance depends on the availability of mechanisms to ensure enforcement and the willingness of citizens to accept the legitimacy of the state to collect taxes. When citizens perceive that the tax system is fair (for example, it does not exclude powerful individuals and politically connected firms) and that revenues are used to finance productive spending programs, they are more likely to accept their tax obligations. Therefore, the transparent publication of who benefits from tax exemptions or incentives, as well as public financial management reforms that increase the efficiency and transparency of public spending, can be helpful instruments to support tax reform efforts. At the same time, customs and tax officials are more likely to remain professional and preserve the integrity of the system when political leaders, at the highest level show their commitment to reform through an adequate system of incentives and sanctions. This is illustrated by the case of Rwanda, a country that has one of the best track records in its anti-corruption efforts and has made remarkable progress in revenue mobilization efforts.

Finally, specific reform efforts and policies need to be defined at the country level using local knowledge, and country authorities are best placed to lead this exercise. There are, however, five steps that could usefully guide this process:

1. **Identify the taxes that offer the greatest potential.** For most sub-Saharan African countries, improving the VAT offers substantial potential given its current low efficiency in most cases. But there should be a systematic assessment of the potential associated with other taxes, including the CIT (where excessive tax exemptions/incentives have been eroding the base), the PIT (where there should be an effort to gradually expand coverage), and excise taxes. Despite the general decline in customs duties, stricter enforcement of customs rules and procedures could also help mobilize additional revenues. There is also potential in other areas, such as real estate taxes, though many countries have so far achieved limited progress in this area.
2. **Review the legal framework and tax policy design.** Once the potential of the various taxes has been established, there will be a need to align tax policies with the new objectives. In some cases, this may mean the introduction of a VAT, or the reduction of exemptions and the introduction of sanctions for noncompliance.
3. **Assess the institutional framework.** This should be done at two levels. First, there is the underlying supporting framework covering governance aspects. Countries that have weak governance are less likely to be effective in their revenue mobilization efforts. A greater emphasis on improving governance and controlling corruption seems crucial. In sub-Saharan Africa, the countries that are ranked highest in terms of control of corruption and good governance

also tend to have higher levels of tax effort. And this effect is statistically significant even after controlling for the impact of per capita GDP. This finding confirms recent research on this issue (IMF 2016).¹³ But there is also the operational framework, which covers institutional arrangements that have proven effective, such as the establishment of a revenue authority that follows specific principles.

4. **Define a medium-term revenue strategy.** There is consensus in the literature that this is a key step. The strategy should provide medium-term objectives and short-term goals, and could also define capacity-building needs. A convincing strategy would need to explain why the state is seeking to collect additional taxes.
5. **Build a constituency for reform.** The success of the medium-term strategy will depend on the structures of horizontal and vertical accountability. Horizontal accountability refers to the capacity of the government to convince other political parties that revenue mobilization is in the broader interest of the country. This is important to avoid reversals in cases of government changes after elections, given that revenue mobilization takes time. Vertical accountability refers to the social contract between the state and its citizens to ensure compliance. The state exercises its legitimate right to collect taxes in exchange for effective and transparent government spending. Public outreach efforts would be helpful, but they would need to be based on a credible commitment to better governance and transparency.

¹³ Seven of the 10 countries that are ranked highest in the control of corruption dimension of the World Bank Worldwide Governance Indicators have a relatively high tax-to-GDP ratio (above 18 percent of GDP). These include Botswana, Cabo Verde, Mauritius, Namibia, Senegal, Seychelles, and South Africa. Rwanda also scores high in control of corruption and has made great progress in revenue mobilization. The two other countries have lower tax-to-GDP ratios associated with other factors, such as fragility (São Tomé and Príncipe) or some political instability (Burkina Faso).

Box 2.1. Looking ahead: Digital Revenue Mobilization

Digitalization has enabled a massive increase in the capacity to capture, retain, and process vast amounts of data. Its impact on tax policy and administration is multifaceted. It empowers tax policymakers with quick access to more reliable information. It reduces costs for both administrators and taxpayers, as digital infrastructure eliminates numerous manual processes related to recording, counting, and collecting tax files and payments. It can also deepen the tax base by reducing the use of cash and facilitating analysis of chains of transactions. And it can significantly benefit the business climate by clarifying tax rules and speeding up processes.

Sub-Saharan African tax authorities have seized upon digitalization as an opportunity to leapfrog from basic infrastructure to recent technologies. Several countries have already introduced online e-tax portals, mobile tax payments, and online reimbursement of value-added tax (VAT) credits. Nonetheless, progress has been uneven and halting, as implementation faces important hurdles in the region, including

- Low levels of internet penetration that limit the reach of some platforms.
- Inherent complexity, where platforms require extensive development and adaptation in a context of incomplete or low-quality data, with potentially significant financial and reputational risks.
- Sociopolitical challenges, including weak enforcement and little trust in government.

With these shared problems in mind and with a desire to design solutions appropriate to national circumstances, a number of peer-to-peer learning workshops on technology-enabled ideas and navigating the political economy of such reforms have been organized, including the 2016 Hackathon in Senegal and the 2017 Ideas Workshop in Uganda. These events brought together participants from different nations, institutions, and the private sector to identify issues and brainstorm solutions. Experts then evaluated these homegrown proposals, picking the most practicable areas for further work. In Senegal, the participants considered that expanding the menu of mobile options could help improve e-tax accessibility. In Uganda, the interest was in encouraging the deployment of electronic fiscal devices—portable and increasingly inexpensive devices that record business transactions—in order to improve compliance with sales taxes and the VAT. Participants also suggested establishing a gateway for the collection of third-party data to help identify and cross-check tax liabilities.

These initiatives suggest a useful approach to building ownership by ensuring that reforms are homegrown, driven by an intimate knowledge of local circumstances, and informed by a pragmatic dialogue among policymakers and practitioners. Indeed, in the preparation of specific medium-term revenue mobilization plans, country authorities should consider organizing similar seminars to draw on inputs and ideas from a broad range of stakeholders.

Box 2.2. Modeling the Economic Impacts of Revenue Mobilization in Resource-Rich Sub-Saharan African Countries

Application to the Central African Economic and Monetary Community

Sub-Saharan African countries need to raise revenues to support their efforts to reach the United Nations Sustainable Development Goals and ensure debt sustainability. The need for revenue mobilization is particularly important in sub-Saharan Africa's resource-rich countries, which have suffered the impact of the large drop in commodity prices since 2014, and have the lowest tax effort and biggest tax gap in the region. This box analyzes the potential economic impact of revenue mobilization in the Central African Economic and Monetary Community (CEMAC) region, which is rich in natural resources, and where these issues have become particularly important. The analysis examines two questions:¹

- What are the main macroeconomic and distributional impacts of an improvement in non-oil revenue mobilization?
- How can undesirable distributional effects be addressed by using some of the newly created fiscal space?

Through the calibration of a theoretical macroeconomic model for the CEMAC region, the analysis first simulates how private consumption and investment, public debt, and other key macroeconomic variables are affected by two different sources of higher non-oil revenue mobilization: (1) an increase in value-added tax (VAT) rates, one of the most important sources of non-oil tax revenue in the region; and (2) an improvement in the efficiency of collection of existing taxes. The analysis then investigates how the enhanced revenue mobilization deriving from a higher VAT rate can be used to mitigate undesirable distributional effects.

The simulation analysis uses the IMF Debt, Investment, Growth and Natural Resources (DIGNAR) model developed in Melina, Yang, and Zanna (2016). DIGNAR is a real model of a small open economy with three production sectors, productive public capital, and three types of debt: commercial, external, and concessional. Importantly, there are two types of households: (1) non-financially constrained (NFC) households with access to capital and financial markets; and (2) financially constrained (FC) households, which are poor and consume all their disposable income each period.

Key results are as follows:

1. Non-oil revenue mobilization helps reduce government debt and can increase long-term growth, but with potentially undesirable distributional effects.

Figure 2.2.1. presents simulations of the macroeconomic effects of an increase in the VAT rate or an expansion of the tax base through greater efficiency. Both policy measures would increase non-oil revenues while reducing public debt and private consumption for NFC households. Initially, non-oil GDP falls, in line with the empirical literature on short-term fiscal multipliers. It recovers in the medium term, driven by an increase in private investment—in turn boosted by higher savings—and net export and reaches a higher-than-initial level in the long run when revenue gains are realized due to an improvement in tax collection efficiency.

In terms of differences between the two revenue-increasing measures, the improvement in revenue collection through efficiency allows for lower tax rates for a given level of debt. It also has more desirable distributional properties as the negative impact falls largely on the consumption of NFC and not of FC consumers. Importantly, the impact on non-oil GDP is smaller, and its recovery is stronger, when the focus is on collection efficiency rather than on increases in the VAT rate. In contrast, the increase in VAT rate negatively affects particularly the consumption of FC consumers because they have a larger marginal propensity to consume than NFC households.

This box was prepared by Giovanni Melina and Marcos Poplawski-Ribeiro with support from Mathilde Perinet.

¹ For an analysis of the economic effects of shocks on oil revenues, see Araujo, Poplawski-Ribeiro, and Zanna (2016).

Box 2.2. (continued)**2. Policies targeting the most vulnerable improve distributional outcomes**

A second set of simulations (Figure 2.2.2) shows the effects of channeling a fraction (for example, half) of the additional non-oil revenue obtained from higher VAT rates either to targeted transfers toward FC households or to public investment. The combination of an increase in VAT rates and additional public investment is especially good at mitigating the negative effects of the fiscal consolidation on non-oil GDP. In addition, the mix of an increase in VAT rates with targeted cash transfers is a powerful tool to mitigate adverse effects on FC households.

One caveat is in order: it is possible that by channeling public investment to projects that affect the poor—projects that reduce unemployment in poor households, this policy may also act as a mitigating mechanism for inequality. This channel is missing in the DIGNAR model. Indeed, Furceri and Li (2017) empirically find that increases in public investment reduce income inequality, although Furceri and others (2018) find that total government expenditures, including transfers, have a bigger multiplier effect on inequality.

This analysis focusing on the CEMAC region reinforces some key considerations in the design of fiscal adjustment strategies: revenue mobilization is a powerful means to create fiscal space and reduce government indebtedness, but it may also generate undesirable effects on inequality that can be addressed by mitigating policies such as cash transfer programs targeted to the most vulnerable groups of the population and the choice of revenue raising strategies.

DIGNAR Model and Calibration to CEMAC

To conduct the simulation analysis the box relies on the IMF Debt, Investment, Growth and Natural Resources (DIGNAR) model of Melina, Yang, and Zanna (2016). DIGNAR is a real model of a small open economy with two types of households and three production sectors. The intertemporal NFC households have access to capital and financial markets, while the FC households are poor and consume all the disposable income each period. The modeling of two types of households allows the simulations to shed light on consumption-inequality impacts of the different revenue mobilization strategies in the region. In turn, the three production sectors include a nontraded goods sector, a (nonresource) traded goods sector, and a natural resource sector. Each period the government's total receipts consist of (1) taxes, including consumption taxes, labor income taxes, and resource revenues; (2) foreign aid; (3) bond sales; and (4) user fees on infrastructure services. The government's total expenditures consist of (1) government consumption, (2) public investment, (3) transfers to households, and (4) debt service payments. As in Buffie and others (2012), borrowing can be done through issuing domestic debt, external commercial debt, and external concessional debt. The key investment-growth link in DIGNAR is that public investment creates productive capital, which enters the production functions of traded and nontraded goods. Public investment, however, is subject to some investment inefficiency and absorptive capacity constraints. Dabla-Norris and others (2012) argue that high productivity of infrastructure can often coexist with very low returns on public investment in developing economies, because of investment inefficiencies that may be associated with corruption, among other things. As a result, all public investment spending does not necessarily increase the stock of productive capital. Similarly, absorptive capacity constraints related to administrative and management capacity and supply bottlenecks—which negatively affect project selection, management, and implementation, and raise input costs—can further reduce the efficiency of public investment and have negative effects on growth, as suggested by Esfahani and Ramirez (2003).

We calibrate the initial steady state of the main macro-economic aggregates in the model using average values of observed variables over the last five years. The rest of the parameters are set at values appropriate for low-income countries as discussed in Melina, Yang, and Zanna (2016). Table 2.1.1 summarizes the CEMAC-specific calibration.

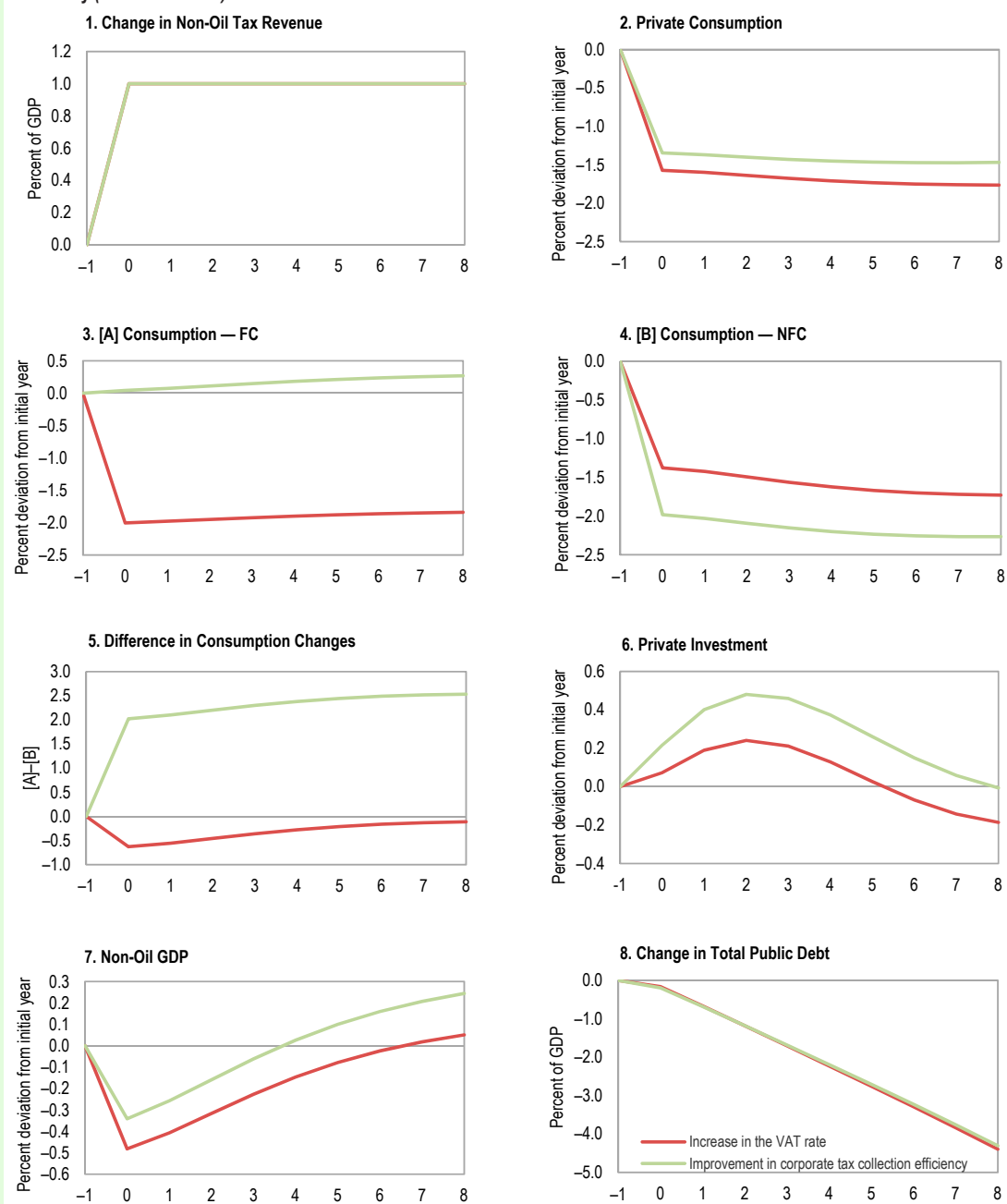
Table 2.1.1. Calibration

Target (Percent of GDP)	Value
Exports	40.1
Imports	38.7
Government consumption	14.6
Government investment	11.9
Private investment	16.2
Resource sector	24.5
Government domestic debt	12
Government external concessional debt	13.2
Government external commercial debt	10.4
Grants	0.7

Source: IMF staff calculations.

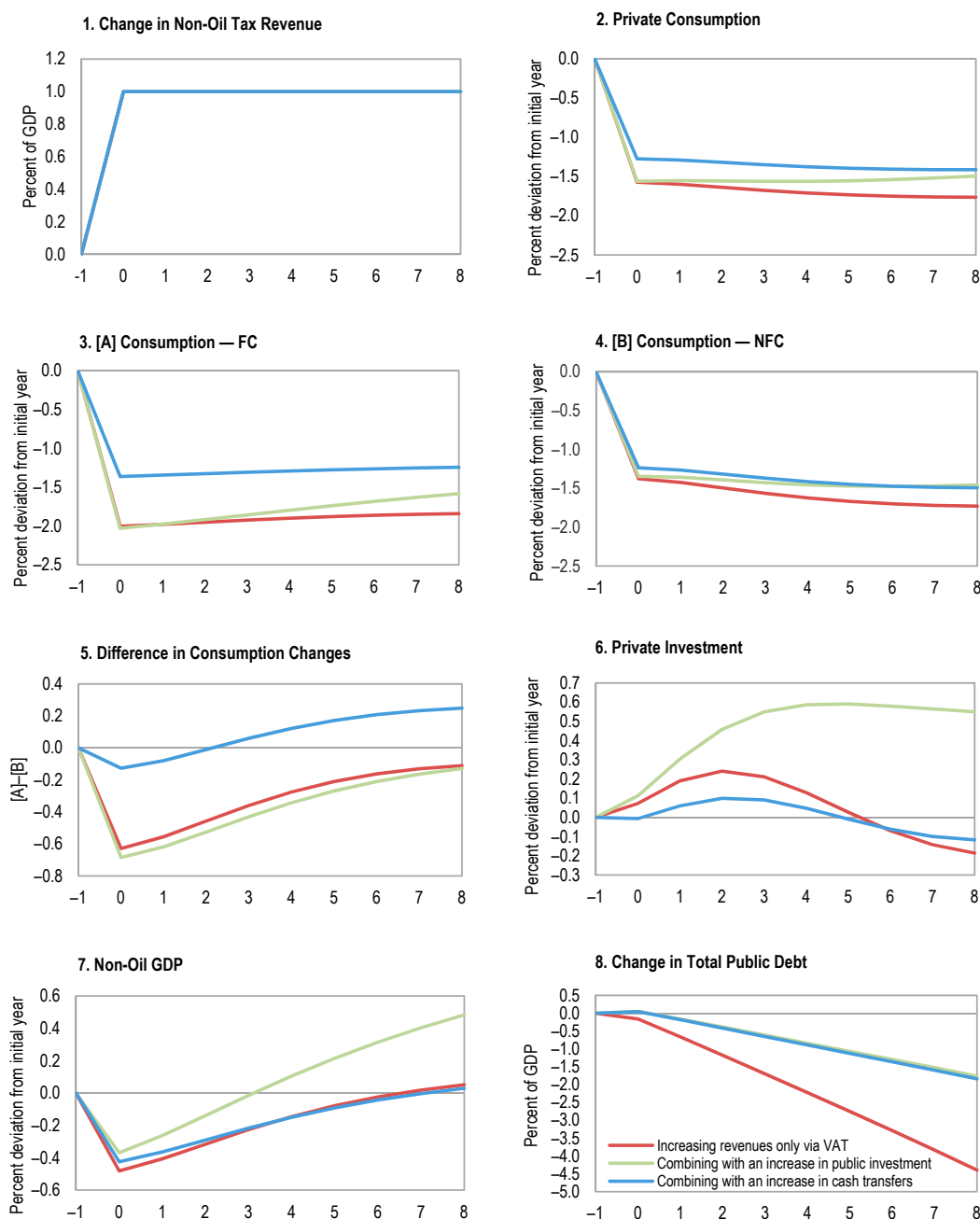
Box 2.2. (continued)

Figure 2.2.1. Macroeconomic Effects of an Increase in Tax Revenues through Either the VAT Rate or Corporate Tax Collection Efficiency (Years on x-axis)



Source: IMF staff calculations.

Note: FC = financially constrained; NFC = non-financially constrained; VAT = value-added tax.

Box 2.2. (continued)**Figure 2.2.2. Mitigating Effects of Cash Transfers or Public Investment.**
(Years on x-axis)

Source: IMF staff calculations.

Note: FC = financially constrained; NFC = non-financially constrained; VAT = value-added tax.

Annex 2.1. Estimating Tax Effort and Tax Potential

Definitions

The tax frontier is defined as the maximum theoretical level of tax revenues (measured in percent of GDP) that a country can achieve given certain underlying structural conditions (level of development, trade openness, sectoral structure, income distribution, institutions, etc.).

Tax effort is defined as the ratio of actual tax revenue to corresponding frontier tax revenue.

Tax potential reflects the distance between the tax frontier and the actual tax revenue level.

Tax potential can be achieved through higher taxation or better collection efficiency, which may be the result of specific policy choices.

Estimation Strategy

Step 1: Estimate the tax frontier from a cross-country panel data set

$$y_{it} = \alpha_i + \beta' X_{it} + \vartheta_{it} - \mu_{it} ,$$

where

y_{it} is the log of the tax revenue-to-GDP ratio for country i at period year t

X_{it} is a vector of independent variables that affect y_{it}

μ_{it} is the inefficiency, which is correlated with X_{it} , but independent from ϑ_{it} , and

ϑ_{it} is the residual, and normal distribution with $N(0,1)$

Step 2: Determine the tax effort

$$TE_{it} = \frac{\exp(y_{it})}{\exp(y_{it}|\mu_{it}=0)} = \frac{\exp(\alpha_i + \beta' X_{it} + \vartheta_{it} - \mu_{it})}{\exp(\alpha_i + \beta' X_{it} + \vartheta_{it})} = \exp(-\mu_{it}) .$$

Step 3: Determine the tax frontier and tax potential

$$TP_{it} = TF_{it} - y_{it} = \frac{y_{it}}{TE_{it}} - y_{it} .$$

Data and Variables

Log of tax to GDP: *World Economic Outlook* (WEO)

Log of tax on goods and services to GDP: WEO

Lag of log of real GDP per capita: WEO

Lag of log of real GDP per capita squared: WEO

Trade openness—sum of imports and exports in percent of GDP: WEO

Agriculture: Value added of agriculture in percent of GDP: World Bank, World Development Indicators (WDI)

Gini coefficient: WDI

Oil: dummy for oil exporters

General Government: dummy for General Government tax revenues.

Corruption and Government Effectiveness: Worldwide Governance Indicators (WGI).

Annex Table 2.1.1. Main Regression Results

Dependent Variable: Log of tax/GDP						
	All Sample			Emerging Market and Developing Economies		
Log of real GDP per capita	2.939 ***	2.866 ***	2.885 ***	2.781 ***	2.691 ***	2.716 ***
Trade openness	0.002 ***	0.002 ***	0.002 ***	0.002 ***	0.002 ***	0.002 ***
Agriculture	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
Gini coefficient	-0.006 ***	-0.006 ***	-0.007 ***	-0.006 ***	-0.006 ***	-0.006 ***
General government	0.105 **	0.109 ***	0.110 ***	0.091 **	0.093 **	0.098 **
Education	0.015 ***	0.016 ***	0.016 ***	0.016 ***	0.018 ***	0.017 ***
Oil dummy	0.080 **	0.035	0.031	0.043	0.030	0.026
Log of real GDP per capita squared	-0.152 ***	-0.148 ***	-0.150 ***	-0.142 ***	-0.138 ***	-0.140 ***
Corruption		0.117 ***	0.083 *		0.134 ***	0.100 **
Government effectiveness			0.091 *			0.088 *
Constant	4.165 ***	4.186 ***	4.256 ***	5.279 ***	4.945 **	5.267 **
Sigma_u	0.515 ***	0.515 ***	0.516 ***	0.525 ***	0.526 ***	0.526 ***
Sigma_u	0.099 ***	0.098 ***	0.098 ***	0.106 ***	0.106 ***	0.105 ***
Number of observations	1,366	1,360	1,360	1,109	1,103	1,103
Number of countries	122	121	121	99	98	98
Dependent Variable: Log of Goods and Services Tax/GDP						
	All Sample			Emerging Market and Developing Economies		
Log of real GDP per capita	2.379 ***	2.332 ***	2.353 ***	2.228 ***	2.173 ***	2.207 ***
Trade openness	0.002 ***	0.002 ***	0.002 ***	0.002 ***	0.002 ***	0.002 ***
Agriculture	0.000	0.001	0.001	0.000	0.001	0.001
Gini coefficient	-0.008 ***	-0.008 ***	-0.008 ***	-0.009 ***	-0.009 ***	-0.009 ***
General government dummy	0.142	0.146	0.152	0.140	0.164 *	0.168 *
Education	0.003	0.007	0.006	0.004	0.009	0.008
Oil dummy	-0.642 ***	-0.626 ***	-0.634 ***	-0.646 ***	-0.581 ***	-0.587 ***
Log of real GDP per capita squared	-0.122 ***	-0.120 ***	-0.122 ***	-0.113 ***	-0.111 ***	-0.114 ***
Corruption		0.123	0.052		0.140	0.065
Government effectiveness			0.170 **			0.172 *
Constant	-0.615	-0.636	-0.615	0.621	1.258	1.075
Sigma_u	0.660 ***	0.665 ***	0.665 ***	0.667 ***	0.672 ***	0.672 ***
Sigma_u	0.162 ***	0.159 ***	0.159 ***	0.177 ***	0.174 ***	0.174 ***
Number of observations	1,152	1,146	1,146	930	924	924
Number of countries	105	104	104	85	84	84

Source: IMF staff calculations.

Note: * $p < .10$; ** $p < .05$; *** $p < .01$.

2. DOMESTIC REVENUE MOBILIZATION IN SUB-SAHARAN AFRICA: WHAT ARE THE POSSIBILITIES?

Annex Table 2.1.2. Estimates of Sub-Saharan African Countries' Tax Frontier
(Percent of GDP)

Country	Tax to GDP ¹	All Countries			Emerging Market and Developing Economies			SSA Countries		
		A	B	C	A	B	C	A	B	C
Nigeria	5.9	11.1	11.1	12.0	10.7	10.4	12.0	8.1	8.3	8.5
Central African Rep.	6.2	8.4	8.5	9.7	8.0	8.2	8.8	8.1	7.9	8.8
Guinea-Bissau	7.0	9.8	9.7	9.8	9.6	9.5	9.5	10.0	9.5	9.7
Sierra Leone	8.6	12.0	11.9	11.7	11.6	11.5	11.3	11.9	11.4	11.8
Chad	8.9	10.9	10.4	11.5	10.2	10.1	11.5	9.2	9.1	9.2
Congo, Dem. Rep.	9.4	11.2	11.1	12.2	11.0	11.1	11.8	10.4	10.6	11.2
Madagascar	9.9	16.7	17.3	19.5	16.6	16.7	19.4	14.8	15.8	18.4
Burundi	11.3	14.6	15.2	13.9	14.7	14.5	12.4	12.7	12.5	11.7
Comoros	11.8	12.1	14.7	14.2	12.1	14.5	14.0	12.2	14.7	14.3
Tanzania	12.4	20.3	20.9	19.5	20.2	19.8	19.7	18.3	18.6	19.4
Ethiopia	12.7	13.8	14.2	13.2	13.9	13.8	13.1	13.3	13.3	13.1
Congo, Rep.	12.8	19.3	18.6	19.5	19.0	19.1	19.6	17.5	17.8	19.2
Uganda	13.0	18.3	19.1	22.1	18.9	18.4	21.0	18.4	17.7	20.8
Zambia	13.3	13.7	14.1	21.2	13.8	13.9	21.5	14.6	14.8	21.7
Rwanda	13.5	16.4	17.2	16.0	16.5	16.3	15.7	15.2	15.7	15.5
Cameroon	14.0	19.6	19.0	20.7	18.9	18.6	21.3	18.7	18.1	20.9
Gabon	14.3	20.2	19.3	26.6	20.3	20.6	24.1	15.2	15.6	16.0
Côte d'Ivoire	15.1	15.7	15.6	15.7	15.7	15.7	15.8	15.8	15.8	15.9
Burkina Faso	15.7	17.9	18.3	18.8	17.7	17.8	17.8	16.9	17.3	18.0
Togo	16.2	18.2	17.7	18.9	17.6	17.8	18.6	18.2	18.1	18.6
Ghana	16.3	23.7	25.2	21.4	25.0	23.9	22.0	24.8	24.3	22.9
Mali	16.6	17.3	17.2	17.4	17.1	17.1	17.2	17.1	17.1	17.5
Benin	16.7	19.1	19.2	19.2	19.0	18.8	19.4	17.8	18.1	18.9
Malawi	16.8	18.5	20.1	21.4	19.3	18.9	19.6	17.7	17.6	18.8
Kenya	17.5	21.6	22.2	19.3	22.0	21.0	19.3	22.9	21.1	20.2
Niger	17.6	20.2	20.6	20.3	20.4	20.3	18.7	18.7	18.7	18.2
Gambia, The	17.7	18.5	18.7	22.4	18.6	18.5	21.9	19.0	18.8	22.0
Cabo Verde	18.4	20.9	21.0	22.0	21.1	21.2	22.7	20.1	21.0	21.8
Senegal	18.7	21.4	21.8	22.6	21.7	21.8	22.5	20.4	21.4	22.3
Mauritius	19.2	24.4	24.2	29.3	26.0	25.7	28.5	22.3	22.5	23.8
Liberia	19.2	19.7	19.7	23.0	19.9	19.9	22.3	20.0	20.0	21.1
Guinea	19.5	20.6	21.3	24.1	20.7	20.6	23.1	20.0	20.1	22.4
Mozambique	21.7	31.5	33.4	36.1	32.7	32.3	33.9	27.5	28.5	29.9
Botswana	24.3	32.8	33.3	32.7	34.8	34.8	31.4	31.4	31.9	27.3
South Africa	24.7	26.9	26.9	31.1	27.9	27.6	30.5	25.5	25.4	26.2
Zimbabwe	26.9	27.7	27.6	27.5	27.7	27.6	27.5	27.8	27.7	27.6
Swaziland	28.3	30.4	29.8	30.1	30.4	30.4	30.5	30.3	30.4	29.6
Seychelles	29.2	36.2	34.8	49.4	39.4	39.0	48.3	34.5	34.2	37.1
Namibia	32.1	33.5	33.4	33.9	34.2	33.9	35.4	33.7	33.8	33.2
Average	16.2	19.6	19.9	21.3	19.9	19.8	20.9	18.7	18.9	19.6

Source: IMF staff calculations.

Notes: Models A, B and C are based on the specifications listed in Annex Table 2.1.1, with log of tax to GDP as the dependent variable. Model A includes institutional factors and public spending on education. Model B includes public spending on education but not corruption or government effectiveness. Model C does not include corruption, government effectiveness or public spending on education.

¹ Data correspond to 2015 in most cases, with the exception of Comoros, Seychelles, and Swaziland (all 2014), and Cabo Verde, Democratic Republic of the Congo, and Guinea-Bissau (all 2013). Year selection requires data availability for the set of independent variables in the model.

REFERENCES

- Akitoby, B., A. Baum, C. Hackney, O. Harrison, K. Primus, and V. Salins. Forthcoming “Large Tax Revenue Mobilization in Low-Income Countries and Emerging Markets: Lessons from a New Database.” IMF Working Paper, International Monetary Fund, Washington, DC.
- Araujo, J., B. Li, M. Poplawski-Ribeiro, and L. Zanna. 2016. “Current Account Norm in Natural Resource Rich and Capital Scarce Economies.” *Journal of Development Economics* 120: 144–156.
- Baum, A., S. Gupta, E. Kimani, and S. J. Tapsoba. 2017. “Corruption, Taxes and Compliance.” IMF Working Paper 17/255, International Monetary Fund, Washington, DC.
- Buffie, E. F., A. Berg, C. Pattillo, R. Portillo, and L.-F. Zanna. 2012. “Public Investment, Growth, and Debt Sustainability: Putting Together the Pieces.” IMF Working Paper 12/144, International Monetary Fund, Washington, DC.
- Casey, R., and P. Castro. 2015. “Electronic Fiscal Devices: An Empirical Study of the Impact on Taxpayer Compliance and Administrative Efficiency.” IMF Working Paper 15/73, International Monetary Fund, Washington, DC.
- Crivelli, E., and S. Gupta. 2014. “Does Conditionality in IMF-Supported Programs Promote Revenue Reform?” IMF Working Paper 14/206, International Monetary Fund, Washington, DC.
- Dabla-Norris, E., J. Brumby, A. Kyobe, Z. Mills, and C. Papageorgiou. 2012 “Investing in Public Investment: an Index of Public Investment Efficiency.” *Journal of Economic Growth* 17: 235–66.
- Delipalla, S., and M. Keen. 1991. “The Comparison Between Ad Valorem and Specific Taxation under Imperfect Competition,” *Journal of Public Economics* 49: 351–67.
- Ebeke, C., M. Mansour, and G. Rota Graziosi. 2016. “The Power to Tax in Sub-Saharan Africa: LTUs, VATs, and SARAs.” Études et Documents, no 11, Centre for Study and Research on International Development, Clermont-Ferrand, France.
- Esfahani, H. S., and M. T. Ramirez. 2003. “Institutions, Infrastructure, and Economic Growth,” *Journal of Development Economics* 70(2): 443–77.
- Fenochietto, R. and C. Pessino. 2010. *Determining Countries’ Tax Effort*. *Hacienda Pública* 195(4): 65–87.
- Fenochietto, R., and C. Pessino. 2013. “Understanding Countries’ Tax Effort.” IMF Working Paper 13/244, International Monetary Fund, Washington, DC.
- Furceri, D., J. Ge, P. Loungani, and G. Melina. 2018. “The Distributional Effects of Government Spending Shocks in Developing Economies.” IMF Working Papers 18/57, International Monetary Fund, Washington, DC.
- Furceri, D. and G. Bin, Li. 2017. “The Macroeconomic (and Distributional) Effects of Public Investment in Developing Economies,” IMF Working Papers 17/217, International Monetary Fund, Washington, DC.
- Gaspar, V., L. Jaramillo, and P. Wingender. 2016. “Tax Capacity and Growth: Is There a Tipping Point?” IMF Working Paper 16/234, International Monetary Fund, Washington, DC.
- Gunter, S., D. Riera-Crichton, C. Vegh, and G. Vuletin. Forthcoming. “Non-Linear Effects of Tax Changes on Output: The Role of the Initial Level of Taxation,” World Bank, Washington, DC.
- Gunter, S., D. Riera-Crichton, C. Vegh, and G. Vuletin. Forthcoming. “Policy Implications of Non-Linear Effects of Tax Changes on Output.” World Bank, Washington, DC.
- International Monetary Fund, (IMF). 2011. “Revenue Mobilization in Developing Countries.” IMF Policy Paper, Washington, DC.
- . 2012. “Macroeconomic Policy Frameworks for Resource-Rich Developing Countries.” IMF Staff Report, Washington, DC.
- . 2015a. “Estimating the Tax Frontier.” Annex 1.1., *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, October.
- . 2015b. “Current Challenges in Revenue Mobilization: Improving Tax Compliance.” IMF Staff Report, Washington, DC.
- . 2015c. “Fiscal Policy and Long-Term Growth.” IMF Policy Paper, Washington, DC.
- . 2016. “Corruption: Costs and Mitigating Strategies.” IMF Staff Discussion Note, Washington, DC.
- . 2017. “Sub-Saharan Africa’s Revenue Potential.” Chapter 2, *Regional Economic Outlook: Sub-Saharan Africa*, Washington, DC, October.
- Melina, G., S.-C. S. Yang, and L.-F. Zanna. 2016. “Debt Sustainability, Public Investment, and Natural Resources in Developing Countries: The DIGNAR Model.” *Economic Modelling* 52(PB): 630–49.
- Norregaard, J., 2013. “Taxing Immovable Property: Revenue Potential and Implementation Challenges.” IMF Working Paper 13/129, International Monetary Fund, Washington, DC.
- Prichard, W., and D. Leonard. 2010. “Does Reliance on Tax Revenue Build State Capacity in Sub-Saharan Africa?” *International Review of Administrative Sciences*, 76(4): 653–75.
- Thomas, A., and J. Treviño. 2013. “Resource Dependence and Fiscal Effort in Sub-Saharan Africa.” IMF Working Paper 13/188, International Monetary Fund, Washington, DC.

3. Private Investment to Rejuvenate Growth

Private investment in sub-Saharan Africa is low compared with other countries with similar levels of economic development. The low level of private investment is constraining the region's efforts to improve social outcomes by holding back labor productivity and the resulting gains in real wages and households' income. In general, there appears to be a negative association between investment and poverty rates (Figure 3.1). The benefits from increasing investment are well recognized in the region. For example, many countries have engaged in major public investment programs to close large infrastructure gaps with a view to catalyzing private investment. But such a strategy can only be sustained for a limited amount of time, particularly if the private sector growth response is weak. With debt levels high and rising in many countries in the region, there is an increased focus on other options. Countries are participating in external investment initiatives such as the Group of Twenty's (G20) Compact with Africa, which coordinates efforts to facilitate private investment and increase the provision of infrastructure, and China's Belt and Road Initiative, which aims to help the region better integrate into global value chains. These initiatives aim to spur private and public investment by improving the business environment and by increasing the availability of financing. These efforts could improve the availability and allocation of resources for investment, and thus have the potential to raise medium-term growth prospects and living standards.

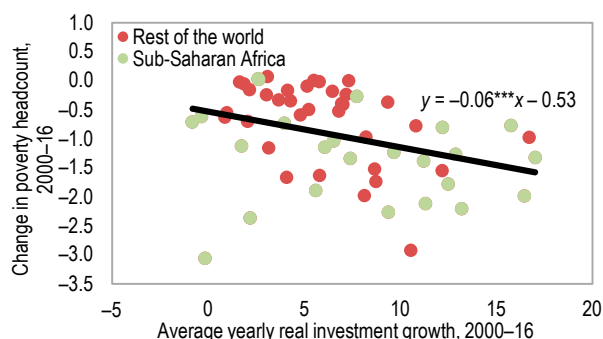
Against this backdrop, this chapter aims to shed light on what influences the level of private investment in sub-Saharan Africa. It does so by following a two-pronged approach that (1) uses econometric techniques to study the importance of the traditional determinants of private investment in a sample of emerging market and developing economies; and (2) examines the role of additional options, such as public-private partnerships (PPPs),

foreign direct investment (FDI), and special economic zones (SEZs), that have been implemented in some countries in an attempt to promote private investment.¹

The main findings of the chapter are the following:

- Sub-Saharan Africa is the region with the lowest private-investment-to-GDP ratio among developing regions. Within sub-Saharan Africa, however, there is some heterogeneity, with private investment ratios averaging about 14 percent in oil-exporting countries, 17 percent in other resource-intensive countries, and 15 percent in non-resource-intensive countries during 2010–16.
- Sub-Saharan African countries that have experienced sustained increases in private investment benefited from macroeconomic stability, stronger institutions, the discovery of natural resources, and the resolution of long-standing conflicts.

Figure 3.1. Poverty Headcount Ratio at \$2 a Day in Purchasing Power Parity Terms and Real Private Investment Growth, 2000–16 (Percent of population and percent)



Source: World Bank, World Development Indicators database.

Note: The regression line is estimated using observations for sub-Saharan Africa and the rest of the world. To control for the effect of outliers, observations below the 5th percentile and above the 95th percentile were eliminated for each variable.

* $p < .10$; ** $p < .05$; *** $p < .01$.

This chapter was prepared by a team led by Jesus Gonzalez-Garcia and composed of Romain Bouis, Paolo Cavallino, Nkunde Mwase, Hector Perez-Saiz, Ludger Wocken, and Mustafa Yenice.

¹ Throughout the chapter we use data for investment, private and public, available in the World Economic Outlook database and supplemented with data from the UN National Accounts database. Given the state of development of statistical systems in many countries in sub-Saharan Africa it is possible that some public investment ends up classified as private investment, especially in the case of investment undertaken by nonfinancial public sector entities not included in the central government accounts.

- Much as in advanced and emerging market economies, strong current and prospective economic activity is needed for firms to invest in new capital (IMF 2015c). Furthermore, such investment tends to be larger if it takes place in an environment with a strong regulatory and insolvency framework, efficient public infrastructure, greater trade openness, and deeper financial systems.
- Public investment can support private investment, for example, by providing better infrastructure. Policymakers need to be mindful, however, that public investment may crowd out private investment. This could happen when public investment competes with private investment (either for funding or in activities) in an environment with scarce financial resources or potentially binding supply bottlenecks. While this risk could be mitigated by promoting alternative sources of financing for both public and private investment—including through PPPs and deepening of domestic financial markets—it would be imperative to ensure that the associated risks are well managed. Attracting FDI and setting up SEZs could help, although the experience with the latter has been mixed.

The remainder of the chapter is organized as follows. The first section describes recent trends in private investment. The second section presents the empirical determinants of private investment. The third section zooms in on the various ways

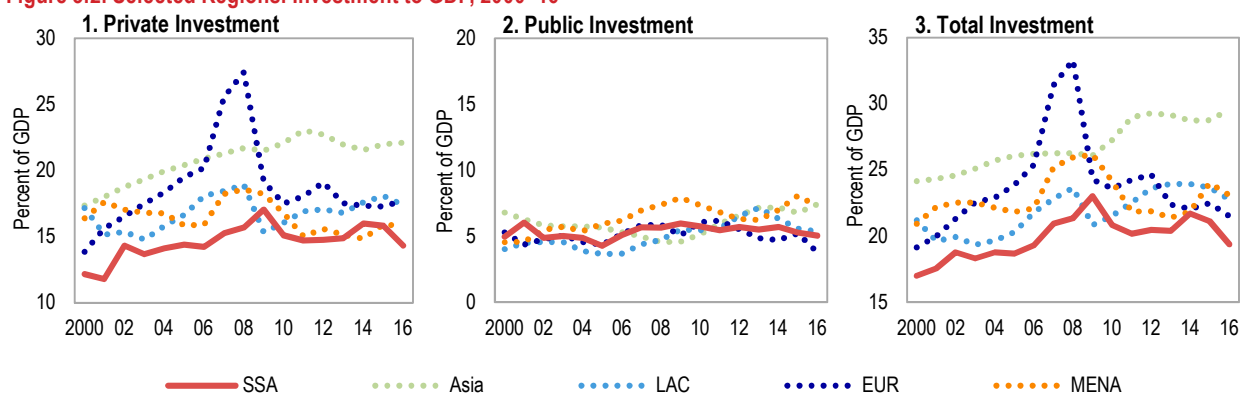
to alleviate the constraints to private investment, including financial deepening, new financial technologies (known as “fintech”), PPPs, FDI, and SEZs.

PRIVATE INVESTMENT TRENDS

While public investment has been on par with other regions, private investment across countries in sub-Saharan Africa is, on average, 2 percent of GDP lower than in other developing economies (Figure 3.2). It averaged 15 percent of GDP during 2010–16, compared with 22 percent for developing economies in Asia, 18 percent in Europe, 17 percent in Latin America, and 16 percent in the Middle East and North Africa (MENA). This difference has, however, fallen by half since the early 2000s, due to a decade of rapid growth in sub-Saharan Africa, when private investment grew at an average rate of 14 percent a year. Since 2010, however, private investment has slowed, growing on average at 5 percent a year through 2014 and contracting during 2015–16 (Figure 3.3).² There are reasons to believe that both global and domestic factors were at play in explaining this slowdown.

Indeed, the slowdown happened more gradually in sub-Saharan Africa than in other emerging market and developing economies, which also experienced a weakening of investment in the aftermath of the global financial crisis. Empirical studies attribute this general slowdown of investment to weaknesses in economic prospects in the United States and the

Figure 3.2. Selected Regions: Investment to GDP, 2000–16

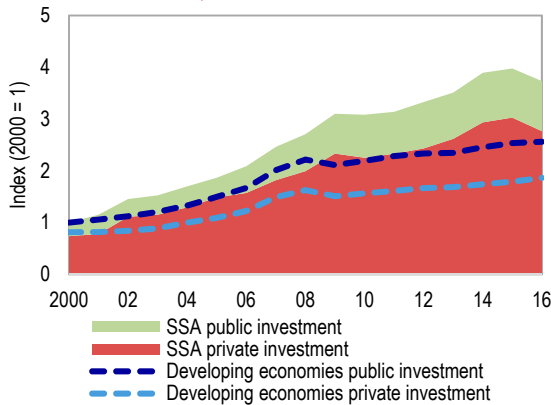


Source: IMF, World Economic Outlook database.

Note: In the figure and throughout the chapter, investment refers to gross fixed capital formation. EUR = Europe; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = sub-Saharan Africa.

² Annex 3.1 explains the construction of these averages and the index shown in Figure 3.3, both of which use weights based on purchasing power parity GDP for the regional aggregation.

Figure 3.3. Sub-Saharan Africa and Developing Economies: Real Investment Index, 2000–16



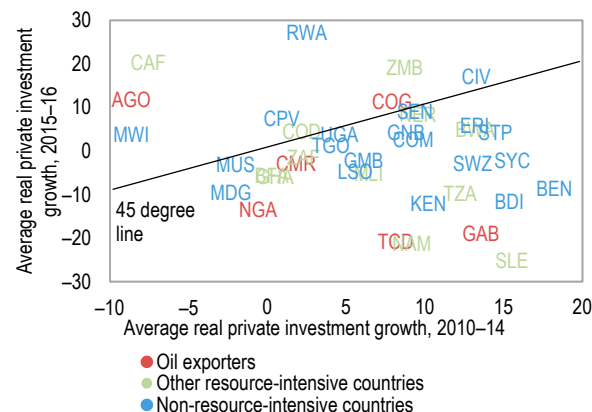
Source: IMF, World Economic Outlook database.

euro area, the rebalancing of the Chinese economy toward domestic consumption, and a surge in the volatility of capital flows (World Bank 2017).

The slowdown in investment in sub-Saharan African countries was less pronounced during 2010–14, owing in part to elevated commodity prices, robust growth prospects in non-resource-intensive countries, and resilient FDI inflows. But since 2015, investment in the region has weakened more than in other developing economies, contracting by 4 percent each year on average in 2015–16.

The decline has been generalized across sub-Saharan Africa, as private investment slowed in two-thirds of the countries and fell in half of them (Figure 3.4). The reasons for the decline

Figure 3.4. Sub-Saharan Africa: Average Growth of Real Private Investment, 2010–14 and 2015–16



Source: IMF, World Economic Outlook database.

Note: See page 90 for country groupings and page 91 for country abbreviations tables.

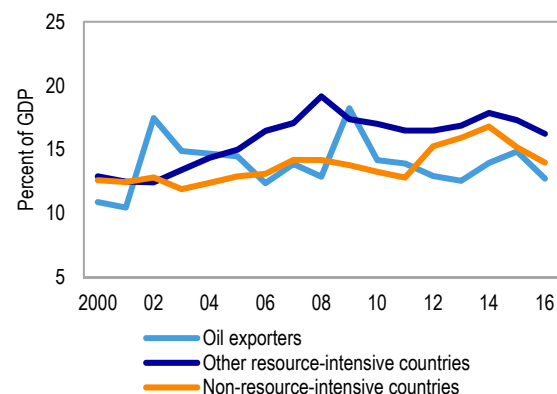
³ For the list of countries considered in each group, see the Statistical Appendix.

differ across countries, and include the collapse of commodity prices, adverse spillovers from large economies in the region, and various idiosyncratic shocks. In particular,

- The sharp fall in commodity prices reduced investment in commodity-exporting countries, especially the oil exporters (Cameroon, Gabon, Nigeria).
- Policy and political uncertainty seem to have played a role in weakening investment in South Africa.
- The attendant slowdown in economic activity in large countries such as Angola, Nigeria, and South Africa (with a combined GDP weight of about 50 percent of the region) has likely had adverse spillovers to the rest of the region, contributing to the investment slowdown.
- Other countries experienced idiosyncratic shocks. In Kenya, a sharp slowdown in credit growth weighed on private investment, while in Namibia investment slowed following the completion of a large mining project.

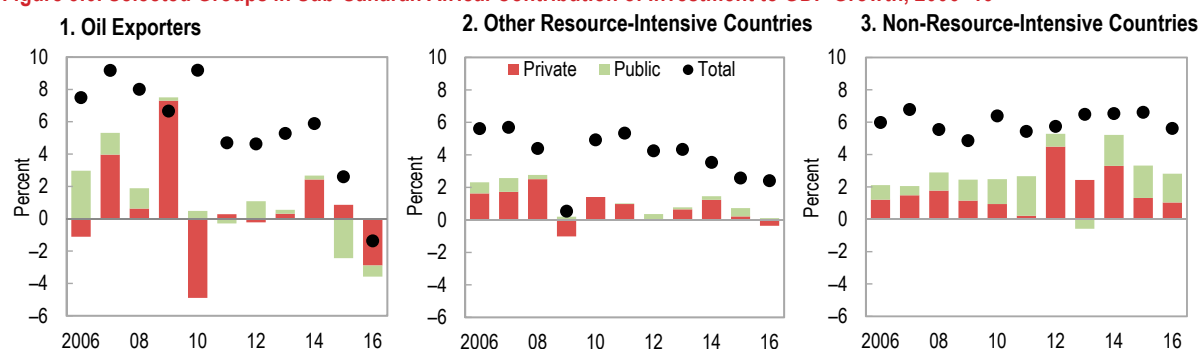
In general, oil exporters have the lowest levels of private investment to GDP, averaging 14 percent over 2010–16, compared with 17 percent in other resource-intensive countries and 15 percent in non-resource-intensive countries (Figure 3.5).³

Figure 3.5. Selected Groups in Sub-Saharan Africa: Private Investment to GDP Ratios, 2000–16



Source: IMF, World Economic Outlook database.

Note: See page 90 for country groupings table.

Figure 3.6. Selected Groups in Sub-Saharan Africa: Contribution of Investment to GDP Growth, 2006–16

Source: IMF, World Economic Outlook database.

Note: See page 90 for country groupings table.

Weaker investment has weighed on GDP growth. In oil-exporting countries, the negative impact of declining private investment on growth was compounded by sharp cuts in public investment. In other countries, weaker private investment was in part offset by more public investment, but it is unclear how long this can continue, as high debt levels and rising debt servicing costs are constraining fiscal space (Figure 3.6).

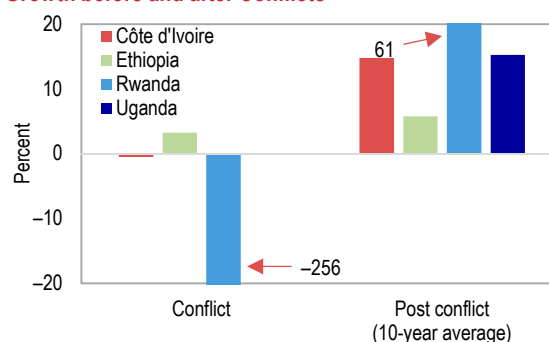
DETERMINANTS OF PRIVATE INVESTMENT RATIOS

Country experiences in sub-Saharan Africa provide some insights on the potential drivers of private investment. They show that surges in private investment have been associated with various factors, some of which were exogenous, such as conflicts and increases in commodity prices.

- **Commodity prices:** Private investment rose markedly in Nigeria during 2007–14 amid elevated oil prices and favorable global financial conditions, while other sub-Saharan African countries benefited from discoveries of natural resources (Equatorial Guinea, Ghana). At the same time, there were instances where commodity importers benefited from a fall in commodity prices that created space to finance more investment, both public and private (Rwanda).
- **Resolution of long-standing conflicts:** The end of conflicts in Côte d'Ivoire, Ethiopia, Rwanda, and Uganda was followed by marked increases in private investment following the end of conflicts (Figure 3.7).

However, these events were generally not enough to sustain the momentum in private investment, especially when they were not supported by macroeconomic stability and a sound institutional environment. Some countries upgraded their institutional environment, which helped sustain private investment growth. (See Box 3.1 for an analysis of the relationship between policy reforms and private investment growth.)

While these country experiences point to an association between private investment and exogenous and institutional factors, they are not sufficient to identify the determinants of private investment. For that purpose, the chapter follows existing literature and estimates the historical relationship between private investment to GDP and its traditional determinants (such as real GDP growth, public investment as a share of GDP, the level of GDP per capita in purchasing power parity, the relative price of

Figure 3.7. Selected Countries: Real Private Investment Growth before and after Conflicts

Source: IMF, World Economic Outlook database.

Note: Private investment growth is computed as private gross fixed capital formation, current prices, deflated by GDP deflator. Conflict episodes: Côte d'Ivoire (2002–05), Ethiopia (1974–91), Rwanda (1990–94), and Uganda (1979–86).

capital, and the real interest rate).⁴ The regressions also consider several structural and institutional variables, including the quality of the business environment, trade openness, financial development, and capital account openness (Annex 3.2).

The selected variables are expected to affect private investment as follows. Strong economic activity captured by real GDP growth provides opportunities for firms to sell more goods and services and make profits, and thus is expected to prompt firms to invest in new capital (the accelerator effect).⁵ The effect of public investment is ambiguous and depends on whether public investment complements or crowds out private investment. Private investment is expected to fall as the cost of capital (proxied here by the fixed capital formation deflator to the GDP deflator ratio and the real interest rate) increases. Finally, because investment ratios tend to show persistence, the regressions include the lagged value of the private-investment-to-GDP ratio.⁶ The estimation sample is composed of an unbalanced panel of 101 emerging market and developing economies covering 1980–2015.⁷

Strong Economic Activity Is Key for Private Investment to Expand

Private investment increases when economic activity is strong—that is, when real GDP growth is high. This result is consistent with an accelerator effect (a similar result is found in IMF 2005).

Interestingly, the impact of GDP growth is nonlinear. Private investment increases with real GDP growth when the latter is high (above the country historical average), but not when it is low (below the country historical average). This possibly reflects a wait-and-see attitude of firms during periods when the economy is rebounding from subdued activity, or when there is idle productive capacity (economic slack).⁸

A Sound Business Environment, Well-Developed Infrastructure, Trade Openness, and Financial Development Strengthen the Effect of Growth on Investment

The empirical estimates also suggest that the effects of economic activity on investment strengthen with countries' institutional and structural characteristics. These include the regulatory quality, the insolvency and resolution framework, the importance of public infrastructure, trade openness, and financial development. More specifically,

- **Regulatory quality and resolution frameworks:** Private investment reacts more strongly to economic growth if regulatory quality is better and the cost of resolving insolvencies is lower.⁹
- **Infrastructure:** The private sector invests more in new capital when improved economic activity is supported by better public

⁴ The analysis focuses on private investment ratios (rather than on investment growth) as the interest is in the factors that can increase the provision of capital for a given output. In the run-up to the global financial crisis and the commodity price shock, strong investment growth indeed occurred in parallel with strong output growth, implying that economies in the region have not become more capital-intensive. For an analysis of the growth of total investment (public and private) in emerging market and developing economies, see World Bank (2017).

⁵ According to the accelerator model of investment, firms adjust their capital stock gradually toward a level that is proportional to output so that investment should react positively to changes in GDP. Jorgenson and Siebert (1968) provided a theoretical derivation of the accelerator model.

⁶ To deal with possible endogeneity between the variables included, the estimations are performed using the system generalized method of moments (system GMM) estimator (see Annex 3.2 for details).

⁷ Given that we are interested in the effects on investment of institutional characteristics (some of which do not vary much over time), the sample includes emerging market and developing economies other than those in sub-Saharan Africa to ensure enough variability in those characteristics. In addition, the econometric method requires a sufficiently large number of countries. As recommended by Roodman (2009), the number of countries should be at least equal to or larger than the number of instruments used in the system GMM method. Even in the baseline models the number of instruments is larger than the number of sub-Saharan African countries.

⁸ The relative price of investment is also found to reduce private investment ratios, but neither the level of GDP per capita nor the real interest rate is significant. Several other control variables have been considered in the regressions and are either generally not significant or do not materially alter the main results presented here.

⁹ The Regulatory Quality Index in the World Bank's Worldwide Governance Indicators covers product markets, labor markets, taxation, and other factors that affect the ease of starting and running a business. Business creation can be hampered by excessive regulations, so the entry of new firms and private investment may be limited even in times of rising demand.

infrastructure, as measured by the larger proportion of paved roads as a share of total roads or greater access to electricity as a share of the population.¹⁰

- Trade openness: Firms are likely to invest more in response to strong economic activity in more open economies, perhaps reflecting the incentive to expand production for exporting purposes.
- Capital account openness:¹¹ The impact of GDP growth on investment is stronger in countries with less open capital accounts. While this result has been found in other studies, the arguments are not obvious. Some studies attribute it to differences in the returns to capital (higher abroad) or to the fact that greater capital account openness could be associated with a higher occurrence of financial crises.
- Financial deepening: There are indications that a very low level of financial development can be a significant constraint to private investment, even when the economic climate is favorable. Indeed, the empirical estimates show that in countries with very low levels of financial development, firms do not invest in new capital in response to stronger demand.¹²

The incremental gains from better structural and institutional characteristics are economically significant. Table 3.1 shows, for example, that with each percentage point increase in GDP growth, countries with weak regulatory quality (typically the case of

Table 3.1. Economic Impact on the Private Investment Ratio of a 1 Percentage Point Increase in GDP Growth, Depending on Institutional and Structural Characteristics

	Effect on private investment ratio of a 1 pp increase in GDP growth (pps)
Whole Sample	0.21
Low Regulatory Quality (SSA average) – High Regulatory Quality (non-SSA EMDEs average)	0.29 – 0.48
High Insolvency Cost (SSA average) – Low Insolvency Cost (non-SSA EMDEs average)	0.02 – 0.24
Higher Proportion of Paved Roads	0.28
Higher Access to Electricity	0.33
Higher Trade Openness	0.26
Lower Capital Account Openness	0.33
Higher Financial Development	0.47

Source: Authors' calculations based on regression results in Annex 3.2.

Note: EMDEs = emerging market and developing economies; pp = percentage point; SSA = sub-Saharan Africa.

the average sub-Saharan African economy) experience an increase in their investment ratio of less than $\frac{1}{3}$ of a percentage point. On the other hand, countries with stronger regulatory quality experience an increase in their investment ratio of $\frac{1}{2}$ percentage point. Similarly, for each percentage point increase in GDP growth, the private investment ratio increases by about $\frac{1}{3}$ percentage point for countries with more developed infrastructure (roads or access to electricity) and trade openness, and by $\frac{1}{2}$ percentage point for countries with more developed financial systems.¹³ These gains are larger than those estimated for the whole sample of countries—including economies with strong and weak structural and institutional characteristics—which are $\frac{1}{3}$ of 1 percentage point.

¹⁰ In the current context, the priorities for public investment spending in sub-Saharan Africa are (1) maintaining levels compatible with fiscal sustainability, and (2) improving the efficiency of that spending to provide better services. As shown in detail in Box 3.2, there is ample room to improve the efficiency of public investment.

¹¹ Capital account openness is proxied by the Chinn-Ito (2006) indicator.

¹² Considering all these variables together would significantly restrict the estimation sample due to the limited availability of the World Bank's Doing Business and Worldwide Governance Indicators. When trade openness, capital account openness, and financial development are considered simultaneously, financial development appears to be the most significant variable in driving private investment ratios. Also, the interaction between GDP growth and the first component obtained from a principal component analysis of these three normalized variables (that is, a summary measure that contains most of the variance of the three variables) is significantly positive (on top of the coefficient for real GDP growth), indicating that investment benefits more from growth when there is greater trade openness, capital account openness, and financial development.

¹³ Following Servén (2003), countries are classified in groups of high and low levels of infrastructure (proxied by paved roads and access to electricity), trade openness, financial development, and capital account openness based on the country-average value of each of the variables compared with the median value of the whole sample. This allows each group to carry a different coefficient on the GDP growth variable in the regressions.

Public Investment Can Crowd in Private Investment, but Not Always

The impact of public investment on private investment is not clear a priori. On the one hand, public investment could be complementary to private investment, for example, public spending on infrastructure or on goods that raise the productivity of private capital.¹⁴ On the other hand, stronger public investment could crowd out private investment through the following channels:

- By competing for scarce physical and financial resources. For instance, the financing of public investment—through debt issuance, bank credit, higher taxes, or inflation—reduces resources available to the private sector, dampening private investment.
- In cases where public investment is carried out by state enterprises producing output in direct competition with the goods and services provided by the private sector (Erden and Holcombe 2005).
- By discouraging investment due to increased macroeconomic instability when public investment is financed through the accumulation of debt that is unsustainable.

The empirical work presented here identifies the two opposite effects of public investment on private investment depending on the degree of financial development: public investment crowds out private investment when the financial system is less developed and crowds it in when the financial system is more developed. For example, given the levels of financial development currently observed across regions,¹⁵ a 1 percentage point increase in the public investment ratio would lead to a ½ percentage point contraction of the private investment ratio in the average sub-Saharan African country and to a ½ percentage point increase in other emerging market and developing economies included in the sample (which are on average much more financially developed than sub-Saharan African countries). This crowding-out effect of private

investment by public investment has also been found in previous studies (Cavallo and Daude 2011; IMF 2017, Box 1.3; IMF 2014a, Box 1.4).

The ultimate impact of public investment on private investment depends on country-specific factors, such as whether the project is financed domestically or externally or is an efficient infrastructure project. Nevertheless, given the low level of financial development, large infrastructure gaps, scarce resources in sub-Saharan Africa, and constraints on availability of foreign financing (or the ability to service the attendant debt) there is a real danger that public investment could crowd out private investment. The region may thus benefit from promoting alternative ways of financing investment (both public and private), including deepening financial markets, engaging in PPPs, and mobilizing more domestic fiscal revenue (Chapter 2 and IMF 2017, Box 1.3). Beyond these measures, there are additional levers that could support higher private investment in sub-Saharan Africa, notably FDI, SEZs, and global initiatives. These possibilities are explored below.

ALLEVIATING CONSTRAINTS TO PRIVATE INVESTMENT

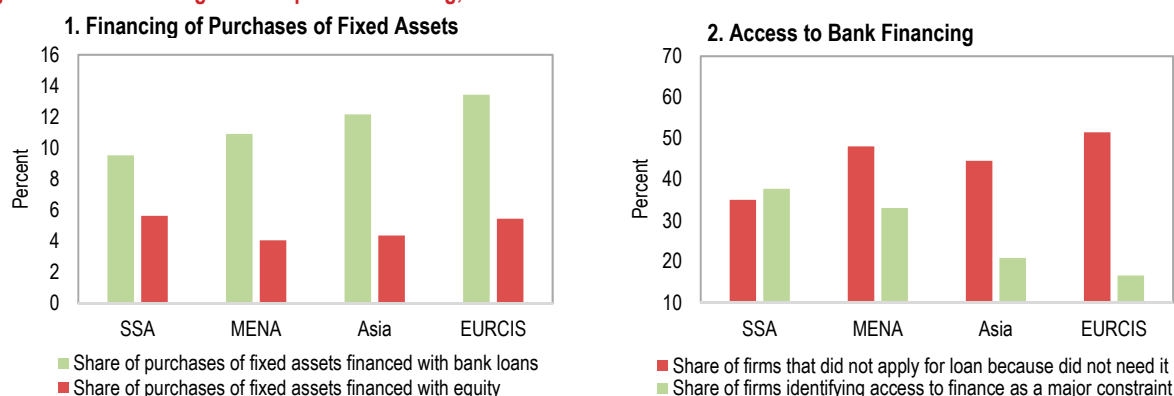
Deepening Financial Systems

Beyond the evidence presented above on the impact of financial development on private investment, there are various reasons to believe that the availability of and access to credit are a major constraint in sub-Saharan Africa. First, when compared with other regions, bank financing of investment in sub-Saharan Africa is the lowest, while equity financing is the highest. Second, sub-Saharan Africa has both the lowest share of firms that do not need a bank loan and the highest number of firms that identify access to credit as a major constraint (Figure 3.8). Finally, small and medium-sized firms, which account for most firms in the region, typically face greater obstacles to obtaining financing than larger firms (Beck and Cull 2014).

The financial landscape in most of sub-Saharan Africa is largely dominated by banks. Other financial institutions such as stock exchanges and

¹⁴ The positive effects of paved roads and access to electricity on private investment identified here also lend support to the idea that public investment contributes positively to private investment in the long run through the buildup of infrastructure.

¹⁵ Proxied by the Financial Development Index detailed in Svirydzenka (2016).

Figure 3.8. Selected Regions: Corporate Financing, 2011–14

Source: World Bank, Global Financial Development database.

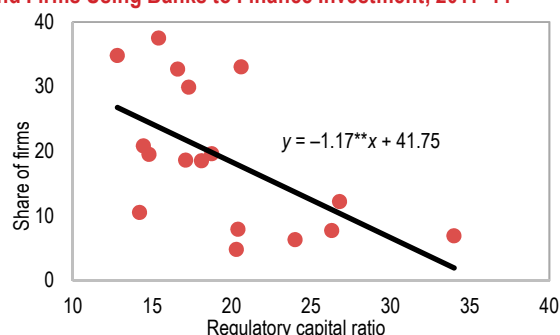
Note: EURCIS = Europe and Commonwealth of Independent States; MENA = Middle East and North Africa; SSA = sub-Saharan Africa.

bond markets remain underdeveloped, but have been expanding rapidly in recent years (Sy 2015). Banks are the primary source of financing for private investment, followed by equity financing. Banking systems in sub-Saharan Africa are characterized by relatively high capital ratios compared with other regions.

Typically, higher capital ratios are found in financial systems that are relatively more unstable, as banks accumulate buffers to cover future losses (Beck and others 2011). But while increases in capital ratios may make banking systems more resilient and help to maintain the provision of credit in difficult times (Kapan and Minoiu 2013), they can also hamper the provision of credit in other periods (Bernanke, Lown, and Friedman 1991).¹⁶ In sub-Saharan Africa, it seems that there

is a negative association between capital ratios and credit availability to firms (Figure 3.9).

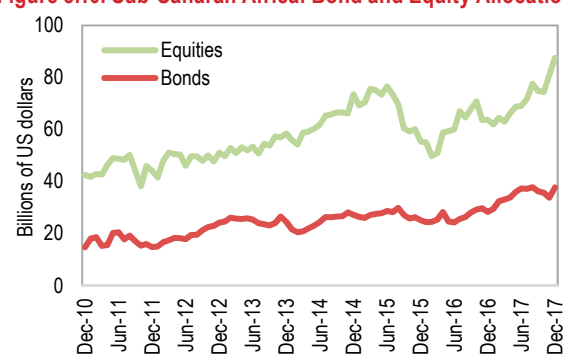
Further developing financial markets, including the quickly expanding bond and equity markets (Figure 3.10), would provide additional means of financing investment. Compared with other regions, there is ample room for further deepening financial markets in sub-Saharan Africa (Figure 3.11). But doing so would require improving the judicial system's independence, strengthening investor protection and auditing standards, and reducing key constraints in financial market infrastructures (IMF 2016, Chapter 3). Developing bond markets, in particular, would require an appropriate technical and regulatory infrastructure (for example, registries to give legal titles to instruments, central depositories, and clearing and settlement systems); a large and

Figure 3.9. Sub-Saharan Africa: Regulatory Capital Ratios and Firms Using Banks to Finance Investment, 2011–14

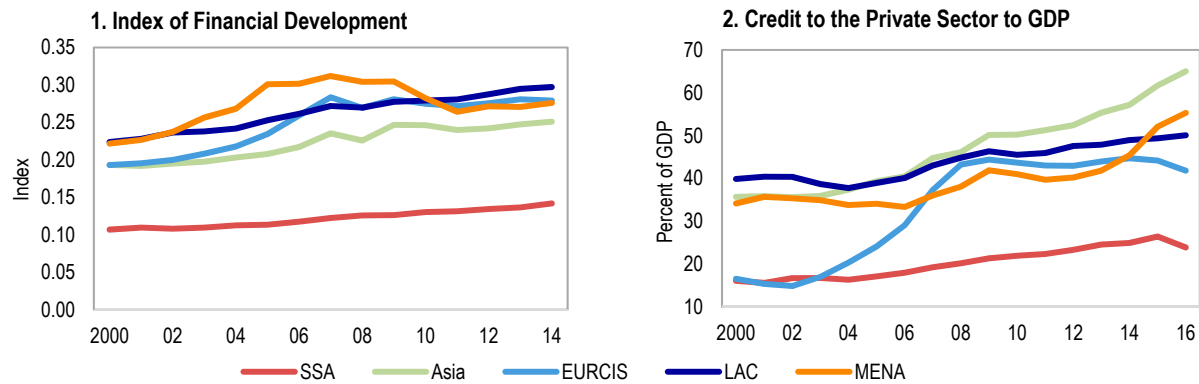
Source: World Bank, Global Financial Development database.

Note: * $p < .10$; ** $p < .05$; *** $p < .01$.

¹⁶ Higher capital ratios could also be driven by and excessive presence of sovereign assets in the banks' balance sheets, which usually have low risk weights. However, the Basel framework includes regulations that set bounds to large exposures, which should limit this effect.

Figure 3.10. Sub-Saharan Africa: Bond and Equity Allocations

Source: Haver Analytics.

Figure 3.11. Selected Regions: Financial Development

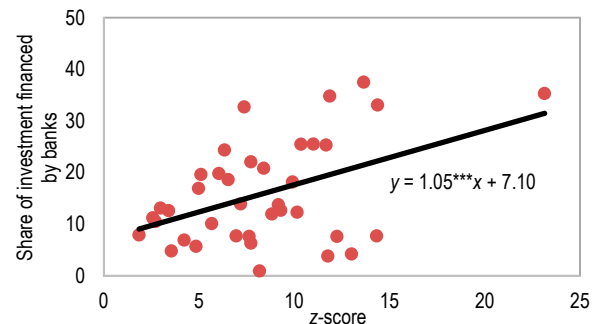
Sources: Sviridzenka (2016); and World Bank, World Development Indicators database.

Note: EURCIS = Europe and Commonwealth of Independent States; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = sub-Saharan Africa.

heterogeneous investor base to ensure a strong and stable demand for securities; a sound banking system as banks play a key role as final investors or intermediaries in bond markets; and market-determined interest rates (Box 3.3). For equity markets, regional integration of individual countries' stock exchanges would help enhance liquidity and efficiency and bring about economies of scale.

However, financial deepening would need to proceed cautiously to reduce risks of financial instability, which could discourage private investment. Indeed, empirical studies show that stressed financial systems supply less credit to the private sector (Freixas, Laeven, and Peydró 2015).

In sub-Saharan Africa, several countries have suffered from banking crises that have hampered their capacity to finance investment (Beck and others 2011). There also appears to be a positive relationship between the strength of the financial system and the provision of private credit. For example, the *z*-score—a widely used indicator of the level of safety and soundness of the financial system, with lower values indicating a situation closer to default (Figure 3.12)¹⁷—is positively related to various indicators of credit to the private sector. In sum, promoting private investment would require deepening financial markets while ensuring financial stability. This, in turn, would entail further strengthening institutions and promoting

Figure 3.12: Sub-Saharan Africa: Safety and Soundness of Banking System and Financing of Investment

Source: World Bank, Global Financial Development database.

Note: * $p < .10$; ** $p < .05$; *** $p < .01$.

sound judicial and regulatory and supervisory frameworks.¹⁸ At the same time, fintech could provide a leapfrogging opportunity for greater financial industry efficiency, with positive effects on financial depth and inclusion (Box 3.4).

Public-Private Partnerships

In theory, PPPs could help improve the quality of much-needed infrastructure in sub-Saharan Africa, bring in private sector expertise to enhance the efficiency of infrastructure, and alleviate some of the financial constraints to investment. But in practice, the global experience with PPPs does not support the notion that they provide infrastructure more efficiently than public procurement. Furthermore, PPPs imply complex arrangements for which it

¹⁷ The *z*-score indicators for banks is calculated as the ratio of the sum of the return on assets (ROA) and equity over assets, divided by the standard deviation of the ROA: $Z = (ROA + (\text{equity/assets})) / (ROA \text{ standard deviation})$ (Čihák and others 2012).

¹⁸ There are other market frictions, such as interest rate caps, that could affect negatively the supply of credit in sub-Saharan Africa and are not covered in this chapter (see Maimbo and Henriquez-Gallegos 2014).

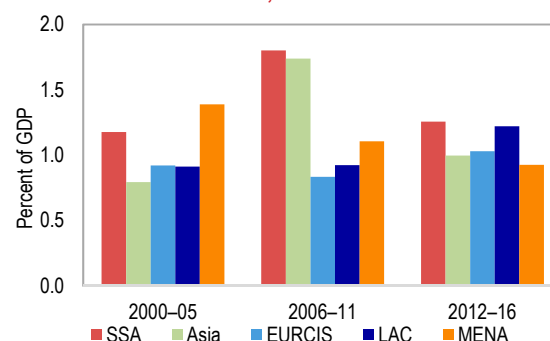
is difficult to evaluate the fiscal risks involved (IMF 2015a). PPPs require the adoption of institutional and legal frameworks to quantify, assess, and control the risks associated with large and complex projects that can potentially entail sizable contingent liabilities and fiscal risks. Thus, PPPs should be considered carefully.

Broadly defined, PPPs are long-term contracts between a private party and a government entity to provide a public asset or service in which the private sector carries a significant portion of the risks involved and for which its payment is in the form of future income streams. Typically, the private party provides financing, designs the project, builds and operates the asset for the life of the contract, and receives fees charged for the services provided or payments from the government. As the private party is responsible for identifying investors and developing the finance structure for the project, PPPs help to expand the options for private investment and the provision of infrastructure services.¹⁹

Sub-Saharan Africa is the region with the highest average ratio of PPP projects to GDP in the world. Its average ratio since 2000 has been 1.4 percent, compared with 1 percent of GDP in other regions. This relatively large ratio in sub-Saharan Africa reflects the substantial need for infrastructure (Figure 3.13).²⁰

The distribution of PPPs is not uniform within sub-Saharan Africa. Measured by the average ratio of PPP projects as a share of GDP over 2000–16, PPP projects are most relevant in non-resource-intensive countries. On average, since 2000 these projects have represented 2¼ percent of GDP in non-resource-intensive countries, 1¾ percent of

Figure 3.13. Selected Regions: Public-Private Partnership Investment as Share of GDP, 2000–16



Source: World Bank, Private Participation in Infrastructure Project database.

Note: EURCIS = Europe and Commonwealth of Independent States; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = sub-Saharan Africa.

GDP in non-oil resource-intensive countries, and 1¼ percent in oil-exporting countries (Figure 3.14).

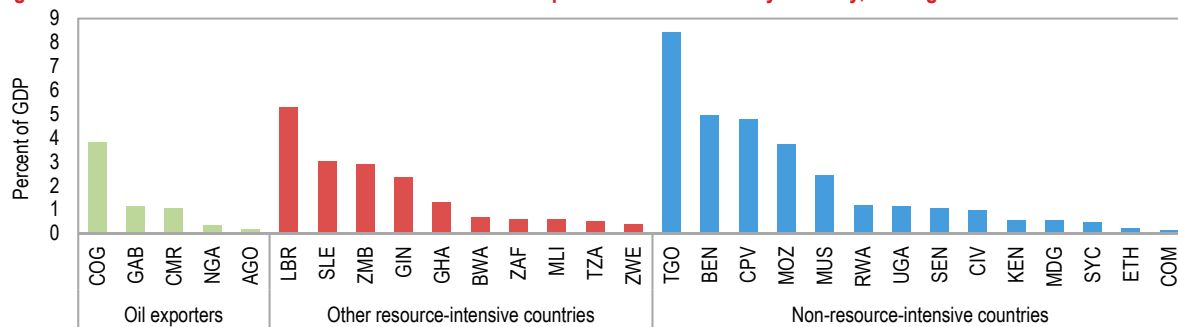
PPPs are mainly concentrated in the energy and transportation sectors. Much of the progress in involving the private sector in the development of infrastructure in the region has been in the energy sector (electricity and natural gas) and the transportation sector (airports, railroads, seaports, and toll roads). In the last five years, projects in the energy sector represent the largest share of total PPPs. The low share of projects related to information and communication technology (ICT) is explained by the fact that these projects have been developed under modalities that are not strictly PPPs, in the sense that they do not involve risk sharing between the private and public sectors (Figure 3.15).²¹

There have been successful PPPs in sub-Saharan Africa. One example is South Africa, although it should be noted that it has greater capacity to

¹⁹ The analysis focuses on greenfield and brownfield projects, including build, lease, transfer projects; build, operate, transfer projects; build, operate, own projects; rehabilitate, operate, transfer projects; rehabilitate, rent, transfer projects; and build, rehabilitate, operate, transfer projects. Other types of projects that are not directly related to the expansion or enhancement of assets with involvement of the public sector are not included in the analysis, such as merchants (the private sector builds a new facility, and the government provides no revenue or payment guarantees); private sector rentals (private investors place, own, and operate a new facility at their own risk); divestures (private investors buy an equity stake in a state-owned enterprise through an asset sale, public offering, or privatization program); management and lease contracts for existing assets; and management contracts of existing assets.

²⁰ For each year, the average of the ratios of the value of PPP projects to GDP across countries is calculated for each region. The average ratio for 2000–16 for each region is then calculated over those years. We excluded from the sample the data points corresponding to São Tomé and Príncipe and Liberia in 2004 and 2009, respectively, as they show extreme values resulting from large PPP projects in comparison to GDP.

²¹ Projects in the ICT sector shown Figure 3.15 are mainly related to hard infrastructure such as cable assets (fiber optic networks and other types of broadband networks), where the government is involved either as a contracting authority by means of a concession agreement or as the owner of the assets, or where there is some other form of government involvement.

Figure 3.14. Sub-Saharan Africa: Public-Private Partnership Investment to GDP by Country, Average 2000–16

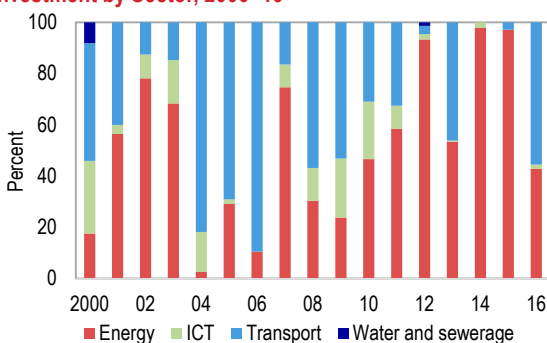
Source: World Bank, Private Participation in Infrastructure Project database.

Note: See page 90 for country groupings and page 91 for country abbreviations tables.

manage these projects than other countries in the region. There, the power purchase agreements were the most successful, with 60 projects over three years, for a total commitment of 118 billion rand (about 2½ percent of 2017 GDP). This benefited from strong competition from the private sector, which drove down costs, and a steady pipeline of projects to attract investors. The transport sector has also seen successful PPPs. In particular, the South African National Roads Agency Limited (SANRAL) has concessioned 1,288 km of its 19,700-km-wide road network under long-term PPP-type concessions for the design, building, financing, and operation of the roads before their transfer back to SANRAL. The Western Cape Chapman's Peak Toll Road is considered an engineering success, given very difficult geological

conditions, and the Gautrain Rapid Rail System ensures good transport services for commuters between Pretoria and Johannesburg.

Nevertheless, sub-Saharan African countries need to improve their capacity to manage PPPs.²² Since 2006, the value of disputed projects in sub-Saharan Africa as a share of countries' GDP has averaged ¾ percent of GDP, which is the highest ratio among emerging market and developing economies. At the same time, there is evidence that higher rates of disputed contracts and lower quality in the selection of PPP projects are related to weaker institutions involved in the management of public investment (Figures 3.16 and 3.17). Thus, disputes could be reduced with improvements in the quality of public investment management and budget transparency (Nose 2017).

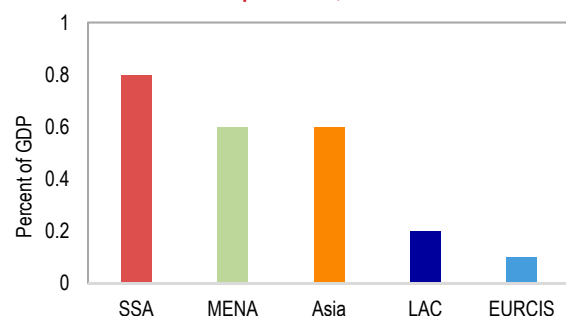
Figure 3.15. Sub-Saharan Africa: Public-Private Partnership Investment by Sector, 2000–16

Source: World Bank, Private Participation in Infrastructure Project database.

Note: ICT = information and communication technology.

²² In Figure 3.16, the benchmarking exercise for MENA covers only nine countries, and two of them are fragile countries with very low benchmarking scores (Afghanistan and Iraq), while other regions have larger samples. This helps to explain why the benchmarking score for MENA is the lowest, since without those two countries the average for MENA would be higher than that for sub-Saharan Africa. The sample of benchmarking scores for sub-Saharan Africa covers 20 countries.

²³ By institutional framework we mean a variety of elements necessary for the management of PPPs, such as the legal and regulatory context, the governance guidelines and public investment practices, and monitoring and reporting mechanisms.

Figure 3.16. Selected Regions: Disputed and Cancelled Public-Private Partnerships to GDP, 2006–16

Source: World Bank, Private Participation in Infrastructure Project database.

Note: EURCIS = Europe and Commonwealth of Independent States; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = sub-Saharan Africa.

the commitment to realize payments for many years and thus introduce rigidity in future budgets (IMF 2014b, Chapter 3).

There are various instruments for managing fiscal risks related to PPPs. The IMF and the World Bank have developed a specialized tool to assess fiscal risks related to PPP projects.

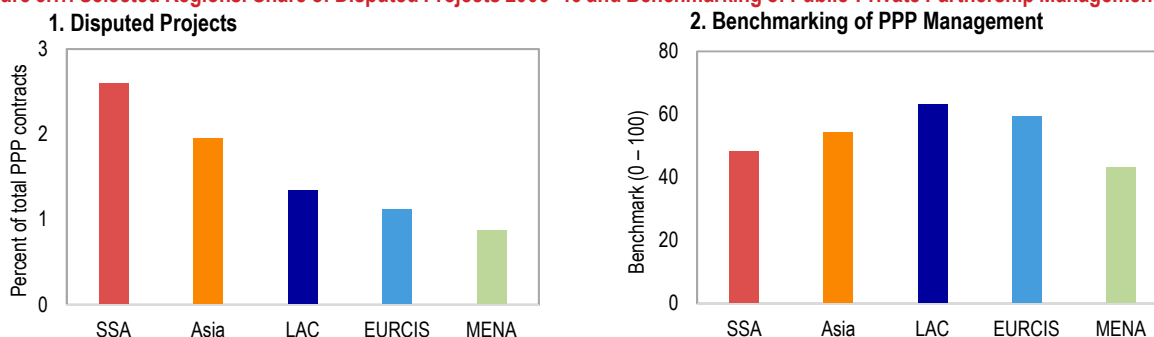
The PPP Fiscal Risk Assessment Model (P-FRAM) is aimed at evaluating the potential fiscal costs and risks arising from PPP projects, including a sensitivity analysis under alternative assumptions for macro variables and contract termination (IMF and WB 2016). The goal of the P-FRAM is to help authorities develop a strategy to mitigate risks. To date, P-FRAM pilots have been conducted in three sub-Saharan African countries: Côte d'Ivoire, Mauritius, and Niger.

In addition, Public Investment Management Assessments (PIMA) performed by the IMF and the World Bank help identify key weaknesses in public investment practices and provide country-tailored solutions (IMF 2015a). This tool is not focused on PPPs, but some components are related to them. To date, PIMA evaluations have been conducted in the following sub-Saharan African countries: Botswana, Burkina Faso, Cameroon, Côte D'Ivoire, Ghana, Liberia, Madagascar, Mauritius, Mozambique, Togo, and Zambia.

Foreign Direct Investment

FDI is another useful lever to raise private investment.²⁴ The benefits of FDI do not come only in the form of expanded resources for investment, but also through the transfer of knowledge and technology. In the past decade, sub-Saharan Africa has been the main recipient of FDI in percent of GDP among emerging market and developing regions in the world. Its ratio of FDI to GDP over the past decade has averaged slightly above 5 percent, higher than Latin America and the Caribbean, while other regions show ratios ranging from 2.5 to 4 percent (Figure 3.18).

FDI flows relative to GDP tend to be concentrated in some countries in the region, but not just in resource-intensive countries. For instance, Cabo Verde, Mauritius, Mozambique Seychelles, São Tomé and Príncipe, and The Gambia, have shown ratios since 2000 well above the regional average of about 4 percent. On the other hand, several countries have not been very successful in

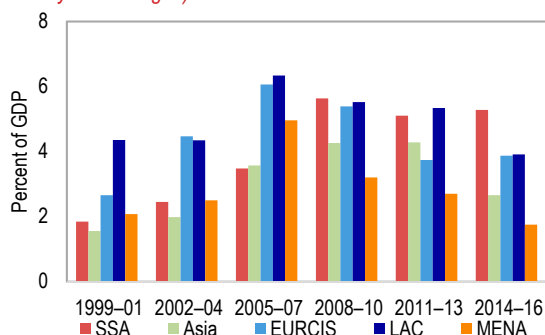
Figure 3.17. Selected Regions: Share of Disputed Projects 2006–16 and Benchmarking of Public-Private Partnership Management 2016

Source: World Bank, Private Participation in Infrastructure Project database; and World Bank (2016).

Note: EURCIS = Europe and Commonwealth of Independent States; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = sub-Saharan Africa.

²⁴ This section focuses on foreign direct investment net inflows which complement domestic resources. On the other hand, net outward outflows, which are significantly smaller in sub-Saharan Africa, reduce available resources for domestic private investment.

Figure 3.18. Selected Regions: Foreign Direct Investment (Three-year averages)



Source: IMF, World Economic Outlook database.

Note: EURCIS = Europe and Commonwealth of Independent States; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = sub-Saharan Africa.

attracting FDI—two-thirds of the countries in the region show ratios below the regional average (Figure 3.19).²⁵

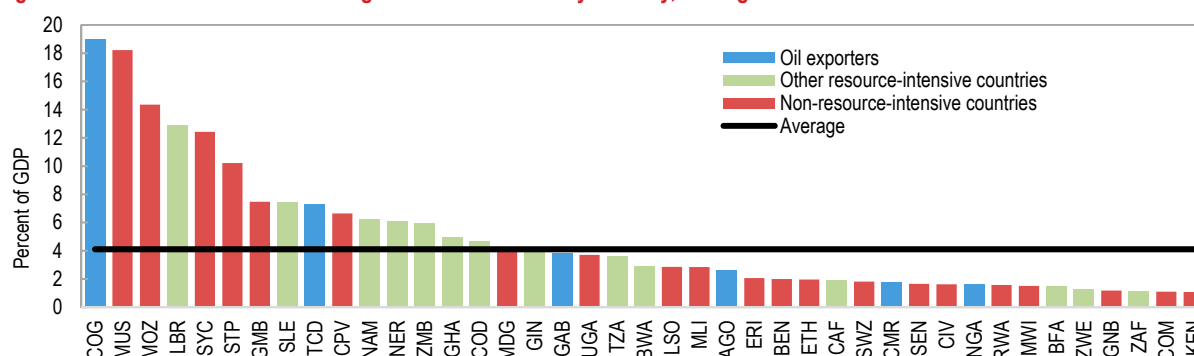
The literature on the determinants of FDI indicates that the following factors help attract these flows: large domestic markets and natural resources, the provision of infrastructure, the level of education of the labor force, openness to trade, macroeconomic and political stability, and the quality of institutions (Asiedu 2002, 2006; Dupasquier and Osakwe 2006). This suggests that policymakers could foster even stronger FDI inflows into sub-Saharan Africa by improving macroeconomic and political stability, providing better infrastructure services and a more skilled labor force, and improving the institutional environment.

Special Economic Zones

Closely related to FDI is the development of SEZs, which are second-best solutions compared with economy-wide reforms (IMF 2011), but can have a catalytic role in promoting structural transformation. China's economic transition since the 1980s is often cited as an example of how to increase FDI through SEZs (UNDP 2015). However, in sub-Saharan Africa, the experience with SEZs during the past two decades has been mixed at best, as most of them have either had an unsuccessful record or have fallen short of expectations (IMF 2011; Farole and Moberg 2017). One reason might be that SEZs in sub-Saharan Africa have relied primarily on corporate tax holidays, with little else offered in terms of nontax incentives and regulations. And when it comes to investment location decisions, there is evidence that taxes are not the only factor considered (IMF 2015b).

Nonetheless, in recent years, some countries have adjusted their approach to developing SEZs, with better results, as in the case of Rwanda (Steenbergen and Javorcik 2017). Other countries, such as Ethiopia, have been more successful in attracting investors. The more positive recent experiences are related to the focus on developing clusters to create more dynamic export sectors by fostering competition and quality improvements, and relying more on the countries' comparative advantages.

Figure 3.19. Sub-Saharan Africa: Foreign Direct Investment by Country, Average 2000–16



Source: IMF, World Economic Outlook database.

Note: EURCIS = Europe and Commonwealth of Independent States; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = sub-Saharan Africa. See page 90 for country groupings and page 91 for country abbreviations tables.

²⁵ It should be noted that some countries have other important sources of financial flows (portfolio and loans), including Kenya, Senegal, and South Africa.

Many SEZs in sub-Saharan Africa focus on the apparel, textile, and agroprocessing industries, where these economies typically have a competitive edge (Ethiopia, Ghana, Kenya, Madagascar, Malawi, Mauritius, Seychelles, Zimbabwe). Only a few economies (Mozambique, Namibia, Nigeria, South Africa, Zambia) have been able to establish SEZs in more capital-intensive industries, for instance, automotive and aluminum (UNDP 2015).

Potential ways to increase the effectiveness of SEZs in the region include better integrating SEZ programs into national and regional development strategies; promoting investments that can be better linked to domestic firms; encouraging stronger ownership by foreign investors; improving the provision of infrastructure and energy; promoting relationships and joint ventures of local corporations with foreign investors; developing training and education aligned with the labor requirements of SEZs; and improving compliance with global production and environmental standards (Farole and Moberg 2017; Zeng 2015). Long-term success will also depend on the capacity of SEZs to catalyze the transformation of the broader economy.

International Initiatives to Support Private Investment in Sub-Saharan Africa

There are various international initiatives to support private investment in sub-Saharan Africa, notably the Belt and Road Initiative and the G20 Compact with Africa (CwA).

The Chinese initiative unveiled in 2013 to form the Silk Road Economic Belt and the 21st Century Maritime Silk Road is a framework to connect China with south, central, and west Asia, Europe, and Africa through trade, infrastructure, investment, and finance. This initiative aims to build a land bridge by developing five major economic corridors as well as maritime transport routes that connect major seaports. It is expected to raise up to \$1 trillion in financing from China over 10 years, mainly for infrastructure development. Specific plans involving sub-Saharan African countries include developing transport and energy infrastructure as well as more SEZs. So far, Kenya (maritime ports and railways) has been the focus. But Ethiopia, Mozambique, South Africa, and Tanzania, are also seeking active involvement, and

coverage is likely to be expanded over time. It is also worth noting that, two years after the Belt and Road Initiative was introduced, China more than doubled its pledges (\$60 billion) in both project finance and technical assistance to support Africa's development during the last Forum on China-Africa Cooperation (FOCAC) in 2015.

The CwA is an international initiative to foster private investment in the region that may bring new momentum for FDI flows. It was launched in early 2017 and involves the cooperation of the G20, African Development Bank, IMF, World Bank, and participating countries. The focus is on coordinating the efforts of the parties involved to facilitate projects for private investment (IMF, African Development Bank, and World Bank 2017).

With the support of the IMF and the World Bank, the G20 is setting up a monitoring mechanism for the CwA that will support continuity and ensure consistency as well as initiate benchmarking and peer-learning processes. In general terms, the monitoring mechanism will involve assessing progress on meeting the commitments made under the three frameworks that are the pillars of the CwA: the macroeconomic framework, which focuses on maintaining macroeconomic stability while providing for adequate investment in infrastructure; the business framework, which lays out how to make countries more attractive for private investors; and the financing framework, which aims to increase the availability of financing with reduced costs and risks.

Eight countries in sub-Saharan Africa have joined the CwA initiative: Benin, Côte d'Ivoire, Ethiopia, Ghana, Guinea, Rwanda, Senegal, and Togo (and three more in the rest of Africa). Progress on actual reforms is still mixed, as participating countries are at various stages of the process, and some have joined only recently.

In Ghana, the measures catalyzed under the CwA focus on renewable energy and energy efficiency and target the promotion of private investment, complemented with training and improved access to appropriate financing. Meanwhile, the government is actively engaged in structural reform of the energy sector, including the restructuring of its debt, and privatization plans. This has been

complemented by an in-depth assessment of the main opportunities and constraints for private sector development (IFC 2017).

In Côte d'Ivoire, the priorities are promoting private activity and employment and increasing the capacity of the electricity sector while maintaining its financial sustainability. There are also projects underway to support value addition in the cocoa industry.

Rwanda has three focus areas: ensuring an investor-friendly tax regime without eroding the tax base, strengthening the responsiveness of government to private sector concerns, and establishing instruments to ease access to finance for private investors in specific sectors. Related measures include improving coordination between national development authorities, establishing a quarterly investor roundtable, and putting in place an investor response mechanism to provide faster private sector feedback to the authorities.

In Senegal, the authorities plan to use a specific approach that involves developing regional development poles with special economic development zones. The IMF, World Bank, and other international institutions are supporting efforts by the Senegalese authorities to promote the acceleration of reforms aimed at creating a sustainable export-oriented industry and thereby jobs for unemployed young people and women in these regional development poles.

Ethiopia is focusing on aligning its participation in the CwA with implementation of its own plan for growth and transformation. The main priorities are further development of targeted export-oriented industrialization, development of industrial parks, and creation of so-called plug-and-play business environments.

Togo recently joined the CwA after the preparation of its policy matrix and investment prospectus, with the aim of improving the conditions for private investment.

Benin and Guinea are in the process of developing their policy matrices containing the main policy lines and setting up the requirements for their implementation. The involvement of bilateral G20 partners is under preparation.

CONCLUSIONS AND POLICY RECOMMENDATIONS

Sub-Saharan Africa needs to increase private investment to achieve its social and development objectives. While private investment has increased since 2000, private-investment-to-GDP ratios in sub-Saharan Africa remain the lowest compared with other countries at similar levels of economic development.

Increasing private investment sustainably would require a favorable macroeconomic and institutional environment. On the macroeconomic side, this would mean ensuring macroeconomic stability, improving current and prospective economic activity, opening to trade, deepening financial systems, and building efficient public infrastructure. On the institutional side, what is needed is strengthening judicial, regulatory, and insolvency frameworks. Country experiences also show that the resolution of long-standing conflicts is typically followed by increases in private investment.

Many countries in the region have engaged in large public infrastructure projects given the substantial infrastructure gaps in the region. While this type of public investment can support private investment, policymakers need to be mindful that public investment can, in specific circumstances, crowd out private investment. Mitigating this risk would require promoting alternative sources of financing for both public and private investment, including deepening domestic financial markets and PPPs, while ensuring that the associated risks are well managed. At the same time, promoting FDI could help foster private investment, while recent experiences with SEZs in attracting investment have been promising.

Box 3.1. Policy Reform and Private Investment Growth

This box describes the analytical framework used to assess the relationship between policy reform and private investment. The main findings are that strong and sustained improvements in public debt, inflation, and strengthened institutions are associated with an increase in private investment growth. Policy setbacks are generally associated with reductions in private investment growth, as risk-averse investors anticipate a slowdown or reversals in reforms.

The analysis in this box extends the World Bank (2017) framework on the causes, implications, and policy responses to weakness in investment growth. The focus is on private investment growth, as opposed to total investment, and on the impact of macroeconomic stability and policy reforms. Three definitions of a “spurt” and “setback” are used:

- Spurts and setbacks in governance are defined in the same way as in World Bank (2017).
- For the macroeconomic variables, a spurt (setback) is defined as a two-year decrease (increase) that is bigger (smaller) than the mean minus (plus) one standard deviation in the public-debt-to-GDP ratio or inflation.

Episodes in which there were improvements in one measure and simultaneous setbacks in another are excluded. The sample spans 97 emerging market and developing economies over 1996–2015, and excludes those with populations of less than 3 million.¹

A panel regression is run in which the dependent variable is real private investment growth. The regressors are dummy variables for spurts (s) and setbacks (s) over the $([t-2, t+2] \text{ } [s-1, s+2])$ window around these episodes, for which the leads and lags are determined considering statistical significance and degrees of freedom. All estimates include time fixed effects to control for global common shocks and country fixed effects to control for time-invariant heterogeneity at the country level. Significant robust standard error estimates are identified with asterisks.

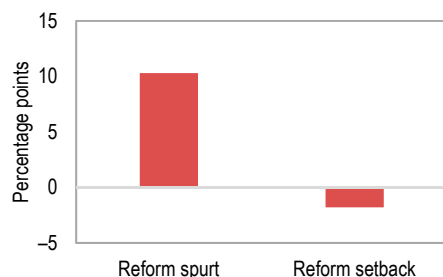
The key finding is that private investment increases after key improvements in public debt, inflation, and the quality of institutions (Figures 3.1.1 and 3.1.2; Table 3.1.1). Typically, setbacks tend to be anticipated by investors, who curtail investments. Economic growth and per capita income growth are also controlled for, but their coefficients tend to be statistically insignificant, and the main findings are unchanged. Similarly, policy spurts and setbacks remain statistically significant even after removing time effects.

This box was prepared by Nkunde Mwase based on Mwase (forthcoming).

¹ The sample set is as follows: sub-Saharan Africa: Angola, Burundi, Benin, Burkina Faso, Chad, Côte d'Ivoire, Republic of Congo, Ethiopia, Ghana, Guinea, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Niger, Nigeria, Senegal, Sierra Leone, Tanzania, Togo, Uganda, Zambia, Zimbabwe. Other emerging market and developing economies: Afghanistan, Algeria, Argentina, Azerbaijan, Bangladesh, Belarus, Bolivia, Bosnia and Herzegovina, Brazil, Bulgaria, Cambodia, Chile, China, Colombia, Costa Rica, Croatia, Dominican Republic, Ecuador, Egypt, El Salvador, Eritrea, Georgia, Guatemala, Haiti, Honduras, Hungary, India, Indonesia, Iran, Iraq, Jordan, Kazakhstan, Kosovo, Kuwait, Kyrgyz Republic, Lao P.D.R., Lebanon, Libya, Malaysia, Mauritania, Mexico, Moldova, Morocco, Myanmar, Nepal, Nicaragua, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Romania, Russia, Saudi Arabia, Serbia, Sri Lanka, Sudan, Tajikistan, Thailand, Tunisia, Turkey, Ukraine, United Arab Emirates, Uruguay, Venezuela, Vietnam.

Box 3.1. (continued)

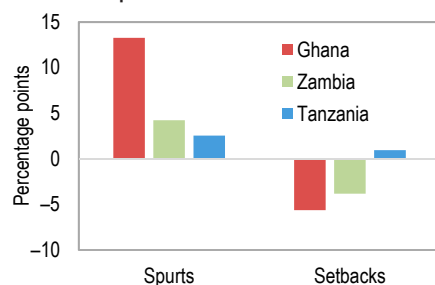
Figure 3.1.1. Selected Sub-Saharan African Countries: Private Investment Growth Differentials during Reform Spurts and Setbacks



Source: IMF, World Economic Outlook database.

Note: The columns show the average private investment growth differential of the 27 sub-Saharan African economies in the panel regression sample during a reform spurt or setback episode, relative to periods with neither spurts nor setbacks.

Figure 3.1.2. Selected Sub-Saharan African Countries: Private Investment Growth Differentials during Public Debt Reform Spurts and Setbacks



Source: IMF, World Economic Outlook database.

Note: The columns show the average private investment growth differential of economies during a public debt reform spurt or setback episode, relative to periods with neither spurts nor setbacks.

Table 3.1.1. Event Study: Policy Reform and Private Investment Growth Episode

Dependent Variable: Private Investment Growth	Coefficient	Robust Standard Errors
Period $t - 1$ of reform spurt	1.15	1.35
Period t of reform spurt	1.46	1.23
Period $t + 1$ of reform spurt	2.42	1.29 *
Period $s - 1$ of reform setback	-3.99	1.25 ***
Period s of reform setback	-1.51	1.15
Period $s + 1$ of reform setback	1.89	1.23
Period $s + 2$ of reform setback	-0.01	1.10
Number of observations		1582
R-squared		0.135

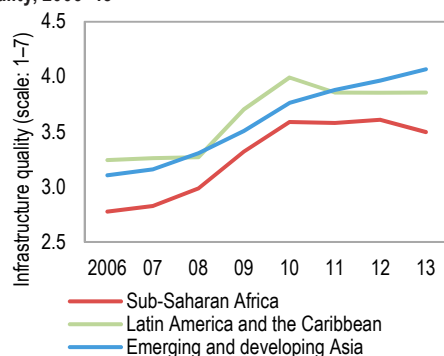
Source: IMF staff calculations.

Note: The regression includes country and time fixed effects. t indicates the period of the significant spurt, s the period of the significant setback as defined in World Bank (2017). Robust standard errors coefficients in bold are significant at *** $p < 0.01$; ** $p < 0.05$; or * $p < 0.1$.

Box 3.2. Public Investment Efficiency in Sub-Saharan Africa

Improving the efficiency of public investment could contribute to more solid economic growth and help achieve desired social priorities and development goals. Public investment efficiency in sub-Saharan Africa compares unfavorably with other regions and could be improved by about 35 percent. Doing so would require improving the quality of institutions in the region. This in turn would require strengthening the planning and selection of public-private partnerships (PPPs), the credibility of multiyear budgeting, the effectiveness of project appraisal and selection, the monitoring of projects during implementation, and the registration of infrastructure assets.

Figure 3.2.1. Selected Regions: Perception of Infrastructure Quality, 2006–13



Sources: IMF Fiscal Affairs Department, Public Investment Management Assessment database; and IMF staff calculations.

Improving the efficiency of public investment in sub-Saharan Africa is a priority because countries continue to have substantial infrastructure needs and have limited fiscal space. In addition to the infrastructure gap, the region's infrastructure is generally assessed to be of relatively low quality (Figure 3.2.1). For instance, the quality of electricity supply, roads, and railroads is scored below regional peers. The results also show substantial scope for improving efficiency (Table 3.2.1). Based on the three efficiency score indices used, the results suggest that sub-Saharan African countries could increase investment efficiency by about 35 percent.

There is wide variation in the efficiency of public investment across countries. A comparison of the efficiency scores across country groups within sub-Saharan Africa suggests that investment efficiency in resource-intensive countries is

Table 3.2.1. Average Efficiency Score by Regions

Region	Physical Infrastructure	Quality Infrastructure	Hybrid Indicator
Commonwealth of Independent States	0.935	0.716	0.788
Emerging and Developing Asia	0.501	0.788	0.659
Emerging and Developing Europe	0.753	0.708	0.727
Latin America and the Caribbean	0.580	0.769	0.709
Middle East, North Africa, Afghanistan, and Pakistan	0.472	0.791	0.676
Sub-Saharan Africa	0.460	0.803	0.642
Advanced Economies	0.733	0.888	0.880

Sources: IMF Fiscal Affairs Department, Public Investment Management Assessment database; and IMF staff calculations.

Table 3.2.2. Average Efficiency Score by Groups

Region	Physical Infrastructure	Quality Infrastructure	Hybrid Indicator
Sub-Saharan Africa	0.460	0.803	0.642
CEMAC	0.305	0.625	0.511
EAC	0.487	0.874	0.735
WAEMU	0.369	0.814	0.619
Oil exporters	0.196	0.594	0.269
Non-resource-intensive countries	0.446	0.858	0.698
Other resource-intensive countries	0.602	0.813	0.656

Sources: IMF Fiscal Affairs Department, Public Investment Management Assessment database; and IMF staff calculations.

Note: CEMAC = Central African Economic and Monetary Community; EAC = East African Community; WAEMU = West African Economic and Monetary Union. See page 90 for country groupings table.

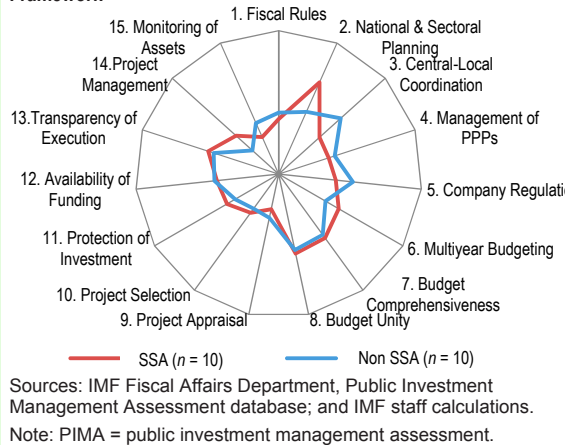
lower than in non-resource-intensive countries. At the same time, countries in the East African Community perform better than those in the Central African Economic and Monetary Community and West African Economic and Monetary Union (Table 3.2.2). Oil exporters perform worse than other resource-intensive countries.

Considering the determinants of public investment efficiency in sub-Saharan African countries, cross-country regressions suggest that the quality of institutions is the most important factor. These regressions cover the period 2000–15, and the efficiency scores are a function of a set of explanatory variables, including (1) the quality of institutions as measured by two World Economic Forum indicators (control of corruption and regulatory quality), (2) official development assistance, (3) the percentage of urban population, and (4) dependence on natural resources, represented by a dummy variable for countries rich in nonrenewable natural resources.

This box was prepared by Karim Barhoumi based on Barhoumi and others (forthcoming).

Box 3.2. (continued)

Figure 3.2.2: Sub-Saharan Africa: PIMA Scores Regulatory Framework



Overall, the estimates show a positive correlation between public investment efficiency and the quality of institutions and a negative association between dependence on natural resources and public investment efficiency.

The initial Public Investment Management Assessment results (for 21 pilot countries) show that sub-Saharan African countries have generally similar regulatory frameworks compared with the average in other regions. Figure 3.2.2 shows the average scores for regulatory frameworks for sub-Saharan Africa and emerging market and developing economies. Sub-Saharan Africa has slightly better frameworks in the areas of national and sectoral planning, multiyear budgeting, and project management. However, the region has weaker regulations in the areas of central-local coordination, management of PPPs, regulation of firms, and monitoring of assets. In addition, Figure 3.2.3 shows that in the areas of management of PPPs, multiyear budgeting, project appraisal and selection, project management, and monitoring of assets, certain regulations exist but are not used effectively to achieve public investment efficiency.

The efficiency of public investment has important implications for growth. As shown in Figure 3.2.4, which splits sub-Saharan African countries into “high-efficiency” countries (red dots) and “low-efficiency” countries (blue dots) relative to the median efficiency scores estimated, the relationship between investment and growth is stronger for the high-efficiency than for the low-efficiency countries.

Strengthening institutions could help improve the efficiency of public investment in sub-Saharan Africa. Specifically, a 10 percent increase in the Control of Corruption Index or the Regulatory Quality Index could lead to a reduction in the efficiency gap in sub-Saharan African countries of about 12 percent. For more detailed results, see Barhoumi and others (forthcoming).

In sum, there is potential for strengthening a wide range of public investment management areas in sub-Saharan African countries, which in turn would increase public investment efficiency. This could be done by strengthening the planning and selection of PPPs, the credibility of multiyear budgeting, the effectiveness of project appraisal and selection, the monitoring of projects during implementation, and the registration of infrastructure assets.

Figure 3.2.3. Sub-Saharan Africa: PIMA Scores Regulatory Framework and Effectiveness

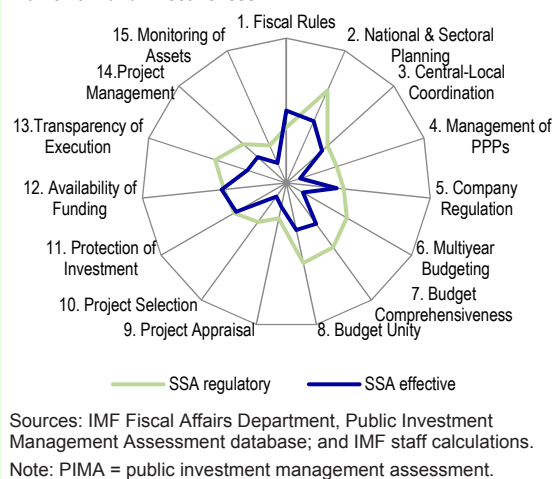
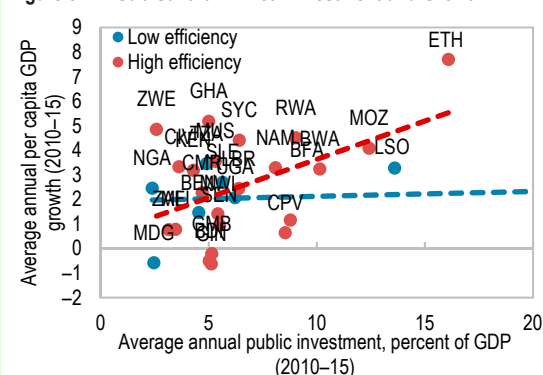


Figure 3.2.4. Sub-Saharan Africa: Investment and Growth



Sources: IMF Fiscal Affairs Department, Public Investment Management Assessment database; IMF, World Economic Outlook database; and IMF staff calculations.

Note: See page 91 for country abbreviations table.

Box 3.3. Developing Domestic Debt Markets in Sub-Saharan Africa

The development of domestic government bond markets in Africa has attracted growing interest among policymakers, investors, and analysts in recent years. Governments have been induced, or felt compelled, to finance their growing budgetary deficits through domestic issuance. Factors pushing in that direction include the limitations of direct banking sector financing; limited availability of foreign aid and/or concessional foreign loans from the official sector (foreign governments and multilateral institutions); and increasing awareness of the risks associated with borrowing abroad and in foreign currencies. More positively, developing the domestic bond market may contribute to overall financial deepening.

Several African countries have extended maturities on their domestic debt, a result of developing their government bond markets. For example, Côte d'Ivoire, Namibia, and Uganda have more than doubled issuance of local currency government bonds, with the stock of local currency bonds in these countries now equivalent to 8.5 percent of GDP on average. The maturity of bonds issued rose on average from 1.5 years to 6.4 years, with some countries, such as Ghana, Kenya, Namibia, Nigeria, and Tanzania, issuing local currency bonds at maturities of or over 15 years.

To develop a sustainable bond market, the following would be required:

- A stable political environment for credible policymaking. The political environment should be secure, and the government should be a credible policymaker.
- A suitable environment for domestic issuance and an effective framework for coordination of debt management and monetary policy.
- A legal and regulatory framework that facilitates the operations of primary and secondary markets of both government and corporate instruments. A clear, modern legal framework for government securities is essential in defining the authority to borrow, and for market transactions and the settlement system.
- Adherence to sound debt management policies and practice that promotes the development of a broader domestic bond market. The existence of a medium-term debt management strategy and a publicly available annual borrowing plan provide the transparency and predictability that allow for the wider market to develop.
- A commitment from the government to pay market interest rates. The market cannot develop if the government creates a captive investor base by compelling some institutions to buy debt instruments using regulations, or if it regularly intervenes in the issuance process to manage the yields at which it issues.
- A sound financial system. Banks are typically the initial investors in any domestic government bond market. Their soundness also ensures that bank failures do not increase the government's financing burden.
- A market infrastructure to support trading, transparency, and financial stability. Adequate clearing, settlement, and custody frameworks should be established for government and corporate securities.
- A diversified investor base. A large and heterogeneous investor base with varied risk preferences, investment horizons, and trading motives can ensure demand for government debt securities across a range of market conditions, as well as support secondary market liquidity.
- Availability of sufficient resources for bond market development. Resource constraints, particularly in terms of staff and capacity in the debt management office, central banks, regulators, and the private sector, can be a constraining factor. Moreover, the authorities will have to bear some costs during the start-up phase, for example, in terms of higher yields and greater rollover risk.

This box was prepared by Thordur Jonasson and James Knight.

Box 3.3. (continued)

Developing domestic debt markets can bring several benefits. Domestic bond issuance (corporate or public) complements funding from external sources and banks. It can help support the implementation of monetary policy, strengthen financial markets, reduce foreign exchange risks, enable the market for private savings, and facilitate the availability of longer-term financing for infrastructure. In addition, developing debt markets should be part of a broader strategy to mobilize domestic finance.

Developing domestic sources of financing would also help mitigate some of the risks from existing Eurobonds. First, Eurobond issuances have surged during a prolonged period of low interest rates since the global financial crisis. Currently, global interest rates are starting to move higher, and capital flow reversals could coincide with the initial wave of Eurobonds reaching maturity. Refinancing risk could become acute, particularly for countries with macroeconomic imbalances; in this context, domestic markets could become even more important.

But developing domestic bond markets can have financial stability implications. A more dynamic market, which may possibly attract international investors, will be helpful in diversifying the investor base and possibly extending maturities. Foreign capital inflows may be most valuable to a country without large nonbank financial institutions with ongoing demand for securities. Foreign investor demand may also reduce crowding out. However, external capital flows may be especially sensitive to risk and relative returns, making national markets susceptible to slight changes in global interest rates and resulting in booms and busts in asset price and credit flows. This is particularly relevant for some sub-Saharan African countries where domestic debt markets have become a destination for foreign investment. For example, nonresidents hold about 40 percent of domestic government bonds in South Africa and about 50 percent of domestic government debt in Ghana. This compares with an average of 25 percent for emerging market economies.

Box 3.4. Fintech in Sub-Saharan Africa

Fintech (the development of financial technology based on innovations of processes, applications, products, and business models) can promote efficiency in the financial industry by transforming the delivery of core financial sector functions, such as the settling of payments, borrowing and saving, risk sharing, and the allocation of capital.

How Can Fintech Support Private Investment?

Fintech could support private investment in sub-Saharan Africa using existing mobile platforms to reduce frictions in the intermediation of funds between savers and investors. Even though the surge in mobile payments in sub-Saharan Africa is not directly related to financial intermediation services, mobile-payment providers have started to leverage their experience, mature technological platform, and large customer base to also provide financial intermediation services. For instance, M-Pesa offers the mobile banking services M-Kesho and M-Shwari to provide access to savings accounts and microcredit products in Kenya. Other examples are Zoono and EasyEquities in South Africa. Zoono has partnered with a crowd-lending platform to offer funding services to entrepreneurs, while EasyEquities enables investment in share in a variety of products (equities, exchange-traded funds, exchange-traded notes, etc.). In this regard, the successful emergence of mobile payments in the region provides a good starting point. Even though financial inclusion ratios are still low compared with other regions, sub-Saharan Africa is a world leader in mobile money payments, with some very successful mobile payment systems, such as M-Pesa in Kenya, Tanzania, and other countries (Figure 3.4.1). The success of these services is most probably the result of several factors, including a large unfulfilled demand for payment services in a market with a relatively developed mobile infrastructure; an appropriate pricing structure to attract customers; and adequate regulation of central banks that provide M-Pesa with space to enter in the market.

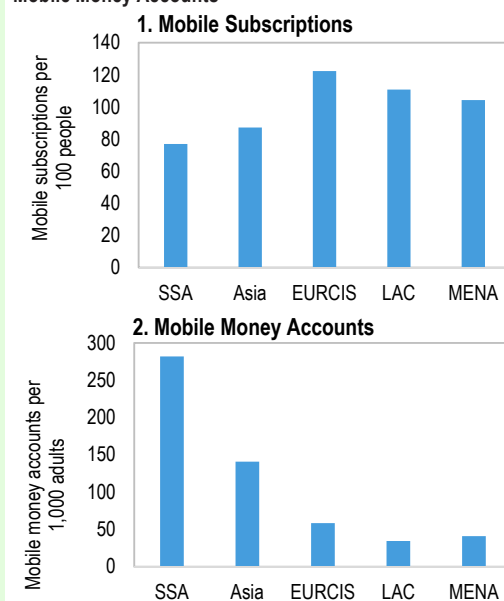
Fintech can also support the region's investment growth by helping improve efficiency in the infrastructure of financial markets, including payment, settlement, and clearing systems—all of which are underdeveloped in sub-Saharan Africa compared with other regions. Since infrastructure helps reduce various sources of financial risks, such as systemic, credit, and liquidity risks (BIS 2012), its development can promote the growth of financial markets such as derivatives, bond, or money markets. This could have positive spillovers on the financing of investment in sub-Saharan Africa. For instance, central counterparties can improve the functioning of derivatives markets, which can help banks more efficiently transfer the credit risk from their loan portfolio. Also, riskless settlement securities systems reduce trading frictions in bond markets, which can facilitate the issuance of corporate bonds to finance investment projects. The use of distributed ledger technologies is also being explored because of potential efficiency gains.

Balancing the Safety-Efficiency Trade-off

Overall, it is important to stress that efficiency gains from the emergence of fintech are not free of social costs. Fintech may exacerbate some of the well-known vulnerabilities of financial systems or create new weaknesses (BCBS 2017). For instance, a proliferation of innovative products and services may increase the complexity of financial services delivery, making it more difficult to manage and control operational risk. Fintech can also increase difficulties in meeting compliance requirements, obligations concerning money laundering and combating the financing of terrorism, and the effective management of cyber-risks.

This box was prepared by Hector Perez-Saiz based on Maino and others (forthcoming).

Figure 3.4.1. Selected Regions: Mobile Subscriptions and Mobile Money Accounts



Sources: World Bank, Global Financial Inclusion; and World Bank, World Development Indicators database.

Note: EURCIS = Europe and Commonwealth of Independent States; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = sub-Saharan Africa.

Annex 3.1. Calculation of the Real Investment Index and Regional Growth Rates

This annex describes how the Real Investment Index in Figure 3.3 in the main text is computed. First, for each country j , total annual real investment growth is decomposed into the contributions of private and public components:

$$g_{j,t} = \alpha_{j,t-1}g_{j,t}^{pr} + (1 - \alpha_{j,t-1})g_{j,t}^{pu} = c_{j,t}^{pr} + c_{j,t}^{pu}, \quad (\text{A3.1.1})$$

In which $\alpha_{j,t-1}$ is the share of private investment over total investment in country j , and $g_{j,t}^{pr}$ and $g_{j,t}^{pu}$ are the rates of growth of private and public investment, respectively. Then, the weighted average across countries using purchasing-power-parity GDP weights of each component is computed, such that the regional total investment growth rate can be decomposed as $g_t = c_t^{pr} + c_t^{pu}$. Finally, the Real Investment Index i_t is computed recursively using $i_t = i_{t-1}c_t^{pr} + i_{t-1}c_t^{pu}$, starting from $i_{1999} = 1$, and $c_{2000}^{pr} = \alpha_{2000}$ and $c_{2000}^{pu} = 1 - \alpha_{2000}$, in which

$$\alpha_t = \frac{\sum_j (\alpha_{j,t} \omega_{j,t})}{\sum_j \omega_{j,t}} \quad (\text{A3.1.2})$$

is the purchasing-power-parity GDP-weighted average of the share of private investment across countries.

To control for the effect of extreme values, and to be consistent with the decomposition presented above, the regional private and public investment growth rates for each year are computed as follows:

$$\begin{aligned} \hat{g}_t^{pr} &= \frac{c_t^{pr}}{\alpha_{t-1}} \\ \hat{g}_t^{pu} &= \frac{c_t^{pu}}{1 - \alpha_{t-1}}, \end{aligned} \quad (\text{A3.1.3})$$

such that the regional total investment growth rate can be expressed as a weighted average between the private and public component growth rates:

$$g_t = \alpha_{t-1}\hat{g}_t^{pr} + (1 - \alpha_{t-1})\hat{g}_t^{pu}. \quad (\text{A3.1.4})$$

Annex 3.2. Determinants of Private Fixed Investment Ratios in Emerging Market and Developing Economies

This annex presents the empirical approach for the analysis of the institutional drivers of private fixed investment ratios in emerging market and developing economies. It provides details on the econometric methodology, data, and estimation results.

Baseline Regressions

In the baseline regressions, the ratio of private investment to GDP is explained by its lagged value and by traditional determinants of investment identified in the literature (including Servén 2003; IMF 2005; Cavallo and Daude 2011; Lim 2014; World Bank 2017) using the dynamic fixed-effects panel data equation:

$$\left(\frac{I}{Y}\right)_{i,t} = \beta_0 + \beta_1 \left(\frac{I}{Y}\right)_{i,t-1} + \beta_2 \left(\frac{IG}{Y}\right)_{i,t} + \beta_3 \ln(Ypc_{i,t}) + \beta_4 \left(\frac{PI}{PY}\right)_{i,t} + \beta_5 IR_{i,t} + \beta_6 g_{i,t} + \eta_i + \gamma_t + \varepsilon_{i,t}, \quad (A3.2.1)$$

in which I/Y is the private-fixed-investment-to-GDP ratio, IG/Y is the public-fixed-investment-to-GDP ratio, Ypc is the real GDP per capita in purchasing power parity, PI/PY is the ratio of the deflator of gross fixed investment to the GDP deflator (the relative price of capital), IR is the real interest rate, g is the real GDP growth, η_i and γ_t denote country and year fixed effects (to control for unobserved cross-country heterogeneity and for global shocks, respectively), and $\varepsilon_{i,t}$ is the error term. The final estimation sample is composed of 101 emerging market and developing economies over the years 1980 to 2015.¹ Data sources are presented in Annex Table 3.2.3.

The estimation uses the system generalized methods of moments (GMM) estimator (Arellano and Bover 1995; Blundell and Bond 1998) to address the Nickell (1981) bias arising from the lagged dependent variable and possible endogeneity issues between the variables.²

Results reported in Annex Table 3.2.1 confirm the persistence of the private investment ratio. In line with a crowding-out effect of public investment on private investment (Cavallo and Daude 2011; IMF 2017), the coefficient on the public-investment-to-GDP ratio is significant with the expected negative sign. However, this crowding-out effect is mitigated if the availability of financing in the economy increases, as implied by a higher degree of financial development (column (2)). Real GDP growth is also significant, both statistically and economically: a 1 standard deviation increase in real GDP growth (+6.2 percent) translates into a 1.3 percentage point increase in the investment ratio. The relative price of investment reduces private investment ratios, while neither the level of GDP per capita nor the real interest rate is significant.³

¹ Countries are Algeria, Angola, Antigua and Barbuda, Argentina, Armenia, Azerbaijan, The Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Chile, China, Colombia, Comoros, Democratic Republic of the Congo, Republic of Congo, Costa Rica, Côte d'Ivoire, Croatia, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, Equatorial Guinea, Ethiopia, Gabon, The Gambia, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Haiti, Honduras, Hungary, India, Indonesia, Iran, Jordan, Kenya, Kuwait, Kyrgyz Republic, Lebanon, Lesotho, Malaysia, Mauritius, Mexico, Moldova, Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Oman, Panama, Peru, Poland, Romania, Russia, Rwanda, São Tomé and Príncipe, Senegal, Serbia, Seychelles, Sierra Leone, South Africa, Sri Lanka, St. Lucia, St. Vincent and the Grenadines, Suriname, Swaziland, Tanzania, Thailand, Togo, Tunisia, Uganda, Ukraine, Uruguay, Venezuela, Yemen, Zambia.

² The null hypothesis of the Im-Pesaran-Shin test that all panels of the sample have a unit root is rejected at less than 0.1 percent significance level. GMM regressions are performed using the two-step procedure with the Windmeijer's finite-sample correction. The lagged dependent variable is treated as predetermined and instrumented with one to two lags. The other regressors are treated as endogenous variables and are instrumented with two lags and more, while fixed effects and some institutional variables, such as regulatory quality or the cost of resolving insolvencies, are treated as exogenous. The validity of the instruments is tested using the Hansen test, with the number of instruments being lower than the number of countries to limit a weakening of the Hansen test, as suggested by Roodman (2009). The absence of serial correlation of residuals is tested using the AR(2), test while in all regressions, the AR(1) test is rejected, suggesting, as expected, a first-order serial correlation of the differenced error term.

³ Other control variables considered include inflation, a real effective exchange rate index to control for competitiveness, the terms of trade, oil prices interacted with a dummy variable for oil exporters, foreign direct investment, estimates of the stocks of public and private capital, public consumption as a share of GDP, public external debt, and the current account as a share of GDP. None of these variables are significant, and their inclusion does not modify the results presented here.

Decomposing the effect of GDP growth between low and high levels of growth indicates the presence of a nonlinear effect (column (3)).⁴ Finally, the regressions also include structural variables such as the World Bank's Doing Business, Worldwide Governance, and *International Country Risk Guide* indicators; variables for infrastructure like paved roads as a proportion of total roads, or access to electricity in percent of the population (results not reported); financial development, measured by the IMF's Financial Development Index (Sviryzdenka 2016); capital account openness (proxied by the Chinn-Ito index); and trade openness. However, none of these variables have a significant direct effect on private investment (columns (5)–(7)). The effect of real GDP growth on investment is significant only in the richer countries of the sample (that is, those countries with an average level of GDP per capita above the median of the sample, which is \$5,072 in 2011 purchasing-power-parity terms). This probably reflects better institutions in these economies (column (4)). Thus, the next section investigates whether the institutional environment matters for the relationship between growth and investment.

Interactions of GDP Growth with Institutions and GDP Growth Effects by Country Groups

The baseline regressions are extended by adding interactions between real GDP growth and some of the above-mentioned structural variables or by classifying countries by groups according to their structural characteristics. Annex Table 3.2.2 reports results of the regressions. Considering the interaction effects with the World Bank's Doing Business, Worldwide Governance, and *International Country Risk Guide* indicators, only a few variables are significant, although the findings should be interpreted with caution, since these indicators are available only from the end of the 1990s or from the mid-2000s, implying a significant reduction in the size of the sample. In particular, the effect of GDP growth on investment is larger when regulatory quality is higher and when the cost of resolving insolvency (as a percent of the real estate property value of the firm) is lower (columns (1) and (2)).⁵

Following Servén (2003), countries are classified into groups with high and low infrastructure (paved roads and access to electricity), trade openness, financial development, or capital account openness according to whether the country-average level of each structural variable is above or below the sample median, allowing each group to carry a different coefficient on the GDP growth variable in the regressions.⁶ Results indicate a positive effect of GDP growth in the groups of countries with high levels of paved roads, access to electricity, and trade openness (columns (3)–(5)), low capital account openness (column (6)), and a high level of financial development (column (7)).

⁴ For each country, real GDP growth is considered high (low) if it is above (below) the country-specific historical mean measured over the estimation period.

⁵ As defined by the Worldwide Governance Indicators “regulatory quality captures perceptions of the ability of the government to formulate and implement sound policies” and “regulations that permit and promote private sector development.” Regulatory quality covers product markets, labor markets (for example, “How problematic are labor regulations for the growth of your business?”), taxation, and other aspects affecting the ease of starting and running a business. Because this indicator is based mainly on a survey of perceptions rather than on objective information, results obtained with this indicator should be interpreted with caution.

⁶ Regressions also include the square of real GDP growth to control for the possibility that countries with better institutions might also show higher levels of growth, and therefore higher investment ratios. However, including this variable does not alter the significance of the coefficients of interactions with structural variables.

Annex Table 3.2.1. Determinants of Private Investment Ratios in Emerging Market and Developing Economies: Baseline Regressions

Dependent Variable: Private-Investment-to-GDP Ratio	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Private-investment-to-GDP ratio, one-year lagged	0.793*** (10.58)	0.764*** (8.88)	0.800*** (9.69)	0.811*** (11.23)	0.781*** (10.43)	0.858*** (14.30)	0.775*** (10.03)
Public-investment-to-GDP ratio	-0.557** (-2.45)	-1.362** (-2.37)	-0.546** (-2.48)	-0.521** (-2.36)	-0.625** (-2.03)	-0.514*** (-2.76)	-0.471** (-2.53)
Real GDP per capita in logs	2.885 (0.96)	-0.406 (-0.13)	0.691 (0.30)	1.777 (0.55)	1.689 (0.81)	1.821 (1.15)	2.071 (0.48)
Relative price of investment in logs	-1.516** (-2.39)	-0.999 (-1.32)	-1.273** (-2.07)	-1.751*** (-2.70)	-1.219* (-1.82)	-0.761 (-1.23)	-1.354** (-2.00)
Real interest rate	-0.034 (-1.01)	-0.022 (-0.72)	-0.037 (-0.86)	-0.025 (-0.89)	-0.013 (-0.44)	0.045 (0.72)	-0.031 (-1.06)
Real GDP growth	0.209* (1.86)	0.239* (1.91)			0.181* (1.83)	0.190*** (2.86)	0.209* (1.87)
Low real GDP growth			0.372 (1.25)				
High real GDP growth			0.228* (1.90)				
Financial development × public investment ratio		5.946** (2.02)					
Financial Development Index		-25.888 (-1.52)					0.232 (0.02)
Real GDP growth × low Income country ¹				-0.263 (-0.87)			
Real GDP growth × high income country ¹				0.321*** (3.50)			
Trade openness					0.027 (1.13)		
Capital account openness						0.096 (0.29)	
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,194	2,185	2,194	2,194	2,194	2,143	2,185
Number of countries	101	100	101	101	101	99	100
Number of instruments	51	58	54	54	50	69	54
AR(2) test <i>p</i> -value	0.693	0.544	0.603	0.687	0.835	0.994	0.662
Hansen test <i>p</i> -value	0.303	0.305	0.347	0.237	0.097	0.146	0.17

Source: IMF staff calculations.

Note: Estimates using the Arellano and Bond system—generalized method of moments estimator. Constant term included but not reported. Real GDP per capita in purchasing power parity terms. Robust *z*-statistics in parentheses. **p* < .10; ***p* < .05; ****p* < .01.

¹ Lower and higher than the median country, respectively, following Sérvén (2003).

Annex Table 3.2.2. Determinants of Private Investment Ratios in Emerging Market and Developing Economies: Interaction Effects with GDP Growth and GDP Growth Effects by Country Groups

Dependent Variable: Private-Investment-to-GDP Ratio	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Private investment-to-GDP ratio, one-year lagged	0.878*** (14.11)	0.877*** (7.78)	0.824*** (9.92)	0.879*** (14.53)	0.867*** (11.52)	0.880*** (12.97)	0.873*** (11.98)
Public-investment-to-GDP ratio	-0.508** (-1.84)	-0.414** (-2.28)	-0.528*** (-2.70)	-0.546** (-2.33)	-0.488** (-2.17)	-0.340* (-1.76)	-0.471** (-2.14)
Real GDP per capita in logs	1.465 (1.63)	-0.480 (-0.18)	1.324 (0.52)	3.017 (0.85)	1.458 (0.98)	0.767 (0.29)	3.665 (0.92)
Relative price of investment in logs	0.193 (0.12)	-1.127 (-1.41)	-1.322 (-1.41)	-1.203 (-1.57)	-1.001 (-1.43)	-0.530 (-0.78)	-1.219 (-1.37)
Real interest rate	0.211 (2.14)	0.036 (0.19)	-0.059* (-1.66)	-0.001 (-0.01)	-0.008 (-0.25)	0.028 (0.59)	0.008 (0.24)
Real GDP growth	0.542* (1.67)	0.692** (2.00)					
Regulatory quality	-3.566 (-1.37)						
Real GDP growth × regulatory quality	0.425** (2.39)						
Cost of resolving insolvency (% of estate)		0.026 (0.27)					
Real GDP growth × cost of resolving insolvency		-0.030*** (-3.35)					
High-paved-roads country			4.840 (1.09)				
Real GDP growth × low-paved-roads country ¹			0.215 (1.29)				
Real GDP growth × high-paved-roads country ¹			0.281* (1.93)				
High-access-to-electricity country				-2.936 (-0.64)			
Real GDP growth × low-access-to-electricity country ¹				0.107 (0.46)			
Real GDP growth × high-access-to-electricity country ¹				0.332** (1.99)			
Trade openness					0.017 (1.01)		
Real GDP growth × low-trade-openness country ¹					0.262 (1.09)		
Real GDP growth × high-trade-openness country ¹					0.257* (1.78)		
Capital account openness						0.111 (0.21)	
Real GDP growth × low-capital-account-openness country ¹						0.331* (1.77)	
Real GDP growth × high-capital-account-openness country ¹						0.217 (1.47)	
Financial Development Index							-10.365 (-0.98)
Real GDP growth × low-financial-development country ¹							-0.119 (-0.74)
Real GDP growth × high-financial-development country ¹							0.465*** (3.28)
Real GDP growth, squared			-0.011** (-2.18)	-0.001 (-0.70)	-0.002** (-2.09)	-0.003* (-1.95)	0.000 (0.32)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,623	778	2,113	2,194	2,194	2,143	2,185
Number of countries	100	89	98	101	101	99	100
Number of instruments	45	32	59	58	60	58	60
AR(2) test <i>p</i> -value	0.979	0.863	0.407	0.743	0.944	0.939	0.591
Hansen test <i>p</i> -value	0.425	0.402	0.364	0.210	0.696	0.216	0.392

Source: IMF staff calculations.

Notes: Estimates using the Arellano and Bond system-generalized method of moments estimator. Constant term included but not reported. Real GDP per capita in purchasing power parity terms. Robust z-statistics in parentheses.

p* < .10; *p* < .05; ****p* < .01.¹ Lower and higher than the median country, respectively, following Sérvén (2003).

Annex Table 3.2.3. Definitions of Variables and Sources

Variable	Source
Private fixed gross capital formation (percent of GDP)	IMF, World Economic Outlook database; United Nations National Accounts
Public gross fixed capital formation (percent of GDP)	IMF, World Economic Outlook database; United Nations National Accounts
Real GDP growth	IMF, World Economic Outlook database; United Nations National Accounts
Real GDP per capita, in purchasing power parity	IMF, World Economic Outlook database; United Nations National Accounts
Relative price of investment (capital formation price index to GDP deflator)	Penn World Tables 9.0
Real interest rate	World Bank, World Development Indicators
Regulatory quality	World Bank, Doing Business Indicator database
Cost of resolving insolvency (percentage of business real estate)	World Bank, Worldwide Governance Indicators database
Roads paved, percent of total roads	World Bank, World Development Indicators
Access to electricity, percent of population	World Bank, World Development Indicators
Trade openness ((imports + exports), percent of GDP)	IMF, World Economic Outlook database
De jure financial openness (Chinn–Ito Index)	Chinn and Ito (2006), updated July 2017
Financial Development Index	Sviridzenka (2016)

REFERENCES

- Arellano, M., and O. Bover. 1995. "Another Look at the Instrumental Variable Estimation of Error-Components Models." *Journal of Econometrics* 68: 29–51.
- Asiedu, E. 2002. "On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different?" *World Development*, 30 (1): 107–19.
- . 2006. "Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Stability." *World Economy* 29(1): 63–77.
- Bank for International Settlements (BIS). 2012. "Principles of Financial Market Infrastructures." Basel.
- Barhoumi, K., H. Va, S. Nikaein Towfighian, and R. Maino. Forthcoming. "Public Investment Efficiency in sub-Saharan African Countries: What Lies Ahead?" IMF African Department Paper, International Monetary Fund, Washington, DC.
- Basel Committee on Banking Supervision (BCBS). 2017. "Sound Practices: Implications of Fintech Developments for Banks and Bank Supervisors." Basel.
- Beck, T., and R. Cull. 2014. "Small- and Medium-Sized Enterprise Finance in Africa." Africa Growth Initiative Working Paper 16, Brookings Institution, Washington, DC.
- Beck, T., S. Munzele Maimbo, I. Faye, and T. Triki. 2011. "Financing Africa: Through the Crisis and Beyond." World Bank, Washington, DC.
- Bernanke, B., C. Lown, and B. Friedman. 1991. "The Credit Crunch." *Brookings Papers on Economic Activity* 2: 205–47.
- Blundell, R., and S. Bond. 1998. "Initial Conditions and Moment Restrictions in Dynamic Panel Data Models." *Journal of Econometrics* 87: 115–43.
- Cavallo, E., and C. Daude. 2011. "Public Investment in Developing Countries: A Blessing or a Curse?" *Journal of Comparative Economics* 39(1), 65–81.
- Chinn, M. D., and H. Ito. 2006. "What Matters for Financial Development? Capital Controls, Institutions, and Interactions." *Journal of Development Economics* 81(1): 163–92.
- Čihák, M., A. Demirgüç-Kunt, E. Feyen, and R. Levine. 2012. "Benchmarking Financial Systems around the World," Policy Research Working Paper 6175, World Bank, Washington, DC.
- Dupasquier, C., and P. Osakwe. 2006. "Foreign Direct Investment in Africa: Performance, Challenges, and Responsibilities," *Journal of Asian Economics* 17(2): 241–60.
- Erden, L., and R. G. Holcombe. 2005. "The Effects of Public Investment on Private Investment in Developing Economies." *Public Finance Review* 33(5): 575–602.
- Farole, T., and L. Moberg. 2017. "Special Economic Zones in Africa, Political Economy Challenges and Solutions." *In The Practice of Industrial Policy: Government-Business Coordination in Africa and East Asia*, edited by J. Page and F. Tarp. Oxford: Oxford University Press.
- Freixas, X., L. Laeven, and J-L. Peydró. 2015. "Systemic Risk, Crises, and Macroprudential Regulation." MIT Press, Cambridge, MA.
- International Finance Corporation (IFC). 2017. "Creating Markets in Ghana. County Private Sector Diagnostic." World Bank, Washington, DC.
- International Monetary Fund (IMF). 2005. "Global Imbalances: A Saving and Investment Perspective." Chapter 2, *World Economic Outlook*. Washington, DC, October.
- . 2011. *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, October.
- . 2014a. "Is it Time for an Infrastructure Push? The Macroeconomic Effects of Public Investment." Chapter 3, *World Economic Outlook*. Washington, DC, October.
- . 2014b. *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, October.
- . 2015a. "Making Public Investment More Efficient." Staff Report, Washington, DC.
- . 2015b. "Options for Low Income Countries' Effective and Efficient Use of Tax Incentives for Investments, A Report to the G20 Development Working Group by the IMF, OECD, UN and World Bank." Washington, DC.
- . 2015c. "Private Investment: What's the Holdup?" Chapter 4, *World Economic Outlook*. Washington, DC, April.
- . 2016. *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, April.
- . 2017. *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, April.
- International Monetary Fund (IMF) and World Bank (WB). 2016. "Public-Private Partnerships Fiscal Risk Assessment Mode User Guide." Washington, DC.
- International Monetary Fund (IMF), African Development Bank and World Bank Group. 2017. "The G20 Compact with Africa, A Joint AfDB, IMF and WBG Report." Baden-Baden. www.compactwithafrica.org.
- Jorgenson, D., and C. Siebert. 1968. "A Comparison of Alternative Theories of Corporate Investment Behavior." *American Economic Review* 58: 681–712.

- Kapan, T., and C. Minoiu. 2013. "Balance Sheet Strength and Bank Lending during the Global Financial Crisis." IMF Working Paper 13/102, International Monetary Fund, Washington, DC.
- Lim, J. 2014. "Institutional and Structural Determinants of Investment Worldwide." *Journal of Macroeconomics* 41: 160–77.
- Maimbo, S., and C. Henriquez-Gallegos. 2014. "Interest Rate Caps around the World. Still Popular, but a Blunt Instrument." Policy Research Working Paper 7070, World Bank, Washington, DC.
- Maino, R., A. Massara, H. Perez-Saiz, P. Sharma, and A. Sy. Forthcoming. "FinTech in SSA: A Game Changer." African Department Paper. International Monetary Fund, Washington, DC.
- Mwase, N. Forthcoming. "Policy Reform and Private Investment Growth." IMF Working Paper, International Monetary Fund, Washington, DC.
- Nickell, S. 1981. "Biases in Dynamic with Fixed Effects." *Econometrica* 49 (6): 1417–26.
- Nose, M. 2017. "Enforcing Public-Private Partnership Contract: How do Fiscal Institutions Matter." IMF Working Paper 17/243, Washington, DC.
- Roodman, D. 2009. "How to do xtabond2: An Introduction to Difference and System GMM in Stata." *Stata Journal* 9(1): 86–136.
- Servén, L., 2003. "Real-Exchange-Rate Uncertainty and Private Investment in LDCs." *Review of Economics and Statistics* 85(1): 212–18.
- Steenbergen, V., and B. Javorcik. 2017. "Analyzing the Impact of the Kigali Special Economic Zone on Firm Behavior." Working Paper F-38419-RWA-1, London School of Economics, International Growth Center.
- Svirydzenka, K. 2016. "Introducing a New Broad-based Index of Financial Development." IMF Working Paper 16/5, International Monetary Fund, Washington, DC.
- Sy, A. 2015. "Trends and Developments in African Frontier Bond Markets." Brookings Policy Paper 2015-01, Brookings Institution, Washington, DC.
- United Nations Development Program (UNDP). 2015. "If Africa Builds Nests, Will the Birds Come? Comparative Study on Special Economic Zones in Africa and China." UNDP-IPRRC Working Paper, New York.
- World Bank. 2016. "Benchmarking Public-Private Partnerships Procurement 2017." World Bank, Washington, DC.
- . 2017. "Weak Investment in Uncertain Times: Causes, Implications, and Policy Response." Chapter 3, *Global Economic Prospects*, Washington, DC, January.
- Zeng, D. 2015. "Global Experiences with Special Economic Zones. Focus on China and Africa." World Bank Policy Research Working Paper 7240. World Bank, Washington, DC.

Statistical Appendix

Unless noted otherwise, data and projections presented in this *Regional Economic Outlook* are IMF staff estimates as of March 30, 2018, consistent with the projections underlying the April 2018 *World Economic Outlook* (WEO).

The data and projections cover 45 sub-Saharan African countries followed by 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.

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 90 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 countries, middle-income countries, low-income countries, and countries in fragile situations (see page 90 for the country groupings table).

Classification into 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 2014–16 of more than US\$1,005.00 (World Bank, using the Atlas method).
- The low-income countries had average per capita gross national income in the years

2014–16 equal to or lower than US\$1,005.00 (World Bank, Atlas method).

- The countries in fragile situations had average CPIA scores of 3.2 or less in the years 2014–16 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 90: 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–SA3, SA6–SA7, SA13, SA15–SA16, and SA22–SA23, country group composites 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 database.

In Tables SA8–SA12, SA17–SA21, and SA24–SA26, country group composites 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.

In Tables SA4–SA5 and SA14, country group composites 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 World Economic Outlook database.

In Tables SA27–SA28, country group composites are calculated as the unweighted arithmetic average of data for individual countries.

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	Ethiopia	Equatorial Guinea	Congo, Dem. Rep. of	South Sudan	Côte d'Ivoire
South Sudan	Mali	Gambia, The	Gabon	Eritrea	Tanzania	Eritrea
	Namibia	Guinea-Bissau	Ghana	Ethiopia	Togo	Gambia, The
	Niger	Kenya	Kenya	Gambia, The	Uganda	Guinea
	Sierra Leone	Lesotho	Lesotho	Guinea	Zimbabwe	Guinea-Bissau
	South Africa	Madagascar	Mauritius	Guinea-Bissau		Liberia
	Tanzania	Malawi	Namibia	Liberia		Madagascar
	Zambia	Mauritius	Nigeria	Madagascar		Malawi
	Zimbabwe	Mozambique	Senegal			Mali
		Rwanda	Seychelles			São Tomé & Príncipe
		São Tomé & Príncipe	São Tomé & Príncipe			Sierra Leone
		Senegal	South Africa			South Sudan
		Seychelles	Swaziland			Togo
		Swaziland	Zambia			Zimbabwe
		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	Lesotho	Burkina Faso
Côte d'Ivoire	Chad	Congo, Dem. Rep. of	Rwanda	Congo, Dem. Rep. of	Namibia	Cabo Verde
Guinea-Bissau	Congo, Republic of	Eritrea	Tanzania	Lesotho	South Africa	Côte d'Ivoire
Mali	Equatorial Guinea	Ethiopia	Uganda	Madagascar	Swaziland	Gambia, The
Niger	Gabon	Kenya		Malawi		Ghana
Senegal		Madagascar		Mauritius		Guinea
Togo		Malawi		Mozambique		Guinea-Bissau
		Mauritius		Namibia		Liberia
		Rwanda		Seychelles		Mali
		Seychelles		South Africa		Niger
		Swaziland		Swaziland		Nigeria
		Uganda		Tanzania		Senegal
		Zambia		Zambia		Sierra Leone
		Zimbabwe		Zimbabwe		Togo

List of Country Abbreviations:

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

List of Sources and Footnotes for Appendix Tables SA1—SA28**Tables SA1–SA3, SA6–SA19, SA21, SA24–SA26**

Sources: IMF, Common Surveillance database, and IMF, World Economic Outlook database, April 2018.

¹ Fiscal year data.

² The GDP data are staff estimates and are based on the preliminary results of the 2016 Household Income and Expenditure Survey, and on the ongoing STA technical assistance for National Accounts.

³ In constant 2009 C dollars. The Zimbabwe dollar ceased circulating in early 2009. Data are based on IMF staff estimates of price and exchange rate developments in US dollars. Staff estimates of US dollar values may differ from authorities' estimates.

Note: "..." denotes data not available.

Tables SA4–SA5

Sources: IMF, World Economic Outlook database, April 2018.

¹ In constant 2009 US dollars. The Zimbabwe dollar ceased circulating in early 2009. Data are based on IMF staff estimates of price and exchange rate developments in US dollars. Staff estimates of US dollar values may differ from authorities' estimates.

Note: "..." denotes data not available.

Table SA20

Source: IMF, World Economic Outlook database, April 2018.

¹ Including grants.

² Fiscal year data.

³ In constant 2009 U.S. dollars. The Zimbabwe dollar ceased circulating in early 2009. Data are based on IMF staff estimates of price and exchange rate developments in US dollars. Staff estimates of US dollar values may differ from authorities' estimates.

Note: "..." denotes data not available.

Tables SA22–SA23

Source: IMF, Information Notice System.

¹ An increase indicates appreciation.

Note: "..." denotes data not available.

Table SA26

Sources: IMF, Common Surveillance database, and IMF, World Economic Outlook database, April 2018

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 constant 2009 U.S. dollars. The Zimbabwe dollar ceased circulating in early 2009. Data are based on IMF staff estimates of price and exchange rate developments in US dollars. Staff estimates of US dollar values may differ from authorities' estimates.

Note: "..." denotes data not available.

Table SA27

Source: IMF, International Financial Statistics.

¹ Includes offshore banking assets.

Note: "..." denotes data not available.

Table SA28

Source: IMF, International Financial Statistics.

¹ Loan-to-deposit ratio includes deposits and loans of commercial banks to the public sector.

Note: "..." denotes data not available.

List of Tables:

SA1.	Real GDP Growth	93
SA2.	Real Non-Oil GDP Growth	94
SA3.	Real Per Capita GDP Growth	95
SA4.	Consumer Prices, Average	96
SA5.	Consumer Prices, End of Period	97
SA6.	Total Investment	98
SA7.	Gross National Savings	99
SA8.	Overall Fiscal Balance, Including Grants	100
SA9.	Overall Fiscal Balance, Excluding Grants	101
SA10.	Government Revenue, Excluding Grants	102
SA11.	Government Expenditure	103
SA12.	Government Debt	104
SA13.	Broad Money	105
SA14.	Broad Money Growth	106
SA15.	Claims on Nonfinancial Private Sector Growth (Percent change)	107
SA16.	Claims on Nonfinancial Private Sector (Percent of GDP)	108
SA17.	Exports of Goods and Services	109
SA18.	Imports of Goods and Services	110
SA19.	Trade Balance on Goods	111
SA20.	External Current Account	112
SA21.	Net Foreign Direct Investment	113
SA22.	Real Effective Exchange Rates	114
SA23.	Nominal Effective Exchange Rates	115
SA24.	External Debt, Official Debt, Debtor Based	116
SA25.	Terms of Trade on Goods	117
SA26.	Reserves	118
SA27.	Banking Penetration	119
SA28.	Banking Sector: Loan-to-Deposit Ratio	120

Table SA1. Real GDP Growth
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	17.4	2.4	3.5	3.9	5.2	6.8	4.7	3.0	-0.8	0.7	2.2	2.4
Benin	4.2	2.3	2.1	3.0	4.8	7.2	6.4	2.1	4.0	5.6	6.0	6.3
Botswana	6.0	-7.7	8.6	6.0	4.5	11.3	4.1	-1.7	4.3	2.2	4.6	4.5
Burkina Faso	5.9	3.0	8.4	6.6	6.5	5.8	4.3	3.9	5.9	6.4	6.0	6.0
Burundi	4.4	3.8	5.1	4.0	4.4	5.9	4.5	-4.0	-1.0	0.0	0.1	0.4
Cabo Verde	7.1	-1.3	1.5	4.0	1.1	0.8	0.6	1.0	3.8	4.0	4.3	4.0
Cameroon	4.1	2.2	3.4	4.1	4.5	5.4	5.9	5.7	4.5	3.2	4.0	4.5
Central African Rep.	3.3	1.7	3.0	3.3	4.1	-36.7	1.0	4.8	4.5	4.0	4.0	4.0
Chad	9.8	4.1	13.6	0.1	8.8	5.8	6.9	1.8	-6.4	-3.1	3.5	2.8
Comoros	1.3	1.8	2.1	2.2	3.0	3.5	2.0	1.0	2.2	2.5	3.0	3.0
Congo, Dem. Rep. of	6.1	2.9	7.1	6.9	7.1	8.5	9.5	6.9	2.4	3.4	3.8	4.0
Congo, Rep. of	4.3	7.8	8.7	3.4	3.8	3.3	6.8	2.6	-2.8	-4.6	0.7	4.6
Côte d'Ivoire	1.8	3.3	2.0	-4.2	10.1	9.3	8.8	8.8	8.3	7.8	7.4	7.1
Equatorial Guinea	15.5	1.3	-8.9	6.5	8.3	-4.1	-0.7	-9.1	-9.7	-4.4	-8.5	-2.8
Eritrea	-2.1	3.9	2.2	8.7	7.0	4.6	2.9	2.6	1.9	5.0	4.2	3.8
Ethiopia ¹	11.8	10.0	10.6	11.4	8.7	9.9	10.3	10.4	8.0	10.9	8.5	8.3
Gabon	1.3	-2.3	6.3	7.1	5.3	5.5	4.4	3.9	2.1	0.8	2.7	3.7
Gambia, The	3.3	6.4	6.5	-4.3	5.6	4.8	0.9	4.3	2.2	3.5	5.4	5.2
Ghana	6.2	4.8	7.9	14.0	9.3	7.3	4.0	3.8	3.7	8.4	6.3	7.6
Guinea	3.7	-1.5	4.2	5.6	5.9	3.9	3.7	3.5	6.6	6.7	5.8	5.9
Guinea-Bissau	5.1	3.4	4.6	8.1	-1.7	3.3	1.0	6.1	5.8	5.5	5.5	5.5
Kenya	4.6	3.3	8.4	6.1	4.6	5.9	5.4	5.7	5.8	4.8	5.5	6.0
Lesotho	4.1	3.1	6.3	6.7	4.9	2.2	3.0	2.5	3.1	3.1	1.7	2.6
Liberia ²	7.5	5.2	6.4	7.7	8.4	8.8	0.7	0.0	-1.6	2.5	3.2	4.7
Madagascar	5.8	-4.7	0.3	1.5	3.0	2.3	3.3	3.1	4.2	4.1	5.1	5.6
Malawi	6.1	8.3	6.9	4.9	1.9	5.2	5.7	2.9	2.3	4.0	3.5	4.5
Mali	4.2	4.7	5.4	3.2	-0.8	2.3	7.0	6.0	5.8	5.3	5.0	4.7
Mauritius	4.3	3.0	4.1	3.9	3.2	3.2	3.6	3.5	3.9	3.9	3.9	4.0
Mozambique	8.1	6.4	6.7	7.1	7.2	7.1	7.4	6.6	3.8	2.9	3.0	2.5
Namibia	4.3	0.3	6.0	5.1	5.1	5.6	6.4	6.0	1.1	-1.2	1.2	3.3
Niger	5.2	-0.7	8.4	2.2	11.8	5.3	7.5	4.0	5.0	5.2	5.1	5.4
Nigeria	7.7	8.4	11.3	4.9	4.3	5.4	6.3	2.7	-1.6	0.8	2.1	1.9
Rwanda	9.0	6.3	7.3	7.8	8.8	4.7	7.6	8.9	6.0	6.1	7.2	7.8
São Tomé & Príncipe	5.7	4.0	4.5	4.8	4.5	4.3	4.1	4.0	4.1	4.0	5.0	5.5
Senegal	4.5	2.4	4.3	1.9	4.5	3.6	4.1	6.5	6.7	7.2	7.0	7.0
Seychelles	4.8	-1.1	5.9	5.4	3.7	6.0	4.5	5.0	4.5	4.2	3.3	3.3
Sierra Leone	5.8	3.2	5.3	6.3	15.2	20.7	4.6	-20.5	6.3	3.5	3.5	5.6
South Africa	4.8	-1.5	3.0	3.3	2.2	2.5	1.8	1.3	0.6	1.3	1.5	1.7
South Sudan	...	...	...	...	-52.4	29.3	2.9	-0.2	-13.8	-11.1	-3.8	-2.6
Swaziland	4.2	4.5	3.5	2.0	3.5	4.8	3.6	1.1	-0.0	0.2	-0.9	0.2
Tanzania	6.5	5.4	6.4	7.9	5.1	7.3	7.0	7.0	7.0	6.0	6.4	6.6
Togo	-0.0	5.5	6.1	6.4	6.5	6.1	5.9	5.7	5.1	4.4	4.9	5.2
Uganda	8.3	8.1	7.7	6.8	2.2	4.7	4.6	5.7	2.3	4.5	5.2	5.8
Zambia	7.7	9.2	10.3	5.6	7.6	5.0	4.7	2.9	3.7	3.6	4.0	4.5
Zimbabwe ³	-7.4	7.4	15.4	16.3	13.6	5.3	2.8	1.4	0.7	3.0	2.4	4.2
Sub-Saharan Africa	6.6	3.9	7.0	5.1	4.4	5.3	5.1	3.4	1.4	2.8	3.4	3.7
Median	4.9	3.3	6.1	5.2	4.9	5.3	4.5	3.5	3.8	3.9	4.0	4.5
Excluding Nigeria and South Africa	6.9	3.9	6.1	6.1	5.4	6.6	5.7	4.7	3.6	4.6	4.8	5.4
Oil-exporting countries	8.7	6.7	9.2	4.7	3.9	5.7	5.8	2.6	-1.5	0.5	2.0	2.1
Excluding Nigeria	11.1	2.4	3.5	4.2	2.8	6.4	4.6	2.3	-1.3	-0.3	1.7	2.6
Oil-importing countries	5.3	2.0	5.4	5.4	4.8	5.1	4.6	4.0	3.5	4.4	4.3	4.7
Excluding South Africa	5.6	4.4	7.0	6.7	6.3	6.6	6.1	5.5	5.1	5.9	5.7	6.1
Middle-income countries	6.7	3.6	6.9	4.5	4.3	4.7	4.6	2.7	0.5	1.9	2.7	2.9
Excluding Nigeria and South Africa	7.4	2.8	5.1	5.3	6.1	5.9	4.9	3.9	3.0	3.6	4.1	4.9
Low-income countries	6.3	5.1	7.4	7.1	4.7	7.3	6.7	5.6	4.3	5.5	5.6	5.9
Excluding low-income countries in fragile situations	8.1	6.7	7.8	8.1	6.3	7.3	7.5	7.4	6.1	7.2	6.7	6.8
Countries in fragile situations	3.5	3.3	6.0	3.7	3.8	7.4	6.1	3.9	2.5	3.3	4.3	4.8
CFA franc zone	5.0	2.7	4.0	2.9	6.1	4.5	5.7	4.2	3.4	3.6	4.4	5.0
CEMAC	6.6	2.3	3.6	4.4	5.9	2.8	4.7	2.0	-0.5	-0.1	1.7	3.3
WAEMU	3.5	3.0	4.5	1.3	6.3	6.1	6.7	6.2	6.6	6.6	6.4	6.3
COMESA (SSA members)	6.2	5.7	8.1	7.4	6.1	6.3	6.4	6.0	4.7	5.9	5.6	6.0
EAC-5	6.2	5.2	7.4	6.9	4.5	6.1	5.9	6.1	5.4	5.2	5.8	6.2
ECOWAS	6.8	7.0	9.7	5.0	5.1	5.8	6.1	3.2	0.4	2.6	3.3	3.4
SACU	4.8	-1.6	3.4	3.5	2.4	3.0	2.1	1.3	0.8	1.3	1.6	1.9
SADC	6.2	0.5	4.3	4.4	3.8	4.4	3.6	2.7	1.7	2.2	2.6	3.0

See sources and footnotes on page 91.

Table SA2. Real Non-Oil GDP Growth
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	17.9	8.1	7.6	9.5	5.6	10.8	8.0	1.6	-0.4	1.2	2.0	3.5
Benin	4.2	2.3	2.1	3.0	4.8	7.2	6.4	2.1	4.0	5.6	6.0	6.3
Botswana	6.0	-7.7	8.6	6.0	4.5	11.3	4.1	-1.7	4.3	2.2	4.6	4.5
Burkina Faso	5.9	3.0	8.4	6.6	6.5	5.8	4.3	3.9	5.9	6.4	6.0	6.0
Burundi	4.4	3.8	5.1	4.0	4.4	5.9	4.5	-4.0	-1.0	0.0	0.1	0.4
Cabo Verde	7.1	-1.3	1.5	4.0	1.1	0.8	0.6	1.0	3.8	4.0	4.3	4.0
Cameroon	4.2	3.1	4.4	4.9	4.6	5.2	5.4	4.4	5.1	4.4	4.2	4.9
Central African Rep.	3.3	1.7	3.0	3.3	4.1	-36.7	1.0	4.8	4.5	4.0	4.0	4.0
Chad	6.3	6.3	17.3	0.2	11.5	8.1	7.1	-2.9	-6.0	-0.5	1.4	2.5
Comoros	1.3	1.8	2.1	2.2	3.0	3.5	2.0	1.0	2.2	2.5	3.0	3.0
Congo, Dem. Rep. of	5.9	2.8	7.2	7.0	7.2	8.6	9.5	7.1	2.4	3.7	3.6	3.9
Congo, Rep. of	5.7	3.9	6.4	7.5	9.7	8.2	7.9	5.3	-3.2	-9.2	-6.3	1.6
Côte d'Ivoire	1.8	2.1	2.6	-4.8	12.5	9.0	9.4	8.4	7.9	8.3	7.4	7.1
Equatorial Guinea	29.0	18.2	-10.2	15.9	6.8	1.5	-2.3	-10.1	-5.9	-2.5	-5.3	-0.4
Eritrea	-2.1	3.9	2.2	8.7	7.0	4.6	2.9	2.6	1.9	5.0	4.2	3.8
Ethiopia ¹	11.8	10.0	10.6	11.4	8.7	9.9	10.3	10.4	8.0	10.9	8.5	8.3
Gabon	5.0	-3.3	13.1	10.5	7.1	7.7	5.1	3.8	3.3	1.7	3.0	4.5
Gambia, The	3.3	6.4	6.5	-4.3	5.6	4.8	0.9	4.3	2.2	3.5	5.4	5.2
Ghana	6.2	4.8	7.6	8.6	8.6	6.7	4.0	4.0	5.0	4.0	5.0	6.0
Guinea	3.7	-1.5	4.2	5.6	5.9	3.9	3.7	3.5	6.6	6.7	5.8	5.9
Guinea-Bissau	5.1	3.4	4.6	8.1	-1.7	3.3	1.0	6.1	5.8	5.5	5.5	5.5
Kenya	4.6	3.3	8.4	6.1	4.6	5.9	5.4	5.7	5.8	4.8	5.5	6.0
Lesotho	4.1	3.1	6.3	6.7	4.9	2.2	3.0	2.5	3.1	3.1	1.7	2.6
Liberia ²	7.5	5.2	6.4	7.7	8.4	8.8	0.7	0.0	-1.6	2.5	3.2	4.7
Madagascar	5.8	-4.7	0.3	1.5	3.0	2.3	3.3	3.1	4.2	4.1	5.1	5.6
Malawi	6.1	8.3	6.9	4.9	1.9	5.2	5.7	2.9	2.3	4.0	3.5	4.5
Mali	4.2	4.7	5.4	3.2	-0.8	2.3	7.0	6.0	5.8	5.3	5.0	4.7
Mauritius	4.3	3.0	4.1	3.9	3.2	3.2	3.6	3.5	3.9	3.9	3.9	4.0
Mozambique	8.1	6.4	6.7	7.1	7.2	7.1	7.4	6.6	3.8	2.9	3.0	2.5
Namibia	4.3	0.3	6.0	5.1	5.1	5.6	6.4	6.0	1.1	-1.2	1.2	3.3
Niger	5.2	-0.7	8.4	1.3	4.2	3.2	8.9	5.3	4.6	4.9	5.2	5.5
Nigeria	10.8	10.0	12.4	5.3	5.9	8.3	7.3	3.6	-0.3	0.5	1.3	1.5
Rwanda	9.0	6.3	7.3	7.8	8.8	4.7	7.6	8.9	6.0	6.1	7.2	7.8
São Tomé & Príncipe	5.7	4.0	4.5	4.8	4.5	4.3	4.1	4.0	4.1	4.0	5.0	5.5
Senegal	4.5	2.4	4.3	1.9	4.5	3.6	4.1	6.5	6.7	7.2	7.0	7.0
Seychelles	4.8	-1.1	5.9	5.4	3.7	6.0	4.5	5.0	4.5	4.2	3.3	3.3
Sierra Leone	5.8	3.2	5.3	6.3	15.2	20.7	4.6	-20.5	6.3	3.5	3.5	5.6
South Africa	4.8	-1.5	3.0	3.3	2.2	2.5	1.8	1.3	0.6	1.3	1.5	1.7
South Sudan	...	...	...	...	-0.8	4.1	-17.5	-1.2	-7.0	-18.8	-7.0	-6.6
Swaziland	4.2	4.5	3.5	2.0	3.5	4.8	3.6	1.1	-0.0	0.2	-0.9	0.2
Tanzania	6.5	5.4	6.4	7.9	5.1	7.3	7.0	7.0	7.0	6.0	6.4	6.6
Togo	-0.0	5.5	6.1	6.4	6.5	6.1	5.9	5.7	5.1	4.4	4.9	5.2
Uganda	8.3	8.1	7.7	6.8	2.2	4.7	4.6	5.7	2.3	4.5	5.2	5.8
Zambia	7.7	9.2	10.3	5.6	7.6	5.0	4.7	2.9	3.7	3.6	4.0	4.5
Zimbabwe ³	-7.4	7.4	15.4	16.3	13.6	5.3	2.8	1.4	0.7	3.0	2.4	4.2
Sub-Saharan Africa	7.7	4.9	7.7	5.5	5.2	6.3	5.4	3.5	2.0	2.6	3.1	3.5
Median	5.2	3.6	6.2	5.6	5.1	5.2	4.5	3.8	3.8	4.0	4.0	4.5
Excluding Nigeria and South Africa	7.4	5.0	6.8	6.8	6.2	6.8	5.8	4.4	3.9	4.3	4.6	5.3
Oil-exporting countries	11.5	9.1	10.7	6.2	5.9	8.2	6.6	2.9	-0.3	0.3	1.3	1.9
Excluding Nigeria	5.1	7.0	6.2	8.6	6.1	7.9	4.8	1.1	-0.3	-0.0	1.1	3.0
Oil-importing countries	5.2	1.9	5.4	5.1	4.7	5.0	4.6	4.0	3.6	4.1	4.2	4.6
Excluding South Africa	5.6	4.3	7.0	6.2	6.3	6.5	6.2	5.5	5.2	5.6	5.6	5.9
Middle-income countries	8.1	4.8	7.7	5.1	5.0	6.3	5.2	2.9	1.2	1.7	2.2	2.8
Excluding Nigeria and South Africa	8.4	4.8	6.2	6.5	6.5	7.1	5.6	3.5	3.4	3.3	3.8	4.9
Low-income countries	6.1	5.2	7.6	7.1	6.0	6.6	6.1	5.5	4.5	5.5	5.5	5.8
Excluding low-income countries in fragile situations	8.1	6.7	7.8	8.1	6.0	7.3	7.6	7.4	6.1	7.2	6.7	6.8
Countries in fragile situations	3.3	2.9	6.2	3.9	7.4	6.4	5.1	3.7	2.8	3.0	3.6	4.5
CFA franc zone	6.5	4.3	4.8	4.3	6.8	5.5	5.8	3.8	3.7	4.0	4.1	5.1
CEMAC	9.7	5.9	4.9	7.6	7.1	5.1	4.5	1.1	0.5	0.5	1.0	3.4
WAEMU	3.5	2.6	4.6	1.1	6.5	5.9	7.0	6.2	6.4	6.7	6.4	6.3
COMESA (SSA members)	6.1	5.7	8.1	7.4	6.1	6.4	6.4	6.1	4.7	5.9	5.6	6.0
EAC-5	6.2	5.2	7.4	6.9	4.5	6.1	5.9	6.1	5.4	5.2	5.8	6.2
ECOWAS	9.0	8.1	10.6	4.9	6.3	7.8	6.8	3.8	1.5	2.0	2.7	3.0
SACU	4.8	-1.6	3.4	3.5	2.4	3.0	2.1	1.3	0.8	1.3	1.6	1.9
SADC	6.3	1.2	4.9	5.1	3.9	4.9	4.0	2.5	1.7	2.3	2.6	3.1

See sources and footnotes on page 91.

Table SA3. Real Per Capita GDP Growth
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	14.0	-0.6	0.4	0.8	2.1	3.7	1.7	-0.0	-3.7	-2.2	-0.8	-0.6
Benin	1.2	-0.5	-0.7	0.1	1.9	4.3	3.5	-0.6	1.2	2.8	3.3	3.6
Botswana	4.6	-8.9	7.2	4.8	3.2	10.0	2.9	-2.8	3.1	1.0	3.3	3.3
Burkina Faso	2.7	-0.1	5.2	3.5	3.3	2.7	1.3	0.9	4.1	3.5	3.2	3.2
Burundi	1.8	0.5	1.9	0.9	1.3	2.8	1.5	-6.8	-4.1	-3.1	-2.8	-2.5
Cabo Verde	6.4	-1.5	1.1	3.3	-2.0	-0.4	-0.6	-0.2	2.6	2.7	3.0	2.7
Cameroon	1.3	-0.6	0.9	1.6	2.0	2.8	3.3	3.1	1.9	0.7	1.5	1.9
Central African Rep.	1.5	-0.2	1.1	1.3	2.1	-37.9	-0.9	2.8	2.5	2.0	2.0	2.0
Chad	7.1	1.6	10.8	-2.3	6.2	3.2	4.3	-0.7	-8.7	-5.8	1.0	0.3
Comoros	-1.2	-0.8	-0.5	-0.5	0.3	0.8	-0.7	-1.6	-0.5	-0.2	0.3	0.3
Congo, Dem. Rep. of	3.0	-0.1	4.0	3.8	4.0	5.3	6.3	3.8	-0.6	0.4	0.7	0.9
Congo, Rep. of	1.7	5.2	6.1	0.9	1.3	0.8	4.2	0.1	-5.2	-6.9	-1.7	2.1
Côte d'Ivoire	-0.8	0.6	-0.6	-6.6	7.3	6.5	6.0	6.1	5.6	5.0	4.6	4.3
Equatorial Guinea	12.1	-1.5	-11.5	3.6	5.3	-6.8	-3.4	-11.6	-12.1	-6.9	-10.8	-5.2
Eritrea	-4.7	1.3	-0.3	6.2	4.5	2.3	0.7	0.4	-0.2	3.0	2.2	1.9
Ethiopia ¹	9.1	8.3	8.9	9.6	7.0	8.2	8.6	8.7	6.3	9.1	6.8	6.6
Gabon	-1.5	-5.9	2.4	3.2	1.4	1.5	2.9	2.4	0.7	-0.5	1.3	2.3
Gambia, The	0.1	3.1	3.2	-7.3	2.3	1.6	-2.2	1.1	-0.8	0.3	2.2	2.0
Ghana	3.6	2.2	5.2	11.2	6.6	4.6	1.4	1.2	1.1	5.7	3.6	4.9
Guinea	1.4	-4.1	1.5	2.9	3.2	1.3	1.1	1.0	4.0	4.1	3.2	3.3
Guinea-Bissau	2.8	1.1	3.8	5.8	-3.8	1.0	-1.2	3.8	3.5	3.2	3.2	3.2
Kenya	1.8	0.5	6.1	3.4	1.5	3.1	2.4	2.8	2.9	1.9	2.6	3.2
Lesotho	4.0	2.9	6.0	6.4	4.6	1.9	2.7	1.7	2.6	2.7	1.4	1.7
Liberia ²	5.9	0.9	2.0	5.0	5.7	6.1	-1.9	-2.5	-3.9	0.1	0.8	2.3
Madagascar	2.8	-7.4	-2.5	-1.4	0.2	-0.6	0.5	0.3	1.3	1.3	2.3	2.7
Malawi	3.5	5.3	3.9	1.9	-1.0	2.3	2.7	0.1	-0.6	1.1	0.6	1.6
Mali	0.9	1.3	2.1	0.1	-3.7	-0.7	3.6	2.6	2.4	1.9	1.6	1.4
Mauritius	3.8	2.8	3.9	3.7	2.9	3.0	3.4	3.4	3.8	3.5	3.5	3.6
Mozambique	5.0	3.4	3.7	4.1	4.2	4.2	4.5	3.7	1.0	0.2	0.2	-0.2
Namibia	2.9	-1.2	4.5	3.5	3.1	3.7	4.4	4.0	-0.8	-2.0	0.4	2.4
Niger	1.5	-4.1	5.1	-0.9	8.5	2.1	4.3	0.8	1.9	2.0	2.0	2.2
Nigeria	4.9	5.5	8.3	2.1	1.5	2.6	3.5	-0.1	-4.2	-1.9	-0.6	-0.8
Rwanda	6.8	4.1	4.1	5.7	5.7	2.4	5.0	6.3	3.4	3.5	4.6	5.2
São Tomé & Príncipe	3.0	1.0	1.5	1.9	1.8	1.7	1.6	1.4	1.6	1.6	2.6	3.2
Senegal	1.7	-0.4	1.3	-1.1	1.4	0.5	1.1	3.4	3.7	4.1	4.0	4.0
Seychelles	3.7	-1.5	3.0	8.2	2.7	4.1	2.9	3.0	3.8	3.5	2.2	2.3
Sierra Leone	2.3	0.8	3.0	3.9	12.6	18.0	1.3	-22.2	4.0	1.3	1.3	3.3
South Africa	3.5	-2.9	1.6	1.8	0.7	1.0	0.3	-0.3	-1.0	-0.3	-0.1	0.1
South Sudan	...	...	...	...	-54.1	25.2	-0.2	-3.1	-16.3	-13.6	-6.7	-5.5
Swaziland	3.2	3.4	2.4	0.8	2.2	3.6	2.4	-0.1	-1.2	-1.1	-2.1	-1.1
Tanzania	3.6	2.7	3.8	5.3	2.7	5.2	4.9	4.9	4.8	3.1	4.3	4.5
Togo	-3.4	2.7	3.3	3.6	3.7	3.3	3.2	3.1	2.5	1.8	2.3	2.6
Uganda	4.7	4.5	4.2	3.4	-0.9	1.7	1.6	2.6	-0.7	1.4	2.1	2.6
Zambia	4.7	6.0	7.1	2.4	4.4	1.8	1.5	-0.2	0.6	0.5	0.9	1.3
Zimbabwe ³	-8.1	6.4	14.4	15.2	8.4	2.4	0.2	-1.1	-1.9	0.4	-0.2	1.5
Sub-Saharan Africa	4.2	1.5	4.6	2.7	1.9	2.9	2.7	1.0	-0.9	0.4	1.0	1.3
Median	2.9	0.9	3.3	3.3	2.7	2.6	2.4	1.0	1.2	1.3	2.0	2.3
Excluding Nigeria and South Africa	4.2	1.2	3.5	3.5	2.7	3.9	3.2	2.2	1.2	2.0	2.3	2.9
Oil-exporting countries	5.8	3.8	6.2	1.9	1.0	2.8	3.0	-0.2	-4.2	-2.2	-0.7	-0.6
Excluding Nigeria	8.0	-0.5	0.7	1.3	-0.1	3.4	1.9	-0.4	-3.9	-2.9	-1.0	0.0
Oil-importing countries	3.2	-0.1	3.3	3.3	2.5	2.9	2.4	1.8	1.4	2.1	2.1	2.5
Excluding South Africa	2.9	1.8	4.5	4.2	3.7	4.1	3.6	3.0	2.7	3.3	3.2	3.6
Middle-income countries	4.4	1.2	4.5	2.2	1.9	2.3	2.2	0.3	-1.8	-0.4	0.3	0.6
Excluding Nigeria and South Africa	4.7	0.2	2.6	2.6	3.3	3.2	2.3	1.3	0.5	1.1	1.6	2.3
Low-income countries	3.5	2.5	4.7	4.5	2.0	4.8	4.1	3.1	1.9	2.9	3.2	3.4
Excluding low-income countries in fragile situations	5.1	4.0	5.2	5.6	3.8	5.0	5.2	5.1	3.8	4.7	4.4	4.5
Countries in fragile situations	0.9	0.6	3.3	1.1	0.9	4.5	3.2	1.2	-0.2	0.5	1.5	2.0
CFA franc zone	2.1	-0.2	1.2	0.0	3.2	1.6	3.0	1.6	0.8	1.0	1.8	2.4
CEMAC	3.7	-0.5	0.8	1.6	3.0	-0.0	2.3	-0.3	-2.8	-2.4	-0.6	0.9
WAEMU	0.6	0.1	1.6	-1.5	3.4	3.2	3.7	3.3	3.8	3.6	3.5	3.4
COMESA (SSA members)	3.5	3.2	5.7	4.9	3.3	3.8	3.9	3.6	2.3	3.4	3.1	3.5
EAC-5	3.2	2.3	4.7	4.1	1.6	3.5	3.2	3.5	2.8	2.2	3.2	3.6
ECOWAS	3.9	4.1	6.8	2.2	2.3	3.0	3.2	0.4	-2.2	-0.1	0.6	0.6
SACU	3.5	-2.9	2.0	2.0	1.0	1.5	0.6	-0.2	-0.8	-0.3	0.1	0.3
SADC	4.4	-1.3	2.4	2.5	1.8	2.4	1.6	0.6	-0.3	0.1	0.6	0.9

See sources and footnotes on page 91.

Table SA4. Consumer Prices
(Annual average, percent change)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	20.9	13.7	14.5	13.5	10.3	8.8	7.3	10.3	32.4	31.7	27.9	17.0
Benin	3.9	0.4	2.2	2.7	6.7	1.0	-1.1	0.3	-0.8	0.1	2.9	2.9
Botswana	9.4	8.1	6.9	8.5	7.5	5.9	4.4	3.1	2.8	3.3	3.7	3.8
Burkina Faso	3.8	0.9	-0.6	2.8	3.8	0.5	-0.3	0.9	-0.2	0.4	2.0	2.0
Burundi	11.4	10.6	6.5	9.6	18.2	7.9	4.4	5.6	5.5	16.6	12.7	22.1
Cabo Verde	2.9	1.0	2.1	4.5	2.5	1.5	-0.2	0.1	-1.4	0.8	1.0	1.5
Cameroon	2.7	3.0	1.3	2.9	2.4	2.1	1.9	2.7	0.9	0.6	1.1	1.3
Central African Rep.	3.5	3.5	1.5	1.2	5.9	6.6	11.6	4.5	4.6	3.8	3.5	3.2
Chad	1.5	10.1	-2.1	1.9	7.7	0.2	1.7	6.8	-1.1	-0.9	2.1	2.6
Comoros	4.0	4.8	3.9	2.2	5.9	1.6	1.3	2.0	1.8	1.0	2.0	2.0
Congo, Dem. Rep. of	14.6	46.1	23.5	14.9	0.9	0.9	1.2	1.0	18.2	41.5	25.8	13.7
Congo, Rep. of	3.7	4.3	0.4	1.8	5.0	4.6	0.9	3.2	3.2	0.5	1.5	1.6
Côte d'Ivoire	3.2	1.0	1.4	4.9	1.3	2.6	0.4	1.2	0.7	0.8	1.7	2.0
Equatorial Guinea	4.4	5.7	5.3	4.8	3.4	3.2	4.3	1.7	1.4	0.7	0.6	2.8
Eritrea	16.4	33.0	11.2	3.9	6.0	6.5	10.0	9.0	9.0	9.0	9.0	9.0
Ethiopia	18.0	8.5	8.1	33.2	24.1	8.1	7.4	10.1	7.3	9.9	11.2	8.6
Gabon	0.9	1.9	1.4	1.3	2.7	0.5	4.5	-0.1	2.1	3.0	2.8	2.5
Gambia, The	6.2	4.6	5.0	4.8	4.6	5.2	6.3	6.8	7.2	8.0	5.8	5.0
Ghana	13.3	13.1	6.7	7.7	7.1	11.7	15.5	17.2	17.5	12.4	8.7	8.0
Guinea	25.0	4.7	15.5	21.4	15.2	11.9	9.7	8.2	8.2	8.9	8.2	8.0
Guinea-Bissau	4.2	-1.6	1.1	5.1	2.1	0.8	-1.0	1.5	1.5	1.1	2.0	2.2
Kenya	8.3	10.6	4.3	14.0	9.4	5.7	6.9	6.6	6.3	8.0	4.8	5.0
Lesotho	6.9	5.8	3.3	6.0	5.5	5.0	4.6	4.3	6.2	5.6	5.5	5.5
Liberia	9.8	7.4	7.3	8.5	6.8	7.6	9.9	7.7	8.8	12.4	11.7	10.5
Madagascar	12.5	9.0	9.2	9.5	5.7	5.8	6.1	7.4	6.7	8.1	7.8	6.8
Malawi	11.5	8.4	7.4	7.6	21.3	28.3	23.8	21.9	21.7	11.5	10.4	7.6
Mali	3.1	2.2	1.3	3.1	5.3	-0.6	0.9	1.4	-1.8	1.8	1.4	1.7
Mauritius	7.4	2.5	2.9	6.5	3.9	3.5	3.2	1.3	1.0	3.7	5.1	4.5
Mozambique	10.2	3.3	12.7	10.4	2.1	4.2	2.3	2.4	19.2	15.3	6.7	5.7
Namibia	5.4	9.5	4.9	5.0	6.7	5.6	5.3	3.4	6.7	6.1	5.8	5.8
Niger	4.0	4.3	-2.8	2.9	0.5	2.3	-0.9	1.0	0.2	2.4	3.9	2.0
Nigeria	11.6	12.5	13.7	10.8	12.2	8.5	8.0	9.0	15.7	16.5	14.0	14.8
Rwanda	10.9	10.3	2.3	5.7	6.3	4.2	1.8	2.5	5.7	4.8	2.8	5.0
São Tomé & Príncipe	20.8	17.0	13.3	14.3	10.6	8.1	7.0	5.3	4.6	5.5	5.4	4.7
Senegal	3.3	-2.2	1.2	3.4	1.4	0.7	-1.1	0.1	0.9	1.4	1.5	1.5
Seychelles	9.0	31.8	-2.4	2.6	7.1	4.3	1.4	4.0	-1.0	2.9	3.8	3.0
Sierra Leone	12.5	9.2	17.8	18.5	13.8	9.8	8.3	9.0	11.5	18.0	13.9	11.2
South Africa	5.5	7.1	4.3	5.0	5.6	5.8	6.1	4.6	6.3	5.3	5.3	5.3
South Sudan	...	...	...	...	45.1	-0.0	1.7	52.8	379.8	187.9	104.1	108.2
Swaziland	6.2	7.4	4.5	6.1	8.9	5.6	5.7	5.0	8.0	6.3	5.4	5.4
Tanzania	6.6	12.1	7.2	12.7	16.0	7.9	6.1	5.6	5.2	5.3	4.8	5.0
Togo	3.8	3.7	1.4	3.6	2.6	1.8	0.2	1.8	0.9	-0.7	0.4	1.2
Uganda	7.5	13.0	3.7	15.0	12.7	4.9	3.1	5.4	5.5	5.6	3.6	4.3
Zambia	13.7	13.4	8.5	8.7	6.6	7.0	7.8	10.1	17.9	6.6	8.2	8.0
Zimbabwe ¹	39.9	6.2	3.0	3.5	3.7	1.6	-0.2	-2.4	-1.6	1.3	5.2	6.3
Sub-Saharan Africa	8.8	9.8	8.1	9.4	9.2	6.6	6.3	7.0	11.3	11.0	9.5	8.9
Median	7.2	7.3	4.3	5.4	6.0	4.9	4.4	4.3	5.5	5.3	5.1	5.0
Excluding Nigeria and South Africa	9.2	9.4	6.5	10.6	9.1	5.7	5.3	6.7	10.7	10.3	8.7	7.1
Oil-exporting countries	10.9	11.4	12.0	9.9	11.1	7.5	7.1	8.8	17.7	17.2	14.6	13.9
Excluding Nigeria	9.0	8.6	7.3	7.5	8.3	4.8	4.6	8.4	23.2	19.1	16.1	11.6
Oil-importing countries	7.7	8.6	5.4	9.0	7.9	5.9	5.7	5.6	6.9	7.1	6.3	5.7
Excluding South Africa	9.3	9.7	6.2	11.6	9.3	6.0	5.5	6.1	7.2	8.0	6.8	5.9
Middle-income countries	8.6	9.5	8.5	8.3	8.4	6.9	6.8	7.1	11.6	11.1	9.7	9.3
Excluding Nigeria and South Africa	8.8	8.3	6.1	8.3	6.4	5.9	6.0	6.7	11.1	9.8	8.4	6.6
Low-income countries	9.8	10.8	6.9	13.4	12.2	5.4	4.5	6.6	10.3	10.9	8.9	7.6
Excluding low-income countries in fragile situations	9.4	8.9	5.8	16.6	14.4	6.0	4.6	5.9	6.0	6.8	6.5	5.8
Countries in fragile situations	8.3	10.4	6.7	7.4	7.4	4.2	3.4	6.2	13.3	13.3	10.1	8.4
CFA franc zone	3.0	2.7	1.1	3.2	3.3	1.7	1.2	1.8	0.6	0.9	1.7	1.9
CEMAC	2.7	4.5	1.5	2.7	3.8	2.2	2.7	2.7	1.3	0.9	1.6	1.9
WAEMU	3.4	0.9	0.8	3.6	2.8	1.3	-0.1	1.0	0.1	1.0	1.9	1.9
COMESA (SSA members)	11.5	13.0	7.3	15.4	11.3	6.1	5.8	6.7	8.4	10.3	8.8	7.3
EAC-5	7.8	11.6	5.1	13.2	12.3	6.3	5.5	5.7	5.7	6.5	4.6	5.1
ECOWAS	10.3	10.3	11.1	9.6	10.3	7.6	7.3	8.2	12.8	13.1	11.1	11.4
SACU	5.7	7.2	4.4	5.1	5.8	5.8	6.0	4.5	6.2	5.2	5.2	5.3
SADC	7.9	9.8	6.9	7.6	7.1	6.3	6.0	5.5	10.4	10.1	9.0	7.2

See sources and footnotes on page 91.

Table SA5. Consumer Prices
(End of period, percent change)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	17.3	14.0	15.3	11.4	9.0	7.7	7.5	14.3	41.9	26.3	24.6	15.0
Benin	4.1	-0.5	4.0	1.8	6.8	-1.8	-0.8	2.3	-2.7	3.0	2.8	3.0
Botswana	9.9	5.8	7.4	9.2	7.4	4.1	3.8	3.1	3.0	2.9	3.5	3.7
Burkina Faso	4.1	-1.8	-0.3	5.1	1.7	0.1	-0.1	1.3	-1.6	2.1	2.0	2.0
Burundi	12.5	4.6	4.1	14.9	11.8	9.0	3.7	7.1	9.5	10.5	18.9	24.7
Cabo Verde	3.5	-0.4	3.4	3.6	4.1	0.1	-0.4	-0.5	-0.3	0.3	1.0	1.5
Cameroon	3.1	0.9	2.6	2.7	2.5	1.7	2.6	1.5	0.3	0.8	1.1	1.3
Central African Rep.	4.7	-1.2	2.3	4.3	5.9	5.9	9.7	4.8	4.7	3.6	3.6	3.4
Chad	3.3	4.7	-2.2	10.7	2.1	0.9	3.7	4.1	-4.9	7.2	-2.3	5.4
Comoros	4.4	2.2	6.7	4.9	1.0	3.5	0.0	2.0	0.8	2.9	3.5	2.0
Congo, Dem. Rep. of	17.2	53.4	9.8	8.7	2.8	1.1	1.0	0.9	23.6	55.0	29.5	15.8
Congo, Rep. of	6.0	-1.8	2.6	1.8	7.5	2.1	0.5	4.1	-0.0	1.8	1.8	1.9
Côte d'Ivoire	3.9	-1.7	5.1	2.0	3.4	0.4	0.9	1.4	-0.2	1.1	2.0	2.0
Equatorial Guinea	4.3	5.0	5.4	4.9	2.6	4.9	2.6	1.6	2.0	-0.2	1.3	4.0
Eritrea	17.5	22.2	14.2	12.3	2.9	9.5	10.0	9.0	9.0	9.0	9.0	9.0
Ethiopia	19.3	7.1	14.6	35.9	15.0	7.7	7.1	10.0	6.7	13.6	10.0	8.0
Gabon	1.1	0.9	0.7	2.3	2.2	3.3	1.7	-1.2	4.1	3.0	2.8	2.5
Gambia, The	5.2	2.7	5.8	4.4	4.9	5.6	6.9	6.7	7.9	6.9	5.1	4.8
Ghana	13.7	9.5	6.9	8.4	8.1	13.5	17.0	17.7	15.4	11.8	8.0	8.0
Guinea	24.6	7.9	20.8	19.0	12.8	10.5	9.0	7.3	8.7	9.5	8.0	8.0
Guinea-Bissau	4.9	-6.4	5.7	3.4	1.6	-0.1	-0.1	2.4	1.6	-1.3	2.0	2.3
Kenya	9.0	8.0	5.8	18.9	3.2	7.1	6.0	8.0	6.3	4.5	5.1	5.0
Lesotho	7.2	3.5	3.6	7.2	5.0	5.5	2.0	7.5	4.4	6.0	5.5	5.5
Liberia	9.5	9.7	6.6	11.4	7.7	8.5	7.7	8.0	12.5	13.9	11.0	10.0
Madagascar	13.6	8.0	10.2	6.9	5.8	6.3	6.0	7.6	7.0	8.1	7.9	6.2
Malawi	11.6	7.6	6.3	9.8	34.6	23.5	24.2	24.9	20.0	7.1	9.0	7.5
Mali	3.7	1.7	1.9	5.3	2.4	0.0	1.2	1.0	-0.8	1.1	1.6	1.7
Mauritius	7.3	1.5	6.1	4.9	3.2	4.1	0.2	1.3	2.3	4.2	5.9	4.7
Mozambique	9.2	4.2	16.6	5.5	2.2	3.0	1.1	11.1	21.1	7.2	6.5	5.5
Namibia	6.1	7.9	3.1	7.4	6.4	4.9	4.6	3.7	7.3	5.2	5.7	5.8
Niger	5.3	-3.1	1.4	1.4	0.7	1.1	-0.6	2.2	-2.2	4.8	1.9	2.1
Nigeria	10.3	13.9	11.8	10.3	12.0	8.0	8.0	9.6	18.5	15.4	14.5	16.6
Rwanda	11.4	5.7	0.2	8.3	3.9	3.6	2.1	4.5	7.3	0.7	5.0	5.0
São Tomé & Príncipe	21.9	16.1	12.9	11.9	10.4	7.1	6.4	4.0	5.1	5.8	5.0	4.5
Senegal	3.8	-4.5	4.3	2.7	1.1	-0.1	-0.8	0.4	2.1	0.3	1.5	1.5
Seychelles	16.1	-2.5	0.4	5.5	5.8	3.4	0.5	3.2	-0.2	3.5	3.8	3.3
Sierra Leone	12.4	10.8	18.4	16.9	12.0	8.5	9.8	10.1	17.4	13.8	13.0	9.9
South Africa	6.4	6.3	3.5	6.2	5.7	5.4	5.3	5.3	6.7	4.7	5.6	5.3
South Sudan	...	...	...	...	25.2	-8.8	9.9	109.9	479.7	117.7	96.4	125.1
Swaziland	7.7	4.5	4.5	7.8	8.3	4.4	6.2	4.9	9.0	4.7	6.0	4.9
Tanzania	7.1	12.2	5.6	19.8	12.1	5.6	4.8	6.8	5.0	4.0	5.0	5.0
Togo	4.9	0.6	3.8	1.5	2.8	-0.4	1.8	1.6	0.5	-1.6	2.4	0.2
Uganda	8.4	10.9	1.5	23.7	4.3	5.5	2.1	8.4	5.7	3.3	4.0	4.5
Zambia	13.4	9.9	7.9	7.2	7.3	7.1	7.9	21.1	7.5	6.1	8.0	8.0
Zimbabwe ¹	...	-7.7	3.2	4.9	2.9	0.3	-0.8	-2.5	-0.9	3.5	7.9	4.9
Sub-Saharan Africa	8.9	9.1	7.7	10.0	8.2	6.1	6.1	8.1	12.5	10.3	9.6	9.3
Median	7.3	4.7	5.3	7.0	5.0	4.4	3.7	4.5	5.1	4.7	5.1	4.9
Excluding Nigeria and South Africa	9.6	7.6	7.1	11.8	6.9	5.2	5.2	8.5	11.3	9.6	8.4	7.0
Oil-exporting countries	9.8	12.0	10.8	9.5	10.5	6.8	7.1	10.1	21.0	15.6	14.4	15.1
Excluding Nigeria	8.4	7.3	8.0	7.3	6.6	4.0	5.0	11.6	27.8	16.1	14.3	11.4
Oil-importing countries	8.4	7.1	5.5	10.4	6.5	5.5	5.3	6.7	6.8	6.8	6.5	5.7
Excluding South Africa	10.0	7.7	6.8	13.3	7.0	5.6	5.2	7.5	6.9	7.9	6.9	5.9
Middle-income countries	8.5	9.1	7.8	8.5	8.1	6.6	6.6	8.0	12.9	10.0	9.8	9.8
Excluding Nigeria and South Africa	8.8	6.2	7.2	8.4	5.5	5.9	5.9	8.4	11.6	8.2	7.9	6.3
Low-income countries	10.7	9.3	7.1	15.9	8.5	4.4	4.4	8.6	11.0	11.2	8.9	7.7
Excluding low-income countries in fragile situations	10.1	7.5	7.1	20.6	9.1	5.0	3.9	7.5	5.7	6.9	6.2	5.6
Countries in fragile situations	9.3	8.2	6.4	7.0	6.9	2.9	4.1	8.1	14.7	14.0	10.4	9.0
CFA franc zone	3.7	0.1	2.8	3.5	2.9	1.2	1.3	1.6	-0.1	1.7	1.6	2.1
CEMAC	3.4	1.9	2.2	4.0	3.2	2.5	2.4	1.9	0.5	2.0	1.1	2.5
WAEMU	4.0	-1.6	3.3	3.0	2.7	0.0	0.3	1.3	-0.5	1.4	2.0	1.9
COMESA (SSA members)	12.5	10.7	7.5	17.6	7.4	6.3	5.3	8.5	7.9	10.8	9.1	7.2
EAC-5	8.4	9.9	4.4	19.6	6.6	6.1	4.5	7.5	5.9	4.0	5.0	5.2
ECOWAS	9.6	10.7	10.2	9.1	10.2	7.1	7.4	8.7	14.6	12.3	11.3	12.6
SACU	6.5	6.3	3.6	6.3	5.8	5.3	5.2	5.1	6.6	4.7	5.5	5.2
SADC	8.4	9.0	6.1	8.2	6.9	5.6	5.3	7.2	11.5	9.3	9.0	7.0

See sources and footnotes on page 91.

Table SA6. Total Investment
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	27.7	42.8	28.2	26.4	26.7	26.1	27.5	34.5	26.9	26.5	24.9	26.5
Benin	20.7	21.9	23.1	24.1	22.6	27.8	28.6	25.6	24.6	28.4	28.3	26.3
Botswana	30.0	37.3	38.1	38.6	38.8	32.7	27.9	32.0	28.6	28.1	29.9	30.6
Burkina Faso	18.5	17.9	18.0	15.4	14.9	18.7	21.5	13.8	15.8	17.7	16.7	17.0
Burundi	14.6	14.2	15.1	14.7	14.3	15.4	15.9	11.0	9.0	7.0	6.0	5.0
Cabo Verde	40.8	43.8	47.6	47.5	37.2	31.6	37.0	38.8	37.4	38.4	36.0	37.8
Cameroon	20.9	29.1	28.0	28.0	27.9	28.3	29.3	27.7	27.5	26.2	26.2	26.4
Central African Rep.	10.1	13.2	14.3	12.2	15.0	8.7	10.2	13.9	13.7	13.2	14.0	14.6
Chad	22.5	30.1	34.4	28.4	31.4	27.4	30.4	26.9	16.7	21.2	22.8	24.0
Comoros	10.7	12.4	15.4	14.9	16.8	20.4	18.5	18.4	21.0	21.2	21.2	21.1
Congo, Dem. Rep. of	11.0	13.9	13.7	10.1	14.2	16.8	22.8	20.2	11.8	12.0	12.2	13.2
Congo, Rep. of	24.4	27.9	22.2	25.7	31.0	33.0	48.0	47.2	46.3	23.7	19.2	18.7
Côte d'Ivoire	10.0	8.7	13.4	4.0	16.1	20.7	19.7	20.1	20.7	21.1	22.6	24.0
Equatorial Guinea	29.5	39.4	38.1	32.0	41.1	30.3	29.5	21.7	10.4	7.0	7.5	22.8
Eritrea	15.9	9.3	9.3	10.0	9.5	9.3	8.5	8.1	8.1	7.8	7.2	7.0
Ethiopia ¹	22.7	24.7	25.5	32.1	37.1	34.1	38.0	39.4	38.0	39.0	37.7	38.6
Gabon	25.4	29.1	26.1	23.8	29.1	33.3	35.9	34.8	34.2	31.5	30.9	31.8
Gambia, The	21.1	19.6	21.3	18.9	27.8	20.0	20.9	19.7	18.7	27.7	30.5	27.3
Ghana	22.2	21.4	25.9	12.8	17.0	13.3	18.8	16.7	14.5	13.6	14.2	15.3
Guinea	12.0	6.3	5.5	9.1	14.7	11.6	6.4	7.3	25.2	22.3	17.9	13.8
Guinea-Bissau	11.0	10.8	10.8	9.9	6.7	7.2	11.4	8.2	8.0	8.8	11.6	11.8
Kenya	18.9	19.3	20.7	21.7	21.5	20.1	22.4	17.7	14.9	17.0	18.1	19.1
Lesotho	22.6	27.9	26.8	25.2	31.4	30.2	30.7	28.7	27.9	32.3	37.1	35.4
Liberia ²	...	...	...	...	...	...	...	...	...	...	...	...
Madagascar	29.7	35.6	23.4	17.6	17.6	15.9	15.6	13.1	15.3	15.9	17.4	19.8
Malawi	19.4	24.4	22.8	12.4	12.0	12.7	12.0	12.2	10.8	13.7	13.4	12.9
Mali	22.4	22.0	24.0	19.7	17.2	17.8	20.4	18.4	18.6	18.9	19.6	19.5
Mauritius	25.6	21.3	23.7	26.0	24.8	25.2	23.0	21.2	20.4	20.5	20.6	20.7
Mozambique	15.1	14.6	18.3	25.7	47.4	54.5	55.4	45.3	42.7	44.0	54.7	86.3
Namibia	23.7	24.7	22.9	18.9	25.6	21.2	34.8	32.9	25.6	22.7	23.5	23.7
Niger	23.2	32.1	49.5	43.9	39.5	40.2	39.3	42.5	37.0	36.6	38.3	38.9
Nigeria	16.5	19.4	17.3	16.2	14.9	14.9	15.8	15.5	12.6	12.9	13.2	13.4
Rwanda	18.1	23.4	23.0	23.5	25.8	26.5	25.3	26.5	25.9	23.4	24.9	25.9
São Tomé & Príncipe	41.6	38.9	55.9	44.6	35.6	28.2	25.2	32.1	27.7	32.2	22.3	22.7
Senegal	26.3	22.1	22.1	25.6	29.3	27.5	24.5	25.2	26.9	26.3	27.6	27.6
Seychelles	28.6	27.3	36.6	35.4	38.1	38.5	37.7	33.8	30.2	30.7	29.9	30.9
Sierra Leone	10.2	10.0	31.1	41.9	27.9	12.7	13.1	13.8	12.3	19.1	18.4	17.8
South Africa	20.2	20.7	19.5	19.7	20.0	21.2	20.5	21.0	19.4	18.6	18.7	18.8
South Sudan	...	...	...	5.5	10.7	12.8	20.6	14.5	17.3	8.4	6.3	6.7
Swaziland	16.6	15.2	14.3	12.8	12.1	12.7	12.9	12.1	11.7	11.7	12.0	11.6
Tanzania	26.3	25.1	27.3	33.2	28.5	30.3	30.1	27.2	24.6	27.9	30.0	30.8
Togo	21.3	21.1	21.6	25.7	23.3	29.6	27.9	32.2	31.1	23.4	27.7	26.2
Uganda	29.3	27.1	26.7	28.7	28.4	27.4	25.7	24.8	24.4	25.0	27.6	30.7
Zambia	33.2	30.3	29.9	33.6	31.8	34.0	34.0	42.8	41.8	41.9	43.1	42.5
Zimbabwe ³	...	14.7	22.4	20.3	12.0	11.5	11.9	12.6	15.6	19.6	18.8	18.2
Sub-Saharan Africa	20.3	22.6	21.3	20.5	21.1	21.1	22.1	22.0	19.8	19.9	20.4	21.4
Median	21.7	22.0	23.0	23.6	25.2	23.2	23.8	21.5	20.8	21.8	21.7	22.7
Excluding Nigeria and South Africa	22.6	25.6	24.8	23.7	25.7	25.1	26.9	26.5	24.4	24.5	25.1	26.7
Oil-exporting countries	19.1	24.3	20.4	18.7	18.7	18.4	19.7	19.9	16.4	15.9	16.0	16.7
Excluding Nigeria	25.5	36.6	29.0	25.0	28.5	27.3	30.0	31.4	26.6	24.1	23.3	25.2
Oil-importing countries	21.1	21.4	21.9	21.8	22.9	23.2	23.9	23.5	22.2	22.6	23.3	24.4
Excluding South Africa	21.7	21.9	23.4	23.2	24.7	24.4	25.9	25.0	23.7	24.6	25.6	27.0
Middle-income countries	19.9	22.6	20.6	19.5	19.8	19.8	20.6	20.8	18.3	17.9	18.2	18.7
Excluding Nigeria and South Africa	23.3	28.1	25.6	23.3	25.7	24.6	26.6	27.1	23.9	23.0	23.2	24.3
Low-income countries	21.8	22.6	23.8	24.1	25.7	25.7	27.3	25.9	24.8	26.2	27.1	29.1
Excluding low-income countries in fragile situations	23.7	24.2	26.0	30.0	31.4	31.9	33.1	31.6	30.1	31.7	33.0	35.7
Countries in fragile situations	17.3	18.5	19.3	14.7	17.8	18.2	20.7	19.5	18.9	17.8	17.9	18.3
CFA franc zone	20.8	24.2	25.2	22.6	26.1	26.6	28.1	26.2	24.7	23.1	23.6	24.8
CEMAC	23.7	30.9	29.4	27.5	31.4	29.7	32.9	30.4	27.0	23.2	23.1	25.4
WAEMU	18.1	17.7	21.2	17.8	21.0	23.6	23.6	22.6	22.7	23.0	24.0	24.4
COMESA (SSA members)	22.5	23.0	23.0	24.2	24.9	24.4	26.1	25.8	24.3	25.5	26.0	27.1
EAC-5	23.3	23.1	24.2	27.1	25.4	25.4	25.8	22.9	20.8	22.7	24.5	25.8
ECOWAS	17.2	19.1	18.5	16.4	16.2	16.1	17.1	16.6	14.7	15.0	15.5	15.8
SACU	20.7	21.4	20.3	20.4	20.9	21.6	21.2	21.8	19.9	19.2	19.4	19.6
SADC	22.1	24.7	22.3	22.5	22.8	23.7	23.9	24.9	22.2	22.3	22.8	24.1

See sources and footnotes on page 91.

Table SA7. Gross National Savings
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	42.3	32.7	37.3	39.0	38.8	32.8	24.5	24.5	21.8	22.0	22.7	26.4
Benin	14.0	13.6	14.9	16.8	15.1	20.4	20.0	16.6	15.2	19.0	19.8	18.4
Botswana	40.4	25.2	34.7	41.4	40.3	41.5	43.2	40.2	40.2	38.9	38.2	38.1
Burkina Faso	8.1	13.2	15.8	11.5	8.2	7.4	13.4	5.3	8.5	9.3	8.7	10.1
Burundi	1.5	9.2	3.7	1.0	-3.8	-4.3	-3.4	-6.7	-4.1	-5.7	-7.2	-6.9
Cabo Verde	31.3	29.2	35.2	31.2	24.6	26.8	27.9	35.6	34.7	29.6	26.5	27.8
Cameroon	19.5	25.9	25.5	25.2	24.6	24.8	25.3	23.9	24.3	23.7	23.7	24.1
Central African Rep.	4.6	4.1	4.1	4.6	10.4	5.7	4.6	4.9	4.6	4.4	3.8	5.8
Chad	23.0	21.9	25.9	22.6	23.6	18.2	21.5	13.3	7.5	16.0	18.5	18.5
Comoros	4.4	5.5	15.0	8.9	11.3	13.3	12.2	17.8	13.6	16.4	14.2	12.6
Congo, Dem. Rep. of	7.0	8.4	12.5	8.0	6.2	11.8	18.2	16.5	8.7	11.5	12.5	12.3
Congo, Rep. of	27.7	13.3	29.6	39.7	48.8	46.8	49.3	-6.9	-27.8	11.1	22.2	23.5
Côte d'Ivoire	11.1	15.4	15.3	14.4	14.9	19.4	21.2	19.5	19.6	19.9	21.1	22.7
Equatorial Guinea	36.0	29.7	17.8	26.4	40.0	27.8	25.2	4.0	-1.5	6.5	6.6	9.4
Eritrea	12.8	1.6	3.2	13.2	12.2	12.9	12.5	6.8	6.0	5.5	5.7	4.8
Ethiopia ¹	19.7	15.4	24.5	33.1	31.2	28.1	30.7	32.4	32.7	32.1	31.2	32.3
Gabon	41.7	33.5	41.0	47.8	47.0	40.5	43.5	29.2	24.1	26.7	29.3	29.9
Gambia, The	12.6	7.1	5.0	7.3	20.8	9.7	10.0	4.7	9.9	13.4	12.0	10.3
Ghana	14.1	16.0	17.3	3.8	5.3	1.3	9.3	9.0	7.8	9.1	10.1	11.3
Guinea	8.1	0.6	-0.9	-9.3	-5.2	-1.0	-7.0	-8.1	-6.7	-0.7	-1.2	3.8
Guinea-Bissau	7.5	5.0	2.5	8.7	-1.7	2.6	12.0	10.5	9.3	8.9	8.4	9.2
Kenya	16.3	14.9	14.8	12.5	13.1	11.3	12.0	10.9	9.8	10.6	12.0	13.5
Lesotho	37.6	29.5	17.9	11.7	23.0	24.6	25.8	24.2	20.5	25.4	25.0	23.3
Liberia	...	...	...	...	...	...	...	...	...	...	...	...
Madagascar	16.7	14.6	13.2	10.7	10.2	10.1	15.3	11.2	15.8	12.5	13.4	15.0
Malawi	12.8	20.5	26.2	3.8	2.8	4.3	3.7	2.8	-2.8	3.7	4.4	4.8
Mali	15.6	15.6	13.3	14.7	15.0	14.9	15.7	13.0	11.4	12.7	12.7	13.1
Mauritius	20.0	15.0	14.3	13.2	18.5	19.0	17.0	16.3	16.3	13.5	12.3	11.0
Mozambique	9.4	4.4	8.1	4.4	14.9	11.5	17.2	5.0	3.4	27.9	37.8	41.7
Namibia	30.4	23.2	19.4	15.9	19.9	17.2	24.1	20.3	11.5	21.3	19.9	18.6
Niger	14.1	7.7	25.5	18.8	23.4	23.4	23.7	22.0	21.6	23.4	22.2	22.2
Nigeria	30.6	24.1	20.8	18.8	18.7	18.6	16.0	12.3	13.2	15.3	13.8	13.9
Rwanda	6.0	6.6	6.4	4.9	7.3	10.5	10.0	7.5	6.1	12.5	12.6	13.5
São Tomé & Príncipe	14.3	14.2	33.0	16.9	13.7	14.5	3.3	19.5	21.8	19.3	11.0	12.8
Senegal	16.7	15.4	17.7	17.6	18.4	17.0	15.5	18.2	21.3	16.9	19.7	20.1
Seychelles	14.8	12.4	17.2	12.4	17.0	26.5	14.6	15.2	12.0	14.7	15.5	17.0
Sierra Leone	4.5	-1.7	9.6	-16.9	-4.0	-4.8	-7.2	-5.9	-6.4	-0.8	1.8	-2.8
South Africa	16.0	18.0	18.0	17.5	14.8	15.3	15.2	16.6	16.1	16.3	15.8	15.8
South Sudan	...	...	...	23.3	-5.2	8.9	18.9	7.3	19.0	2.5	0.2	2.4
Swaziland	15.2	6.4	3.2	9.1	16.9	19.6	20.1	17.5	28.4	26.3	27.4	26.6
Tanzania	20.9	18.3	21.2	21.6	19.3	14.9	21.8	24.9	23.1	24.1	24.6	24.8
Togo	13.2	15.9	15.8	17.9	15.7	16.4	17.9	21.2	21.5	15.2	19.9	19.8
Uganda	26.6	21.4	18.8	18.8	21.7	20.2	17.9	18.1	21.0	20.4	20.8	21.2
Zambia	32.1	36.2	37.4	38.3	37.1	33.4	36.1	38.9	37.3	38.6	40.5	40.6
Zimbabwe ³	...	5.6	21.2	22.0	6.5	5.6	7.2	8.0	19.1	24.8	23.6	23.1
Sub-Saharan Africa	22.6	20.3	20.5	19.6	19.1	18.3	18.2	16.1	15.9	17.6	17.5	18.2
Median	15.4	15.0	17.3	15.3	15.4	15.9	17.1	15.8	14.4	15.7	15.7	16.4
Excluding Nigeria and South Africa	21.6	19.1	21.6	21.1	21.3	19.4	20.9	18.4	17.5	19.4	20.3	21.4
Oil-exporting countries	31.5	25.4	23.8	23.0	23.1	21.8	19.2	14.2	14.0	16.5	15.8	16.5
Excluding Nigeria	33.8	28.9	31.7	33.4	34.5	30.0	27.5	19.0	16.1	19.6	21.2	23.4
Oil-importing countries	16.9	16.7	18.1	17.0	16.1	15.7	17.4	17.6	17.3	18.3	18.7	19.2
Excluding South Africa	17.6	15.8	18.2	16.8	16.9	15.9	18.7	18.2	17.9	19.4	20.1	20.9
Middle-income countries	24.2	22.0	21.3	20.2	19.9	19.1	18.1	15.7	15.4	16.9	16.6	17.1
Excluding Nigeria and South Africa	25.7	23.3	24.9	24.4	25.8	23.0	23.0	19.2	17.3	19.2	20.3	21.6
Low-income countries	16.2	13.9	17.5	17.5	16.1	15.4	18.5	17.5	17.7	19.7	20.3	21.1
Excluding low-income countries in fragile situations	18.6	15.6	19.7	21.6	21.7	19.5	22.6	22.5	22.6	24.8	25.3	26.1
Countries in fragile situations	13.4	12.2	15.6	14.2	12.0	13.7	16.3	10.0	8.7	12.6	14.0	14.8
CFA franc zone	20.0	19.6	21.1	22.6	24.5	23.1	24.3	15.9	14.1	17.7	19.3	20.1
CEMAC	27.5	25.2	26.5	30.2	34.0	29.7	30.7	15.4	10.7	18.8	21.3	22.2
WAEMU	12.9	14.3	16.0	15.3	15.1	16.8	18.3	16.4	17.0	16.9	17.9	18.6
COMESA (SSA members)	18.2	16.4	19.0	19.4	18.8	18.0	19.7	19.6	19.8	20.6	21.0	21.8
EAC-5	19.1	16.9	17.2	16.3	16.4	14.0	16.3	16.8	16.4	17.3	18.0	18.8
ECOWAS	25.5	21.3	19.4	16.4	16.6	16.5	15.3	12.3	13.0	14.7	13.9	14.3
SACU	17.4	18.3	18.5	18.3	16.1	16.6	16.9	17.8	17.2	17.7	17.2	17.1
SADC	20.2	19.8	21.4	20.9	19.3	18.5	18.8	19.3	18.3	19.6	19.9	20.4

See sources and footnotes on page 91.

Table SA8. Overall Fiscal Balance, Including Grants
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	4.6	-7.4	3.4	8.7	4.6	-0.3	-6.6	-3.3	-4.8	-5.6	-1.7	-2.2
Benin	-0.6	-3.1	-0.4	-1.3	-0.3	-1.9	-2.3	-7.6	-5.9	-5.8	-4.7	-2.0
Botswana	4.5	-13.6	-7.9	-0.1	0.9	5.6	3.7	-4.6	-1.1	0.4	-1.2	1.1
Burkina Faso	-0.8	-4.7	-4.6	-2.3	-3.1	-4.0	-2.0	-2.4	-3.5	-8.2	-5.0	-3.0
Burundi	-8.2	-5.1	-3.6	-3.5	-3.8	-1.8	-3.6	-5.3	-6.2	-8.4	-9.3	-9.6
Cabo Verde	-3.4	-5.8	-10.5	-7.7	-10.3	-9.3	-7.6	-4.6	-3.1	-3.0	-3.2	-5.9
Cameroon	7.8	-0.0	-1.0	-2.4	-1.4	-3.7	-4.2	-4.4	-6.2	-4.3	-2.2	-1.8
Central African Rep.	0.5	-0.6	-1.5	-2.4	-0.0	-6.5	3.0	-0.6	1.6	-1.4	1.5	0.3
Chad	1.2	-9.2	-4.2	2.4	0.5	-2.1	-4.2	-4.4	-2.0	-0.9	0.9	-0.1
Comoros	-1.7	0.6	7.0	1.4	3.3	17.8	-0.5	4.3	-7.3	-3.1	-2.8	-3.6
Congo, Dem. Rep. of	0.1	1.0	-0.9	-0.9	2.0	2.0	0.1	-0.2	-1.0	-2.5	0.1	0.1
Congo, Rep. of	14.6	4.9	15.5	15.4	7.5	-5.0	-16.7	-27.2	-22.6	-7.2	3.9	5.0
Côte d'Ivoire	-1.0	-1.4	-1.8	-4.0	-3.1	-2.2	-2.2	-2.8	-3.9	-4.3	-3.7	-3.0
Equatorial Guinea	16.3	-6.5	-4.5	0.8	-7.2	-4.4	-7.6	-16.3	-12.0	-2.9	-1.1	-0.4
Eritrea	-17.9	-14.7	-16.9	-16.1	-15.7	-15.5	-14.8	-14.8	-14.7	-14.5	-13.2	-12.9
Ethiopia ¹	-3.4	-0.9	-1.3	-1.6	-1.2	-1.9	-2.6	-1.9	-2.3	-3.3	-2.5	-2.4
Gabon	8.5	6.8	2.7	1.7	6.2	-3.1	6.0	-1.1	-4.7	-1.8	0.8	1.0
Gambia, The	-3.2	-2.7	-4.7	-4.7	-4.4	-8.5	-5.8	-8.1	-9.7	-3.9	-2.2	-2.4
Ghana	-5.2	-7.2	-10.1	-7.4	-11.3	-12.0	-10.9	-5.4	-8.9	-5.0	-5.0	-3.6
Guinea	-1.1	-4.9	-9.6	-0.9	-2.5	-3.9	-3.2	-6.9	-0.1	-0.3	-2.1	-2.0
Guinea-Bissau	-5.4	2.9	-0.2	-1.4	-2.3	-1.8	-2.6	-3.0	-4.7	-1.5	-2.2	-2.3
Kenya	-1.9	-4.3	-4.4	-4.1	-5.0	-5.7	-7.4	-8.1	-8.3	-8.5	-7.5	-6.2
Lesotho	7.6	-2.9	-3.8	-8.9	4.5	-1.7	0.3	-1.0	-6.3	-6.5	-5.3	-4.9
Liberia	-1.1	-11.2	-6.9	-4.2	-2.9	-5.9	-3.1	-4.4	-3.7	-4.5	-4.1	-4.0
Madagascar	-2.6	-2.5	-0.9	-2.4	-2.6	-4.0	-2.3	-3.3	-1.3	-3.5	-3.0	-5.1
Malawi	-2.3	-3.6	1.8	-4.1	-1.8	-6.4	-4.8	-6.2	-7.3	-6.8	-2.8	-3.7
Mali	3.6	-3.7	-2.6	-3.4	-1.0	-2.4	-2.9	-1.8	-3.9	-2.9	-3.3	-3.0
Mauritius	-3.8	-3.5	-3.2	-3.2	-1.8	-3.5	-3.2	-3.5	-3.6	-3.3	-3.4	-3.3
Mozambique	-2.9	-4.9	-3.8	-4.8	-3.9	-2.7	-10.7	-7.2	-6.2	-5.5	-7.5	-10.8
Namibia	2.0	-0.1	-4.6	-7.0	-2.4	-3.3	-6.0	-8.2	-9.1	-6.1	-7.7	-9.5
Niger	7.1	-5.3	-2.4	-1.5	-1.1	-2.6	-8.0	-9.1	-6.1	-5.1	-6.1	-5.8
Nigeria	4.7	-5.4	-4.2	0.4	0.2	-2.3	-2.1	-3.5	-3.9	-5.8	-4.8	-4.6
Rwanda	0.6	0.3	-0.7	-0.9	-2.5	-1.3	-4.0	-2.8	-2.3	-2.5	-2.0	-2.0
São Tomé & Príncipe	30.7	-19.3	-11.7	-12.5	-11.2	1.9	-5.3	-6.3	-2.7	-2.6	-2.4	-2.8
Senegal	-2.5	-4.6	-4.9	-6.1	-5.2	-5.5	-5.0	-4.8	-4.2	-4.5	-3.5	-3.0
Seychelles	-0.7	4.8	0.5	3.4	2.9	0.4	3.7	1.9	0.2	1.0	0.6	1.1
Sierra Leone	2.2	-2.3	-5.0	-4.5	-5.2	-2.4	-3.6	-4.5	-8.5	-9.2	-8.2	-6.5
South Africa	0.1	-5.2	-5.0	-4.1	-4.4	-4.3	-4.3	-4.8	-4.1	-4.5	-4.2	-4.1
South Sudan	...	...	...	4.6	-14.8	-3.5	-9.2	-20.3	-21.3	-2.9	-4.8	-4.0
Swaziland	1.3	-2.9	-9.0	-3.8	3.5	0.8	-1.1	-4.5	-10.4	-7.9	-7.4	-6.0
Tanzania	-2.5	-4.5	-4.8	-3.6	-4.1	-3.9	-3.0	-3.3	-2.2	-2.7	-4.4	-4.6
Togo	-1.5	-3.7	-2.3	-6.3	-6.5	-5.2	-6.8	-8.8	-9.6	-0.5	-3.2	-0.7
Uganda	-0.8	-2.1	-5.7	-2.7	-3.0	-4.0	-4.7	-4.6	-4.9	-3.2	-5.3	-6.5
Zambia	2.1	-2.1	-2.4	-1.8	-2.8	-6.2	-5.7	-9.3	-5.8	-7.3	-7.8	-7.4
Zimbabwe ²	-3.5	-2.0	0.7	-0.5	0.0	-1.7	-1.4	-1.0	-8.4	-9.6	-3.1	-1.9
Sub-Saharan Africa	1.7	-4.6	-3.6	-1.2	-1.8	-3.2	-3.8	-4.5	-4.6	-5.0	-4.0	-3.9
Median	-0.8	-3.5	-3.7	-2.4	-2.5	-3.3	-3.6	-4.5	-4.8	-4.3	-3.3	-3.0
Excluding Nigeria and South Africa	1.2	-3.7	-2.1	-0.4	-1.7	-3.3	-4.8	-5.0	-5.2	-4.8	-3.6	-3.4
Oil-exporting countries	5.5	-5.0	-2.2	2.2	0.7	-2.2	-3.3	-4.3	-4.7	-5.4	-3.6	-3.6
Excluding Nigeria	7.1	-4.1	2.3	5.6	1.7	-1.9	-6.0	-6.4	-6.4	-4.8	-1.2	-1.3
Oil-importing countries	-0.6	-4.3	-4.5	-3.8	-3.8	-4.0	-4.3	-4.6	-4.5	-4.7	-4.3	-4.1
Excluding South Africa	-1.2	-3.5	-4.0	-3.5	-3.3	-3.9	-4.3	-4.5	-4.8	-4.8	-4.4	-4.0
Middle-income countries	2.3	-4.9	-3.7	-1.1	-1.7	-3.3	-3.8	-4.6	-4.9	-5.3	-4.2	-4.0
Excluding Nigeria and South Africa	2.7	-4.1	-1.5	0.6	-1.1	-3.7	-5.7	-5.8	-6.4	-5.4	-3.8	-3.3
Low-income countries	-1.3	-3.1	-3.0	-1.9	-2.5	-2.6	-3.7	-4.1	-3.7	-3.9	-3.4	-3.5
Excluding low-income countries in fragile situations	-1.6	-2.9	-3.4	-2.6	-2.6	-3.0	-4.0	-3.6	-3.2	-3.7	-4.0	-4.1
Countries in fragile situations	0.4	-2.3	-0.7	-0.1	-1.7	-2.4	-4.0	-5.4	-5.0	-4.4	-2.5	-2.3
CFA franc zone	4.7	-2.0	-0.8	-0.4	-1.3	-3.4	-4.0	-6.0	-5.9	-4.1	-2.5	-1.8
CEMAC	9.2	-0.8	1.0	2.4	0.1	-3.8	-4.7	-8.1	-7.6	-3.5	-0.3	-0.1
WAEMU	-0.1	-3.2	-2.7	-3.7	-2.9	-3.1	-3.4	-4.1	-4.5	-4.6	-4.0	-3.0
COMESA (SSA members)	-1.7	-2.2	-2.7	-2.5	-2.2	-3.2	-4.0	-4.4	-4.8	-5.5	-4.5	-4.2
EAC-5	-1.9	-3.7	-4.5	-3.4	-4.2	-4.5	-5.2	-5.6	-5.5	-5.6	-6.0	-5.6
ECOWAS	2.9	-5.1	-4.5	-0.9	-1.1	-3.2	-2.8	-3.7	-4.4	-5.4	-4.6	-4.2
SACU	0.4	-5.3	-5.1	-4.0	-4.0	-3.8	-3.9	-4.8	-4.2	-4.4	-4.2	-4.1
SADC	0.3	-5.0	-3.4	-1.8	-2.2	-2.9	-4.3	-4.3	-4.1	-4.6	-3.7	-3.7

See sources and footnotes on page 91.

Table SA9. Overall Fiscal Balance, Excluding Grants
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	4.4	-7.4	3.4	8.7	4.6	-0.3	-6.6	-3.3	-4.8	-5.6	-1.7	-2.2
Benin	-2.7	-6.0	-1.8	-3.7	-2.1	-2.8	-3.2	-8.2	-6.6	-6.8	-6.1	-3.7
Botswana	3.8	-14.6	-8.2	-0.6	0.8	5.3	3.4	-4.7	-1.2	0.3	-1.4	1.0
Burkina Faso	-10.2	-10.6	-9.0	-7.3	-8.0	-9.5	-6.1	-6.1	-6.2	-10.9	-8.5	-6.7
Burundi	-24.2	-24.0	-26.3	-25.3	-21.9	-19.2	-17.3	-14.9	-9.1	-11.2	-12.0	-12.3
Cabo Verde	-9.1	-11.4	-17.3	-10.6	-13.1	-11.9	-9.4	-7.0	-5.8	-6.5	-5.1	-7.2
Cameroon	2.0	-0.8	-1.5	-2.8	-1.8	-4.0	-4.4	-4.5	-6.4	-4.5	-2.5	-2.1
Central African Rep.	-5.5	-5.9	-7.0	-4.9	-4.9	-9.3	-7.8	-7.8	-4.4	-5.9	-6.1	-6.1
Chad	-0.7	-11.8	-5.5	0.8	-2.2	-4.3	-6.1	-7.8	-4.9	-4.7	-3.5	-3.6
Comoros	-7.8	-9.1	-7.8	-6.0	-6.0	-9.7	-9.8	-10.8	-16.1	-17.0	-15.9	-14.6
Congo, Dem. Rep. of	-1.0	-1.9	-4.4	-2.8	-0.1	0.2	-4.2	-3.4	-3.5	-4.4	-1.8	-1.8
Congo, Rep. of	14.2	4.6	15.5	14.9	7.3	-5.4	-17.2	-28.1	-23.4	-7.8	3.3	4.5
Côte d'Ivoire	-2.1	-1.9	-2.3	-4.3	-3.7	-3.5	-3.9	-4.3	-5.2	-5.4	-4.9	-4.6
Equatorial Guinea	16.3	-6.5	-4.5	0.8	-7.2	-4.4	-7.6	-16.3	-12.0	-2.9	-1.1	-0.4
Eritrea	-24.8	-17.3	-21.7	-19.1	-16.8	-16.8	-15.8	-15.6	-15.8	-15.5	-14.1	-13.7
Ethiopia ¹	-7.5	-5.2	-4.5	-4.8	-2.9	-3.4	-3.7	-3.0	-3.2	-4.0	-3.3	-3.2
Gabon	8.5	6.8	2.7	1.7	6.2	-3.1	6.0	-1.1	-4.7	-1.8	0.8	1.0
Gambia, The	-4.8	-6.9	-8.7	-9.9	-13.4	-10.8	-9.5	-10.0	-11.4	-15.0	-14.9	-12.5
Ghana	-8.6	-10.2	-12.4	-9.5	-12.8	-12.5	-11.7	-7.3	-9.5	-5.8	-5.3	-3.9
Guinea	-1.7	-5.1	-9.9	-3.5	-4.6	-5.0	-6.3	-8.1	-1.4	-1.9	-4.2	-3.5
Guinea-Bissau	-14.2	-13.0	-9.8	-8.1	-4.7	-5.2	-12.1	-9.5	-8.7	-6.1	-6.8	-7.2
Kenya	-2.9	-5.0	-5.0	-4.6	-5.5	-6.2	-7.9	-8.6	-8.7	-9.0	-8.1	-6.7
Lesotho	6.1	-5.6	-10.4	-15.8	-3.0	-5.8	-1.4	-4.0	-8.9	-8.6	-7.4	-6.9
Liberia	-1.7	-16.4	-10.8	-7.8	-8.2	-12.7	-17.8	-22.1	-21.5	-20.5	-19.1	-17.8
Madagascar	-9.2	-4.2	-2.8	-4.3	-3.8	-5.3	-4.6	-4.8	-4.8	-6.8	-5.9	-7.8
Malawi	-12.3	-11.1	-8.2	-7.7	-10.6	-13.1	-8.0	-9.9	-10.3	-10.5	-7.0	-6.2
Mali	-6.2	-7.8	-5.1	-6.6	-1.2	-5.2	-5.1	-4.5	-5.5	-4.5	-4.5	-4.5
Mauritius	-4.1	-5.0	-3.9	-3.9	-2.5	-3.9	-3.4	-3.6	-4.2	-4.8	-4.9	-4.8
Mozambique	-9.7	-13.3	-12.0	-12.3	-8.9	-7.9	-15.0	-10.2	-8.3	-7.0	-8.8	-12.0
Namibia	1.9	-0.4	-4.7	-7.1	-2.5	-3.5	-6.1	-8.3	-9.1	-6.2	-7.7	-9.6
Niger	-7.6	-9.7	-7.0	-5.2	-7.2	-10.6	-13.5	-14.5	-12.2	-12.3	-13.0	-13.4
Nigeria	4.7	-5.4	-4.2	0.4	0.2	-2.3	-2.1	-3.5	-3.9	-5.8	-4.8	-4.6
Rwanda	-9.8	-11.1	-12.5	-12.3	-10.2	-10.6	-11.7	-9.0	-7.4	-7.3	-6.8	-6.0
São Tomé & Príncipe	-7.9	-34.6	-31.4	-32.0	-29.4	-11.0	-15.3	-17.7	-17.6	-16.8	-15.5	-15.5
Senegal	-4.5	-7.6	-7.4	-8.3	-8.0	-8.1	-8.4	-7.7	-7.0	-7.3	-6.2	-5.6
Seychelles	-1.8	0.8	-0.3	0.9	-1.9	-3.9	0.5	1.1	-1.1	-0.9	-1.3	-0.3
Sierra Leone	-7.5	-8.4	-10.3	-10.1	-9.0	-5.0	-7.8	-9.9	-11.5	-11.7	-10.4	-8.4
South Africa	0.1	-5.2	-5.0	-4.1	-4.4	-4.3	-4.3	-4.8	-4.1	-4.5	-4.2	-4.1
South Sudan	...	...	...	1.7	-20.9	-9.9	-15.6	-26.8	-21.4	-2.9	-4.8	-4.0
Swaziland	0.8	-3.4	-9.0	-3.8	3.4	0.3	-2.8	-5.1	-11.2	-8.6	-8.1	-6.6
Tanzania	-7.2	-8.1	-8.2	-6.9	-7.0	-6.3	-4.7	-4.1	-2.9	-3.6	-5.4	-5.6
Togo	-2.5	-5.1	-4.2	-9.3	-8.9	-8.6	-9.2	-11.1	-12.4	-3.0	-7.1	-4.6
Uganda	-6.0	-4.5	-8.2	-4.4	-4.9	-5.0	-5.8	-5.9	-6.0	-4.5	-6.6	-7.6
Zambia	-5.7	-4.5	-3.9	-2.4	-4.5	-7.6	-6.5	-9.5	-6.0	-7.6	-8.7	-8.0
Zimbabwe ²	-3.5	-2.5	0.7	-0.5	0.0	-1.7	-1.4	-1.0	-8.4	-9.6	-3.1	-1.9
Sub-Saharan Africa	0.4	-5.6	-4.4	-2.0	-2.5	-3.9	-4.5	-5.1	-5.2	-5.5	-4.7	-4.4
Median	-4.3	-6.3	-7.0	-4.8	-4.7	-5.3	-6.5	-7.8	-7.0	-6.2	-6.1	-5.6
Excluding Nigeria and South Africa	-1.9	-5.9	-4.0	-2.1	-3.3	-4.8	-6.4	-6.4	-6.3	-5.9	-4.8	-4.5
Oil-exporting countries	5.0	-5.1	-2.3	2.0	0.5	-2.4	-3.5	-4.5	-4.7	-5.5	-3.7	-3.6
Excluding Nigeria	5.7	-4.5	2.1	5.2	1.2	-2.5	-6.6	-7.0	-6.7	-5.0	-1.5	-1.6
Oil-importing countries	-2.3	-5.9	-5.9	-5.0	-4.9	-5.2	-5.5	-5.7	-5.4	-5.6	-5.3	-5.0
Excluding South Africa	-5.0	-6.5	-6.7	-5.9	-5.4	-5.8	-6.3	-6.2	-6.2	-6.2	-5.8	-5.4
Middle-income countries	1.7	-5.2	-3.9	-1.3	-1.9	-3.5	-4.0	-4.7	-5.0	-5.5	-4.4	-4.2
Excluding Nigeria and South Africa	0.9	-5.0	-2.3	0.0	-1.7	-4.2	-6.2	-6.4	-6.9	-6.0	-4.3	-3.8
Low-income countries	-6.4	-7.2	-6.8	-5.3	-5.5	-5.6	-6.6	-6.5	-5.5	-5.8	-5.4	-5.3
Excluding low-income countries in fragile situations	-7.4	-7.5	-7.5	-6.6	-5.7	-5.9	-6.2	-5.4	-4.7	-5.2	-5.6	-5.7
Countries in fragile situations	-2.8	-4.9	-3.2	-2.3	-4.0	-4.9	-7.2	-8.3	-7.3	-6.5	-4.6	-4.4
CFA franc zone	1.3	-3.7	-2.1	-1.7	-2.6	-5.1	-5.7	-7.6	-7.4	-5.7	-4.2	-3.7
CEMAC	6.8	-1.5	0.5	1.9	-0.5	-4.2	-5.3	-8.8	-8.4	-4.2	-1.2	-0.8
WAEMU	-4.6	-6.0	-4.9	-6.0	-5.0	-6.0	-6.1	-6.6	-6.7	-6.7	-6.3	-5.6
COMESA (SSA members)	-5.3	-5.1	-5.5	-4.6	-4.0	-4.9	-5.7	-5.7	-6.0	-6.6	-5.7	-5.3
EAC-5	-5.6	-6.6	-7.5	-6.2	-6.4	-6.5	-6.8	-6.9	-6.4	-6.6	-7.0	-6.6
ECOWAS	1.8	-5.9	-5.1	-1.5	-1.6	-3.7	-3.4	-4.3	-5.0	-6.0	-5.3	-4.8
SACU	0.3	-5.4	-5.2	-4.1	-4.1	-3.8	-4.0	-4.9	-4.2	-4.5	-4.3	-4.1
SADC	-0.5	-5.8	-4.1	-2.4	-2.7	-3.5	-4.8	-4.7	-4.5	-5.0	-4.1	-4.1

See sources and footnotes on page 91.

Table SA10. Government Revenue, Excluding Grants
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	45.5	34.5	43.4	48.8	46.5	40.2	35.3	27.3	18.6	16.4	18.4	18.3
Benin	16.6	17.2	17.5	16.4	17.4	17.6	16.3	16.7	14.7	17.6	17.5	17.4
Botswana	41.5	36.8	33.9	35.8	36.6	37.4	38.1	31.1	31.9	32.5	30.4	30.3
Burkina Faso	13.1	13.6	15.3	15.7	17.5	18.9	17.4	17.0	18.4	19.0	19.7	20.3
Burundi	13.9	13.9	14.5	16.9	15.6	14.0	14.4	12.3	12.1	11.2	10.8	10.7
Cabo Verde	22.7	22.1	21.8	22.7	21.6	21.9	21.1	24.4	24.2	24.9	27.9	26.8
Cameroon	16.5	15.0	14.4	15.8	15.9	16.0	16.4	16.4	14.7	14.7	15.4	15.7
Central African Rep.	9.4	10.8	11.6	10.8	11.5	5.6	4.9	7.1	8.2	8.3	8.9	9.2
Chad	14.1	12.3	18.9	23.2	21.7	18.5	15.8	10.5	9.6	10.3	11.3	11.3
Comoros	14.1	13.9	14.3	16.1	19.3	15.5	14.5	16.5	14.5	14.4	14.3	15.7
Congo, Dem. Rep. of	8.6	10.7	12.1	11.8	14.4	12.9	14.3	13.6	9.2	8.5	9.3	9.3
Congo, Rep. of	42.2	29.9	36.6	40.9	42.5	44.7	39.2	25.1	26.6	22.5	27.2	27.7
Côte d'Ivoire	17.5	18.0	17.7	14.0	18.6	18.4	17.1	18.5	18.0	18.0	18.1	18.4
Equatorial Guinea	33.7	33.4	26.6	28.3	28.0	24.9	24.4	28.8	18.7	19.8	18.9	17.8
Eritrea	22.3	13.3	13.3	14.8	14.2	14.1	14.1	14.0	13.8	13.7	14.2	14.1
Ethiopia ¹	13.9	11.9	14.0	13.4	13.8	14.3	13.8	14.4	15.0	14.2	14.3	14.7
Gabon	28.7	29.4	25.8	23.5	30.2	31.6	29.7	21.1	17.1	17.4	19.0	19.5
Gambia, The	15.8	16.2	14.9	16.1	16.4	16.3	18.5	19.7	18.4	19.3	20.0	18.2
Ghana	13.6	13.4	14.4	17.1	17.0	16.3	17.7	17.6	16.6	16.7	17.7	17.8
Guinea	9.5	11.1	10.6	12.5	15.5	13.7	13.8	13.7	15.0	15.3	16.0	17.0
Guinea-Bissau	9.4	9.1	10.8	10.1	9.1	8.0	12.6	13.8	12.2	12.7	14.3	15.0
Kenya	18.7	18.1	19.2	19.0	18.7	19.2	19.3	18.7	18.4	18.2	18.4	18.4
Lesotho	48.0	54.7	40.5	39.6	50.6	48.2	48.1	44.2	38.4	37.7	35.8	35.0
Liberia	15.1	16.9	21.9	21.4	22.0	20.2	14.4	14.0	14.0	14.6	15.3	15.5
Madagascar	11.7	9.9	11.2	9.7	9.6	9.6	10.1	10.4	11.2	11.7	12.1	12.3
Malawi	16.4	19.4	21.8	18.4	18.3	21.6	21.8	21.1	20.8	21.8	21.9	21.4
Mali	15.0	15.1	15.2	14.0	14.4	14.5	14.9	16.4	16.7	18.5	19.4	18.7
Mauritius	18.6	20.5	21.2	20.7	20.8	21.0	20.5	21.1	20.6	22.5	22.5	22.5
Mozambique	12.7	15.6	17.9	19.8	21.9	26.2	27.5	25.0	24.0	25.1	22.1	22.0
Namibia	29.3	31.5	28.4	31.2	32.5	33.1	34.5	34.9	31.8	33.6	32.4	30.5
Niger	13.7	14.3	13.6	14.2	15.3	16.6	17.6	18.0	14.4	14.2	15.2	15.5
Nigeria	21.2	10.1	12.4	17.7	14.3	11.0	10.5	7.6	5.6	6.0	7.6	7.3
Rwanda	12.7	12.4	12.8	13.9	15.5	16.2	16.5	18.4	18.4	18.1	18.5	18.0
São Tomé & Príncipe	32.1	17.4	18.5	20.2	16.8	20.6	15.1	16.5	14.5	16.3	15.1	15.3
Senegal	20.8	19.0	19.6	20.5	20.5	20.0	21.5	22.2	24.0	21.3	22.8	22.6
Seychelles	36.5	32.9	34.2	37.2	36.7	33.8	34.3	33.4	36.6	38.2	37.0	36.3
Sierra Leone	8.8	9.1	9.9	11.4	11.3	10.7	9.8	10.8	11.9	12.6	13.6	13.6
South Africa	27.5	26.5	26.4	26.8	26.9	27.3	27.6	28.1	28.6	28.4	29.0	29.3
South Sudan	...	...	...	22.7	10.8	15.4	20.8	14.6	33.6	40.0	42.7	42.7
Swaziland	29.6	29.0	20.8	20.6	30.4	29.1	29.5	27.6	23.3	25.8	23.4	22.2
Tanzania	10.8	12.1	12.0	12.3	12.7	13.1	13.3	13.7	14.7	15.0	14.8	15.1
Togo	15.1	14.9	16.7	16.2	17.8	18.1	18.3	19.5	18.8	18.2	19.8	19.5
Uganda	12.2	10.8	10.6	12.8	11.6	11.6	12.3	13.5	13.9	14.4	14.8	15.5
Zambia	15.2	13.3	14.2	17.1	17.0	16.2	18.1	18.6	18.0	17.5	17.9	17.8
Zimbabwe ²	6.2	11.2	21.8	24.2	24.9	24.6	23.8	24.3	21.7	22.5	23.0	22.8
Sub-Saharan Africa	23.3	19.0	20.4	22.9	21.7	20.0	19.1	17.4	16.4	17.0	17.8	17.5
Median	15.5	15.0	17.1	17.1	17.5	18.1	17.6	18.0	18.0	17.6	18.4	18.0
Excluding Nigeria and South Africa	21.5	19.8	21.7	23.7	23.7	22.5	21.6	19.4	17.4	17.2	17.8	17.9
Oil-exporting countries	25.2	16.3	18.8	24.1	21.2	17.8	16.2	12.0	9.2	9.8	11.3	10.7
Excluding Nigeria	33.7	28.8	33.4	36.2	35.8	32.4	29.4	23.3	17.9	16.7	18.4	18.3
Oil-importing countries	22.2	20.8	21.6	22.0	22.1	21.8	21.8	21.8	21.3	21.5	21.7	21.8
Excluding South Africa	16.4	15.9	16.7	17.2	17.9	17.8	18.0	17.9	17.3	17.4	17.7	17.7
Middle-income countries	25.5	20.4	21.6	24.5	23.1	21.0	20.0	17.9	16.8	17.5	18.5	18.1
Excluding Nigeria and South Africa	27.4	24.7	26.6	29.2	29.5	27.4	26.1	22.7	19.5	18.8	19.6	19.6
Low-income countries	12.3	12.6	14.3	15.4	15.2	15.5	15.6	15.4	15.0	15.2	15.6	15.7
Excluding low-income countries in fragile situations	12.7	12.7	13.5	14.1	14.6	15.4	15.3	15.5	15.6	15.7	15.7	16.0
Countries in fragile situations	15.5	15.0	17.8	18.5	18.7	18.3	17.9	16.2	15.4	15.6	16.5	16.6
CFA franc zone	20.8	19.6	19.9	20.5	21.9	21.5	20.4	18.7	17.3	17.3	18.2	18.3
CEMAC	24.6	22.5	22.7	24.6	25.6	24.9	23.2	19.1	16.1	16.0	17.2	17.3
WAEMU	16.7	16.6	16.9	15.6	17.6	17.8	17.5	18.4	18.2	18.3	18.9	19.0
COMESA (SSA members)	15.0	14.3	15.8	16.2	16.5	16.4	16.7	16.7	16.0	15.9	16.2	16.3
EAC-5	14.5	14.3	14.7	15.2	15.2	15.5	15.8	16.1	16.4	16.5	16.6	16.8
ECOWAS	19.5	11.6	13.3	17.3	15.0	12.5	12.0	9.9	8.9	9.7	11.1	10.8
SACU	28.2	27.2	26.7	27.2	27.7	28.0	28.4	28.6	28.9	28.8	29.1	29.4
SADC	27.2	25.4	26.7	28.2	28.4	27.5	26.9	25.3	23.6	23.2	23.9	24.0

See sources and footnotes on page 91.

Table SA11. Government Expenditure
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	41.1	41.9	40.0	40.2	41.8	40.5	41.9	30.6	23.4	22.0	20.1	20.4
Benin	19.4	23.2	19.2	20.1	19.5	20.4	19.4	24.9	21.3	24.4	23.6	21.1
Botswana	37.6	51.4	42.1	36.4	35.8	32.0	34.7	35.8	33.1	32.3	31.8	29.3
Burkina Faso	23.3	24.2	24.4	23.0	25.5	28.4	23.5	23.1	24.5	29.9	28.1	27.0
Burundi	38.1	38.0	40.8	42.2	37.5	33.2	31.8	27.2	21.2	22.4	22.8	23.0
Cabo Verde	31.8	33.4	39.2	33.3	34.7	33.8	30.5	31.4	30.1	31.4	33.0	34.0
Cameroon	14.5	15.7	16.0	18.6	17.8	20.0	20.8	20.9	21.2	19.2	17.9	17.8
Central African Rep.	14.9	16.6	18.6	15.7	16.4	14.9	12.7	14.9	12.6	14.3	15.0	15.4
Chad	14.8	24.1	24.4	22.4	23.9	22.8	22.0	18.3	14.5	15.0	14.7	14.9
Comoros	21.9	23.0	22.1	22.1	25.3	25.2	24.3	27.3	30.6	31.5	30.2	30.3
Congo, Dem. Rep. of	9.6	12.6	16.5	14.6	14.5	12.7	18.5	17.0	12.7	12.9	11.1	11.1
Congo, Rep. of	28.0	25.3	21.1	26.1	35.2	50.1	56.4	53.2	50.0	30.3	23.8	23.2
Côte d'Ivoire	19.6	19.9	20.0	18.2	22.3	21.9	21.0	22.8	23.3	23.4	23.1	23.0
Equatorial Guinea	17.4	39.8	31.2	27.5	35.2	29.3	32.0	45.1	30.7	22.7	19.9	18.2
Eritrea	47.1	30.6	35.1	33.9	31.0	30.8	30.0	29.6	29.6	29.2	28.3	27.9
Ethiopia ¹	21.5	17.1	18.5	18.2	16.6	17.8	17.5	17.3	18.2	18.2	17.6	17.9
Gabon	20.2	22.6	23.1	21.7	23.9	34.7	23.8	22.3	21.8	19.2	18.2	18.5
Gambia, The	20.6	23.1	23.6	26.0	29.8	27.0	28.0	29.7	29.8	34.3	34.9	30.7
Ghana	22.1	23.6	26.8	26.6	29.8	28.7	29.4	25.0	26.1	22.5	23.0	21.7
Guinea	11.2	16.2	20.5	16.0	20.0	18.6	20.2	21.8	16.4	17.1	20.2	20.5
Guinea-Bissau	23.6	22.1	20.5	18.2	13.8	13.2	24.7	23.4	20.9	18.8	21.2	22.2
Kenya	21.6	23.1	24.2	23.6	24.2	25.4	27.2	27.3	27.2	27.2	26.5	25.0
Lesotho	41.9	60.4	51.0	55.4	53.6	54.0	49.5	48.2	47.3	46.3	43.2	41.9
Liberia	15.9	33.3	32.6	29.2	30.3	33.0	32.3	36.1	35.5	35.1	34.5	33.4
Madagascar	20.9	14.1	14.0	14.1	13.4	14.9	14.7	15.1	16.0	18.5	18.0	20.1
Malawi	28.6	30.5	30.0	26.1	28.9	34.7	29.8	31.0	31.1	32.4	28.9	27.6
Mali	21.2	22.8	20.3	20.6	15.5	19.7	20.0	20.9	22.2	23.0	23.9	23.3
Mauritius	22.6	25.6	25.1	24.6	23.3	24.9	23.9	24.6	24.9	27.3	27.3	27.3
Mozambique	22.5	28.9	29.9	32.2	30.8	34.1	42.5	35.2	32.4	32.1	30.9	34.0
Namibia	27.4	31.9	33.1	38.4	35.0	36.6	40.6	43.2	40.9	39.8	40.1	40.0
Niger	21.3	23.9	20.6	19.4	22.5	27.2	31.1	32.5	26.6	26.4	28.2	28.8
Nigeria	16.5	15.5	16.6	17.4	14.1	13.4	12.7	11.1	9.5	11.7	12.4	11.9
Rwanda	22.5	23.5	25.3	26.2	25.7	26.8	28.3	27.4	25.8	25.4	25.3	24.0
São Tomé & Príncipe	40.0	51.9	49.9	52.2	46.2	31.5	30.5	34.3	32.1	33.1	30.6	30.9
Senegal	25.3	26.6	27.0	28.8	28.5	28.1	29.8	29.9	31.0	28.6	29.0	28.2
Seychelles	38.3	32.1	34.6	36.3	38.6	37.8	33.8	32.4	37.7	39.1	38.2	36.6
Sierra Leone	16.4	17.5	20.2	21.5	20.3	15.7	17.6	20.7	23.3	24.3	24.0	22.0
South Africa	27.4	31.7	31.4	30.9	31.4	31.6	31.9	32.9	32.7	32.9	33.2	33.4
South Sudan	...	...	...	21.0	31.6	25.3	36.4	41.3	55.0	42.9	47.5	46.8
Swaziland	28.8	32.4	29.8	24.4	27.0	28.8	32.2	32.7	34.5	34.4	31.5	28.8
Tanzania	18.0	20.2	20.2	19.1	19.8	19.4	17.9	17.8	17.7	18.6	20.2	20.8
Togo	17.7	20.0	20.9	25.5	26.7	26.7	27.5	30.7	31.2	21.2	27.0	24.1
Uganda	18.1	15.3	18.8	17.2	16.6	16.7	18.2	19.4	19.9	19.0	21.4	23.0
Zambia	21.0	17.8	18.1	19.5	21.5	23.8	24.6	28.1	24.0	25.2	26.6	25.8
Zimbabwe ²	9.7	13.7	21.2	24.7	24.8	26.2	25.2	25.3	30.2	32.1	26.2	24.7
Sub-Saharan Africa	22.9	24.5	24.8	24.9	24.2	23.8	23.6	22.5	21.5	22.5	22.5	22.0
Median	21.5	23.6	23.9	24.4	25.5	26.8	27.5	27.3	26.1	25.4	26.2	24.1
Excluding Nigeria and South Africa	23.4	25.7	25.8	25.8	26.9	27.2	28.0	25.8	23.8	23.1	22.6	22.4
Oil-exporting countries	20.2	21.4	21.1	22.0	20.7	20.2	19.7	16.5	14.0	15.2	14.9	14.4
Excluding Nigeria	28.0	33.3	31.3	31.0	34.6	34.9	36.0	30.4	24.5	21.7	19.8	19.8
Oil-importing countries	24.5	26.7	27.4	27.0	27.0	27.0	27.3	27.4	26.8	27.0	27.0	26.8
Excluding South Africa	21.4	22.4	23.4	23.1	23.3	23.6	24.3	24.1	23.5	23.6	23.5	23.2
Middle-income countries	23.7	25.6	25.5	25.7	25.0	24.5	24.0	22.7	21.8	23.0	22.9	22.2
Excluding Nigeria and South Africa	26.5	29.8	28.8	29.2	31.2	31.6	32.3	29.1	26.4	24.8	23.9	23.4
Low-income countries	18.6	19.8	21.1	20.6	20.7	21.0	22.2	21.9	20.5	20.9	20.9	21.1
Excluding low-income countries in fragile situations	20.1	20.2	20.9	20.6	20.3	21.3	21.5	20.9	20.3	20.8	21.3	21.7
Countries in fragile situations	18.3	19.9	21.0	20.8	22.7	23.2	25.1	24.5	22.7	22.0	21.2	20.9
CFA franc zone	19.5	23.4	22.0	22.2	24.5	26.5	26.0	26.3	24.7	23.0	22.4	22.0
CEMAC	17.8	24.1	22.2	22.6	26.1	29.1	28.4	27.9	24.4	20.2	18.4	18.2
WAEMU	21.3	22.6	21.8	21.7	22.6	23.8	23.5	25.0	24.8	25.0	25.2	24.6
COMESA (SSA members)	20.3	19.4	21.3	20.8	20.6	21.3	22.4	22.5	22.0	22.5	21.9	21.6
EAC-5	20.2	20.9	22.3	21.4	21.6	22.0	22.6	23.0	22.9	23.1	23.7	23.3
ECOWAS	17.7	17.4	18.3	18.8	16.6	16.2	15.3	14.3	13.9	15.7	16.4	15.7
SACU	27.9	32.5	31.9	31.4	31.7	31.9	32.4	33.5	33.1	33.2	33.4	33.5
SADC	27.7	31.2	30.8	30.6	31.1	31.0	31.7	30.0	28.0	28.2	28.0	28.1

See sources and footnotes on page 91.

Table SA12. Government Debt
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	27.8	22.7	44.3	33.8	29.9	32.9	40.7	64.6	79.8	65.3	73.0	71.6
Benin	24.4	25.6	28.7	29.9	26.7	25.3	30.5	42.4	49.7	54.6	55.1	52.6
Botswana	7.7	17.9	20.4	20.4	19.1	17.4	17.3	16.3	15.5	15.6	14.9	12.8
Burkina Faso	32.8	29.1	30.7	28.1	28.2	28.8	30.4	35.8	38.3	38.3	41.0	41.3
Burundi	134.4	25.7	46.9	42.7	41.4	36.1	35.8	45.3	47.2	56.7	65.1	69.4
Cabo Verde	73.8	65.2	72.4	78.8	91.1	102.5	115.9	126.0	129.5	126.0	124.7	126.7
Cameroon	29.9	12.0	14.7	15.7	15.4	18.2	21.5	30.9	31.5	33.8	34.3	34.1
Central African Rep.	69.6	21.1	21.4	21.8	23.5	38.5	69.2	64.0	56.0	53.4	48.6	44.4
Chad	25.8	31.6	30.1	30.6	28.8	30.5	41.5	43.8	52.4	52.5	48.1	45.4
Comoros	65.1	53.6	50.7	45.7	42.6	17.8	22.6	25.9	31.7	28.4	28.4	28.5
Congo, Dem. Rep. of	101.6	84.5	30.9	24.5	22.7	20.0	17.5	16.1	16.8	15.7	14.5	13.3
Congo, Rep. of	119.1	63.3	22.2	23.8	28.6	34.2	47.6	97.1	114.6	119.1	110.4	105.0
Côte d'Ivoire	76.6	64.2	63.0	69.2	45.0	43.4	44.8	47.3	47.0	46.4	48.0	46.9
Equatorial Guinea	2.0	4.3	7.9	7.2	7.1	6.3	12.7	36.4	47.9	42.7	45.6	48.4
Eritrea	158.4	144.6	143.8	132.4	128.3	127.5	128.7	132.5	132.8	131.2	129.4	127.3
Ethiopia ¹	67.9	37.8	40.5	45.3	37.7	42.9	46.8	54.0	55.0	56.2	58.3	56.7
Gabon	41.7	26.0	21.3	21.4	21.4	31.1	34.1	44.7	64.2	61.1	59.3	59.3
Gambia, The	107.3	62.6	69.6	77.3	77.0	89.1	104.9	105.3	118.5	123.2	111.4	105.2
Ghana	39.2	36.1	46.3	42.6	47.9	57.2	70.2	72.2	73.4	71.8	69.1	65.9
Guinea	79.9	61.3	68.8	58.1	27.2	34.0	35.1	42.1	42.9	39.7	43.7	44.7
Guinea-Bissau	197.5	159.0	68.3	49.8	53.1	53.7	54.9	50.3	48.8	42.0	40.1	37.6
Kenya	45.2	41.1	44.4	43.0	43.9	44.0	48.6	51.6	53.5	55.6	58.1	56.9
Lesotho	48.2	35.3	31.4	33.2	35.3	37.2	36.8	41.2	35.4	34.7	39.5	41.7
Liberia	357.1	113.2	21.7	19.3	17.6	17.9	21.6	25.8	28.3	34.4	38.7	39.1
Madagascar	56.6	33.7	31.7	32.2	33.0	33.9	34.7	35.5	38.4	37.3	37.2	38.0
Malawi	62.9	35.6	29.6	30.6	43.9	59.3	55.2	61.1	60.3	59.3	57.8	57.6
Mali	29.2	21.9	25.3	24.0	25.4	26.4	27.3	30.7	35.9	35.6	35.9	36.6
Mauritius	47.3	50.8	52.0	52.2	51.5	53.9	57.5	60.2	60.1	60.2	59.9	59.1
Mozambique	49.7	41.9	43.3	38.0	40.1	53.1	62.4	88.1	118.8	102.2	110.1	116.6
Namibia	24.1	15.9	16.3	27.4	24.6	25.0	25.2	40.3	44.8	46.1	52.4	58.5
Niger	43.3	27.7	24.3	27.8	26.9	26.3	32.0	41.0	45.1	46.5	46.2	47.5
Nigeria	15.8	8.6	9.6	12.1	12.7	12.9	13.1	16.0	19.6	23.4	26.8	27.4
Rwanda	45.2	19.5	20.0	19.9	20.0	26.7	29.1	33.4	37.3	40.6	41.3	43.1
São Tomé & Príncipe	207.5	72.4	79.5	78.0	81.0	71.1	69.6	86.0	94.0	83.3	76.9	72.2
Senegal	32.5	34.2	35.5	40.7	42.8	46.9	54.5	56.9	60.4	61.2	60.6	58.8
Seychelles	155.7	106.1	82.2	82.5	80.1	68.2	72.7	68.0	69.0	63.3	58.5	53.7
Sierra Leone	94.1	48.1	46.8	44.8	36.8	30.5	35.0	45.3	54.9	58.4	63.7	64.0
South Africa	30.5	30.1	34.7	38.2	41.0	44.1	47.0	49.3	51.6	52.7	54.9	55.7
South Sudan	...	...	...	0.0	8.9	17.6	38.3	69.3	86.5	66.3	51.0	48.6
Swaziland	14.1	10.2	13.7	14.2	14.8	15.3	14.3	18.4	24.8	29.2	36.2	41.0
Tanzania	33.5	24.4	27.3	27.8	29.2	30.9	33.8	37.2	38.0	38.2	39.3	40.7
Togo	92.7	80.6	46.7	47.2	47.2	55.7	60.4	72.2	81.6	78.6	75.6	70.6
Uganda	39.4	19.2	22.4	23.4	24.6	27.7	30.8	33.5	37.2	39.0	41.5	44.5
Zambia	54.4	20.5	18.9	20.8	25.4	27.1	36.1	62.3	60.7	62.2	65.5	68.0
Zimbabwe ²	51.5	71.7	59.3	48.3	45.3	48.3	49.6	51.9	69.8	78.4	75.2	72.6
Sub-Saharan Africa	33.3	26.3	27.9	28.5	28.5	30.1	32.4	38.9	44.0	45.9	48.1	47.6
Median	49.0	34.8	31.5	32.2	29.9	33.9	36.8	45.3	51.6	53.4	52.4	52.6
Excluding Nigeria and South Africa	47.0	34.8	35.7	32.8	32.0	35.0	40.0	50.2	54.7	53.5	55.2	54.7
Oil-exporting countries	21.5	13.2	16.2	16.3	16.3	17.5	19.8	27.3	34.0	36.4	39.3	38.3
Excluding Nigeria	33.6	22.4	31.2	24.2	23.8	27.3	35.3	56.5	67.7	60.2	63.4	62.1
Oil-importing countries	40.8	35.5	36.2	37.8	38.2	40.9	44.1	48.4	50.9	51.7	53.4	53.5
Excluding South Africa	52.4	40.1	37.7	37.3	35.8	38.6	42.2	47.8	50.5	51.2	52.5	52.4
Middle-income countries	28.5	23.0	26.4	27.9	27.9	29.1	31.0	37.3	42.8	45.2	47.6	47.0
Excluding Nigeria and South Africa	39.7	30.6	36.0	33.6	32.3	35.4	41.3	54.7	60.2	57.4	59.6	58.6
Low-income countries	58.4	40.9	35.2	31.6	31.5	34.3	38.3	44.8	48.0	48.4	49.6	49.7
Excluding low-income countries in fragile situations	43.6	29.3	31.1	32.2	31.1	35.0	39.1	46.8	49.8	50.2	52.3	52.7
Countries in fragile situations	79.9	59.1	43.3	36.5	33.9	35.3	39.5	45.8	48.8	49.2	49.3	48.6
CFA franc zone	44.8	33.0	29.4	29.8	26.8	29.3	34.5	44.6	49.6	49.8	49.9	49.0
CEMAC	38.6	22.0	17.8	18.1	18.3	22.0	28.9	43.9	51.6	52.0	51.1	50.2
WAEMU	51.6	44.2	42.1	43.7	36.5	37.2	40.4	45.3	48.1	48.2	49.0	48.1
COMESA (SSA members)	59.4	42.3	36.9	36.2	36.0	37.9	41.2	46.7	49.3	51.2	53.0	52.8
EAC-5	42.1	29.8	33.2	32.8	33.9	35.5	39.1	42.8	45.0	47.0	49.2	49.7
ECOWAS	27.5	18.6	18.4	20.1	19.2	20.2	20.7	24.4	29.8	33.5	36.1	35.7
SACU	29.4	29.1	33.5	37.0	39.4	42.1	44.6	47.3	49.2	50.4	52.7	53.6
SADC	34.0	31.3	34.9	35.5	36.4	38.7	42.1	49.3	53.6	52.2	54.9	55.3

See sources and footnotes on page 91.

Table SA13. Broad Money
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	21.9	42.5	35.3	37.6	35.4	36.5	41.0	46.4	41.8	31.0	25.1	25.8
Benin	25.0	33.1	35.3	36.2	34.4	37.0	41.3	42.9	41.5	39.8	46.4	46.8
Botswana	46.7	52.7	46.9	37.5	36.1	32.1	27.3	27.9	27.3	27.7	26.7	26.2
Burkina Faso	20.4	25.9	27.4	27.5	28.4	30.5	32.1	38.0	39.1	41.5	43.7	46.0
Burundi	22.3	24.3	27.5	25.7	25.4	23.5	23.0	22.5	21.8	20.7	23.5	22.8
Cabo Verde	75.1	77.5	80.1	78.5	82.1	89.4	95.6	98.9	104.1	102.2	102.5	101.9
Cameroon	17.7	20.0	21.2	21.9	20.7	21.3	21.8	22.5	22.7	23.3	23.5	23.5
Central African Rep.	15.9	16.1	17.8	19.2	18.3	28.5	29.1	27.5	26.2	24.6	24.0	24.1
Chad	8.9	11.0	11.4	12.0	12.4	13.3	15.6	15.9	15.8	16.3	16.6	17.0
Comoros	26.0	30.4	34.1	34.9	38.3	36.9	38.2	43.5	45.8	45.8	45.8	45.8
Congo, Dem. Rep. of	6.6	10.1	10.5	10.6	11.6	11.5	11.8	12.1	12.5	13.3	15.4	15.4
Congo, Rep. of	17.1	23.3	23.3	27.2	33.1	33.5	37.7	46.1	42.7	39.1	38.1	37.0
Côte d'Ivoire	11.3	14.1	15.7	18.7	15.3	14.9	15.0	15.6	15.2	17.2	19.7	21.1
Equatorial Guinea	6.4	10.5	12.3	10.6	14.8	16.7	14.7	19.3	19.2	19.1	19.7	21.5
Eritrea	130.2	121.6	123.2	114.6	111.8	113.3	113.5	96.1	100.8	101.4	101.8	101.7
Ethiopia ¹	34.6	24.8	27.0	27.6	25.3	27.1	28.1	28.5	28.9	31.7	31.4	31.4
Gabon	17.0	20.3	19.5	20.5	23.2	24.8	24.4	25.4	24.7	23.9	24.8	26.2
Gambia, The	39.0	48.7	49.9	55.7	54.5	56.6	58.6	52.3	55.0	58.7	58.6	57.9
Ghana	22.8	28.0	29.9	30.4	30.0	28.8	32.5	33.9	33.9	32.3	32.3	32.7
Guinea	13.6	18.4	26.4	25.1	22.2	22.6	23.8	26.9	25.5	24.5	24.5	24.5
Guinea-Bissau	20.3	25.3	28.8	35.3	32.6	32.7	46.4	49.2	47.5	32.7	33.9	35.3
Kenya	35.7	36.5	40.1	40.6	34.5	35.5	37.0	36.0	33.0	30.9	30.2	32.5
Lesotho	28.6	35.5	36.3	32.2	31.6	34.1	30.8	31.3	31.1	31.2	29.4	27.2
Liberia	13.0	20.2	22.7	26.8	23.3	22.2	22.2	22.3	20.5	19.9	19.9	19.9
Madagascar	23.6	24.5	24.7	26.1	25.7	25.2	25.4	26.2	28.4	29.8	29.6	29.9
Malawi	15.8	19.8	22.1	25.1	25.7	26.0	24.5	24.3	22.9	24.0	24.0	24.0
Mali	25.6	24.7	24.5	24.4	27.0	28.2	27.8	28.9	28.8	29.0	31.6	32.2
Mauritius	98.5	99.5	100.4	98.8	100.5	99.8	102.9	108.5	110.6	115.6	115.6	115.6
Mozambique	17.0	24.2	24.7	27.7	30.6	33.4	38.5	42.1	37.0	34.3	34.1	34.1
Namibia	40.8	63.2	62.6	64.0	57.2	56.7	53.6	55.5	53.4	54.1	54.1	54.1
Niger	13.7	17.6	19.5	19.5	21.9	22.6	26.2	26.1	27.1	26.8	27.1	27.4
Nigeria	16.0	24.3	20.8	18.8	21.3	19.3	20.9	20.9	22.8	20.7	20.3	20.5
Rwanda	16.6	17.2	18.3	20.0	19.8	20.9	22.4	24.8	23.9	23.6	24.9	26.1
São Tomé & Príncipe	33.4	37.1	38.7	38.0	39.0	38.3	38.8	40.3	34.6	32.4	32.4	32.4
Senegal	34.7	36.9	39.7	40.0	39.9	42.6	46.0	48.9	50.8	50.8	51.3	51.3
Seychelles	84.6	55.5	62.1	60.2	52.0	58.3	69.1	66.4	71.7	78.5	79.0	79.0
Sierra Leone	16.7	22.6	23.5	23.1	21.9	19.8	21.7	24.0	25.1	25.2	25.8	25.5
South Africa	72.5	77.7	75.8	74.6	72.9	71.0	70.8	73.5	72.6	72.6	72.6	72.6
South Sudan	...	...	...	9.5	19.8	14.7	17.6	38.2	28.8	21.3	24.5	22.7
Swaziland	19.3	25.1	25.3	24.8	24.7	26.2	25.0	26.4	29.5	29.0	29.2	32.5
Tanzania	21.8	23.3	25.1	24.7	23.8	22.7	23.3	24.3	21.9	21.4	21.1	21.0
Togo	30.0	36.8	39.8	43.4	44.1	47.7	46.7	51.5	54.2	56.0	56.0	56.0
Uganda	18.5	17.9	21.7	19.8	19.8	19.9	21.0	20.9	21.9	22.5	23.4	24.3
Zambia	18.0	17.8	18.4	19.1	19.6	20.5	20.9	25.8	20.6	20.8	23.2	24.1
Zimbabwe ²	10.8	16.5	23.1	25.7	26.5	25.5	27.6	29.5	34.5	46.0	44.8	45.7
Sub-Saharan Africa	34.7	39.0	37.3	36.2	36.1	35.0	35.8	37.2	37.0	35.9	35.6	35.9
Median	21.1	24.6	25.8	26.8	26.5	28.2	27.8	28.9	28.9	29.8	29.4	29.9
Excluding Nigeria and South Africa	24.5	28.4	29.1	29.1	28.4	28.8	30.2	32.2	31.0	30.2	30.1	30.6
Oil-exporting countries	16.4	25.6	22.2	20.8	22.9	21.7	23.5	24.9	25.5	22.4	21.5	21.8
Excluding Nigeria	17.4	28.8	26.0	25.6	26.9	27.7	30.2	35.1	32.4	27.0	24.7	25.1
Oil-importing countries	46.3	48.5	48.4	47.7	45.8	44.8	45.0	46.3	45.1	45.0	45.0	45.0
Excluding South Africa	26.7	28.3	30.1	30.3	29.0	29.2	30.2	31.3	30.6	31.1	31.5	32.1
Middle-income countries	37.9	43.3	40.7	39.6	39.4	37.9	38.7	40.1	40.1	38.4	37.9	38.2
Excluding Nigeria and South Africa	26.5	33.0	32.7	33.4	31.8	32.2	33.9	36.3	34.5	32.1	31.3	32.2
Low-income countries	22.1	22.8	24.7	24.2	24.6	24.9	26.1	27.6	27.3	28.2	28.8	29.1
Excluding low-income countries in fragile situations	23.5	23.0	25.2	25.2	24.6	25.3	26.9	28.0	27.3	28.1	28.5	28.9
Countries in fragile situations	18.2	20.9	22.5	22.5	23.7	23.3	24.1	26.2	25.9	26.7	27.8	28.1
CFA franc zone	17.6	20.8	22.1	23.2	23.6	24.9	26.0	28.2	28.2	28.5	30.0	30.8
CEMAC	14.2	17.2	18.1	18.8	20.4	21.7	22.4	24.9	24.4	24.0	24.3	24.7
WAEMU	20.9	24.2	25.9	27.5	26.8	27.9	29.2	31.1	31.3	32.0	34.2	35.1
COMESA (SSA members)	29.9	28.5	30.7	30.8	29.0	29.6	30.4	30.9	30.6	31.8	32.1	32.8
EAC-5	26.3	26.7	29.7	29.3	26.7	26.7	27.8	27.9	26.1	25.2	25.1	26.2
ECOWAS	17.6	24.7	22.6	21.4	23.1	21.7	23.4	23.9	25.4	24.0	24.3	24.8
SACU	69.7	75.4	73.4	71.8	70.0	67.9	67.4	69.9	69.0	69.0	68.9	68.9
SADC	53.3	58.5	56.4	55.6	54.0	52.5	52.7	55.1	53.3	52.1	51.2	51.1

See sources and footnotes on page 91.

Table SA14. Broad Money Growth
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	64.6	21.5	5.3	37.1	4.9	14.1	16.2	11.8	14.3	-2.1	14.6	21.2
Benin	15.4	9.1	9.9	9.6	7.2	17.0	18.3	6.1	0.4	1.1	27.0	10.2
Botswana	17.4	-1.3	4.9	-3.1	0.7	1.3	-0.7	2.0	14.3	5.6	4.5	6.9
Burkina Faso	13.7	23.8	19.0	14.2	16.6	10.9	9.3	19.3	11.8	15.6	13.9	13.9
Burundi	21.1	19.8	29.4	5.7	18.0	9.7	11.3	1.5	6.4	7.9	33.4	21.6
Cabo Verde	12.5	3.5	5.4	4.6	6.3	11.4	7.4	6.3	8.4	2.2	6.0	5.0
Cameroon	10.5	6.9	11.3	10.6	1.4	10.8	10.8	9.2	5.5	5.9	5.6	5.6
Central African Rep.	7.5	11.7	16.1	13.8	1.6	5.6	14.6	5.3	5.8	1.1	4.9	8.0
Chad	23.6	-4.6	25.3	14.2	13.4	8.6	26.5	-4.7	-7.7	-0.9	7.6	7.8
Comoros	7.6	13.3	19.4	9.6	16.0	2.8	8.1	17.1	10.3	3.8	5.4	5.3
Congo, Dem. Rep. of	52.5	49.7	30.9	22.9	21.8	18.6	12.6	10.5	22.2	46.6	49.5	18.5
Congo, Rep. of	30.1	5.3	37.6	34.5	21.1	0.7	13.1	-11.2	-15.4	-2.0	9.2	0.3
Côte d'Ivoire	12.0	24.4	19.3	17.2	-7.6	9.7	13.8	17.0	7.0	23.4	24.2	16.6
Equatorial Guinea	30.7	29.9	33.5	7.7	57.8	7.3	-14.1	-10.9	-16.4	2.9	0.9	6.4
Eritrea	11.2	15.7	15.6	14.6	14.3	16.5	12.9	-5.1	18.2	16.8	16.0	14.7
Ethiopia ¹	18.1	19.9	24.4	36.5	32.9	24.2	26.9	24.2	20.4	28.8	20.0	18.9
Gabon	14.2	2.2	19.2	26.5	15.7	6.1	1.6	-1.4	-5.2	2.8	11.3	9.0
Gambia, The	16.5	19.4	13.7	11.0	7.8	15.1	11.2	-0.9	15.3	19.3	11.0	9.1
Ghana	31.3	26.0	34.4	32.2	24.3	19.1	36.8	26.1	22.0	16.7	17.9	18.0
Guinea	35.5	25.9	74.4	9.4	1.0	14.1	12.3	20.3	9.9	11.7	14.0	14.0
Guinea-Bissau	27.1	4.9	22.9	50.7	-10.0	2.8	42.8	24.8	8.8	-21.8	10.8	12.3
Kenya	14.9	16.0	21.6	19.1	-3.0	14.5	18.6	12.8	4.8	7.5	8.8	20.4
Lesotho	16.8	17.9	14.5	1.0	7.3	21.2	4.0	12.6	5.5	10.0	1.6	0.0
Liberia	33.5	30.2	27.4	41.4	-1.4	7.8	2.1	1.7	-5.2	-2.5	1.4	6.1
Madagascar	17.2	10.2	9.6	16.4	6.9	5.3	11.1	14.6	20.1	18.1	12.5	14.2
Malawi	27.6	23.9	33.9	35.7	22.9	35.1	20.7	23.7	15.2	20.6	12.6	11.6
Mali	5.6	16.0	9.0	15.3	15.2	7.4	7.1	13.2	7.3	7.4	16.0	8.3
Mauritius	13.0	2.4	6.9	6.4	8.2	5.8	8.7	10.2	9.1	9.3	7.4	9.8
Mozambique	22.2	34.6	17.6	23.9	25.6	21.2	27.3	21.7	2.4	7.9	8.4	8.3
Namibia	17.3	59.6	8.7	11.6	6.0	13.7	6.9	10.2	4.9	6.3	7.0	9.2
Niger	16.2	20.3	23.4	6.8	31.3	10.2	24.5	4.6	8.7	6.1	10.1	8.6
Nigeria	37.2	17.1	6.9	4.0	29.1	1.0	20.4	5.9	17.4	1.6	13.6	17.6
Rwanda	23.6	13.0	16.9	26.7	14.1	15.8	18.8	21.1	7.6	12.3	16.5	18.8
São Tomé & Príncipe	29.8	8.2	25.1	10.4	20.3	13.9	16.8	13.1	-4.8	-0.3	8.3	9.7
Senegal	9.5	10.9	14.1	6.7	6.8	8.0	11.4	13.4	12.0	9.6	10.2	8.9
Seychelles	7.9	7.0	13.5	4.5	-0.6	23.7	26.6	2.9	12.1	16.4	8.2	6.4
Sierra Leone	24.5	31.3	28.5	22.6	22.5	16.7	16.6	4.9	17.9	10.1	18.4	14.9
South Africa	18.9	1.8	6.9	8.3	5.2	5.8	7.2	10.5	6.1	6.9	6.8	7.1
South Sudan	...	...	...	...	34.0	-1.7	21.5	117.4	142.5	67.8	104.5	63.8
Swaziland	15.7	26.8	7.9	5.5	10.0	15.9	3.9	13.6	26.4	3.8	4.6	16.8
Tanzania	22.0	17.7	25.4	18.2	12.5	10.0	15.6	18.8	2.9	8.6	9.9	11.7
Togo	16.9	14.3	15.3	17.3	10.2	16.6	3.7	20.6	12.6	8.3	6.8	7.5
Uganda	19.1	16.6	41.5	10.5	14.9	9.5	15.2	11.7	11.1	12.8	13.0	13.9
Zambia	25.6	7.7	29.9	21.7	17.9	20.8	12.6	35.2	-5.7	13.5	29.1	17.6
Zimbabwe ²	1.4	340.0	68.6	33.1	19.9	4.6	12.6	8.2	17.5	44.4	8.1	10.8
Sub-Saharan Africa	25.4	14.8	13.5	12.6	15.9	7.7	15.3	11.1	11.4	8.2	13.1	14.0
Median	17.4	16.3	19.1	14.2	13.4	10.8	12.6	11.7	8.8	7.9	10.2	10.2
Excluding Nigeria and South Africa	22.7	20.6	21.6	20.9	13.0	13.1	15.7	14.9	10.1	12.7	15.3	14.8
Oil-exporting countries	36.6	16.4	8.8	9.3	24.4	3.4	17.9	6.8	14.8	1.9	13.5	16.7
Excluding Nigeria	35.8	14.6	14.2	25.3	12.9	9.8	11.6	9.1	8.2	2.8	13.3	14.5
Oil-importing countries	18.8	13.7	17.0	15.0	10.0	11.0	13.4	14.5	9.1	12.6	12.8	12.3
Excluding South Africa	18.8	22.7	24.2	19.5	13.0	14.2	17.1	16.8	10.7	15.7	15.8	14.9
Middle-income countries	27.0	12.2	10.2	10.4	15.2	6.0	14.6	9.3	10.8	5.1	11.6	13.8
Excluding Nigeria and South Africa	25.2	17.0	17.6	20.9	8.6	12.5	14.2	12.6	7.3	7.9	13.2	14.9
Low-income countries	19.7	25.2	26.7	20.9	18.3	13.7	17.5	17.5	13.3	18.2	17.6	14.6
Excluding low-income countries in fragile situations	19.1	19.0	25.6	21.3	20.3	15.4	19.9	18.5	10.4	15.7	14.9	14.5
Countries in fragile situations	19.4	30.6	27.3	20.7	11.5	10.2	13.9	13.9	13.5	21.0	22.1	14.3
CFA franc zone	14.8	13.6	18.9	14.8	11.8	8.9	9.9	6.8	2.2	8.5	12.8	9.5
CEMAC	18.5	9.2	22.1	16.0	17.7	7.6	6.8	-1.1	-4.6	2.9	6.7	5.9
WAEMU	11.5	18.1	15.9	13.5	6.2	10.2	12.9	14.3	8.2	13.0	17.6	12.2
COMESA (SSA members)	19.1	24.7	26.4	22.0	14.8	16.1	17.4	17.0	12.1	19.9	17.8	17.2
EAC-5	18.6	16.7	26.9	16.9	7.2	11.8	16.7	14.9	5.5	9.2	10.8	15.8
ECOWAS	31.3	18.1	11.1	7.7	24.2	4.1	20.0	8.8	15.9	5.0	14.6	16.4
SACU	18.7	3.3	7.0	7.8	5.1	6.1	6.8	10.1	6.6	6.8	6.7	7.2
SADC	23.6	11.9	11.5	14.5	7.9	9.2	10.2	12.7	7.9	9.0	11.0	10.8

See sources and footnotes on page 91.

Table SA15. Claims on Nonfinancial Private Sector
(Percent change)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	71.9	60.5	19.2	28.8	24.2	15.0	1.1	17.6	-0.2	-5.0
Benin	17.7	19.5	8.1	12.9	6.0	13.1	6.3	-0.0	7.3	-0.8
Botswana	21.1	10.3	11.2	21.9	21.6	13.8	13.7	9.0	9.0	5.6
Burkina Faso	14.4	1.7	14.7	23.5	24.1	26.3	18.9	7.0	7.5	8.9
Burundi	8.4	25.5	27.0	51.1	2.5	7.8	9.4	6.0	17.3	-13.9
Cabo Verde	20.3	11.8	9.0	13.3	-0.6	2.0	-0.9	0.4	3.6	4.0
Cameroon	8.2	9.1	8.2	28.3	2.6	14.9	14.4	11.4	7.2	2.3
Central African Rep.	8.7	8.7	30.2	19.2	31.0	-18.1	5.4	-2.1	13.2	25.7
Chad	17.3	21.0	30.2	24.4	32.1	2.7	40.2	2.3	-5.1	-3.2
Comoros	11.4	44.1	25.9	8.9	22.4	12.6	9.6	16.8	7.2	2.2
Congo, Dem. Rep. of	91.1	41.1	18.0	17.1	25.2	26.5	23.0	17.4	29.3	15.8
Congo, Rep. of	19.1	31.0	50.4	40.6	44.2	17.0	26.3	9.3	7.1	-5.4
Côte d'Ivoire	10.0	10.8	8.7	0.4	12.2	22.9	21.7	29.7	15.0	13.4
Equatorial Guinea	50.1	13.8	30.6	30.7	-13.6	34.3	18.4	14.1	4.2	0.2
Eritrea	6.3	1.2	1.8	14.7	19.8	131.0	35.8	-65.6	7.6	13.1
Ethiopia ¹	42.1	11.0	28.1	25.0	37.7	10.8	19.9	31.0	23.0	30.4
Gabon	10.0	-7.9	1.9	42.0	24.1	23.6	-2.0	-9.8	-5.6	-7.5
Gambia, The	13.2	10.3	14.8	8.8	4.3	20.5	-7.5	-7.9	-12.3	-1.2
Ghana	44.1	16.2	24.8	29.0	32.9	29.0	41.8	24.5	15.4	13.7
Guinea	19.2	15.8	43.8	93.4	-3.2	35.0	44.0	27.1	5.9	9.0
Guinea-Bissau	61.1	-3.0	36.5	107.0	38.2	-16.1	-6.6	50.1	6.9	-54.0
Kenya	19.9	13.9	20.3	30.9	10.4	20.1	22.2	16.0	4.1	2.4
Lesotho	28.3	23.9	28.8	25.1	42.2	10.3	11.8	8.2	5.8	10.9
Liberia	36.0	31.5	40.1	32.4	11.2	27.2	5.6	8.1	2.3	14.7
Madagascar	24.8	6.5	11.2	7.0	4.8	16.2	18.4	16.5	8.2	18.4
Malawi	41.2	39.5	52.4	20.5	25.4	14.4	20.0	29.9	4.6	1.4
Mali	7.2	11.0	13.5	24.1	4.8	11.7	18.7	19.9	17.6	11.1
Mauritius	15.4	0.5	12.5	12.3	17.4	14.2	-2.2	8.7	-0.6	11.8
Mozambique	27.5	58.6	29.3	6.4	19.9	15.4	25.2	22.1	14.5	-12.0
Namibia	14.7	10.5	9.8	10.4	18.4	13.4	17.9	13.8	8.6	4.5
Niger	34.3	16.7	15.2	17.2	16.1	8.7	7.7	12.8	12.7	2.1
Nigeria	47.0	22.0	-5.6	2.6	6.6	9.4	18.0	4.6	23.4	-4.2
Rwanda	30.2	5.7	10.3	27.5	34.8	11.3	19.3	30.0	9.1	13.9
São Tomé & Príncipe	53.5	39.3	35.8	15.4	11.0	-3.3	-1.4	7.3	8.3	3.6
Senegal	13.1	3.8	10.1	19.0	10.0	12.6	6.4	7.1	5.9	7.7
Seychelles	21.9	-9.2	23.6	5.2	8.5	4.5	26.2	7.8	10.3	17.8
Sierra Leone	35.5	45.4	31.5	21.8	-6.9	11.9	5.4	9.1	16.7	11.5
South Africa	19.4	2.0	3.1	6.7	9.3	7.1	7.2	8.0	4.7	4.4
South Sudan	...	...	...	-34.0	125.7	45.4	49.8	51.2	221.5	32.9
Swaziland	21.4	13.1	-0.5	26.0	-1.7	20.2	9.8	4.2	11.6	3.9
Tanzania	35.8	9.6	20.0	27.2	18.2	15.3	19.4	24.8	7.2	1.7
Togo	19.5	13.6	19.4	43.6	19.3	27.6	-0.2	17.3	15.3	-4.1
Uganda	27.5	17.3	41.8	28.3	11.8	6.2	14.1	15.1	6.4	15.8
Zambia	43.2	-5.7	15.4	28.2	37.0	12.6	26.4	29.3	-9.4	6.4
Zimbabwe ²	5.8	388.2	143.3	62.8	27.1	3.7	4.7	-2.3	-3.6	10.3
Sub-Saharan Africa	30.7	16.2	8.3	13.0	13.3	12.5	15.5	11.4	12.5	3.3
<i>Median</i>	20.7	13.3	19.3	23.5	18.2	13.8	14.4	11.4	7.3	4.5
Excluding Nigeria and South Africa	28.7	20.6	21.7	23.7	19.8	17.2	17.7	17.4	9.6	7.4
Oil-exporting countries	43.8	24.7	0.6	7.8	10.3	11.8	16.2	6.9	18.7	-3.5
Excluding Nigeria	36.8	31.8	19.5	21.8	20.6	18.2	11.5	13.4	7.3	-1.8
Oil-importing countries	23.2	10.6	14.3	17.1	15.5	13.1	15.0	14.7	8.3	8.2
Excluding South Africa	26.2	17.0	22.4	24.4	19.6	16.9	19.8	18.7	10.3	10.2
Middle-income countries	31.6	14.6	3.8	10.7	10.9	11.7	14.4	9.3	11.7	0.8
Excluding Nigeria and South Africa	29.7	18.9	17.2	25.7	17.9	18.9	16.2	16.3	4.9	3.7
Low-income countries	27.5	22.7	27.4	21.6	22.0	15.3	19.4	18.5	14.9	11.5
Excluding low-income countries in fragile situations	30.5	14.2	24.9	23.9	23.0	12.5	17.9	22.3	12.8	12.6
Countries in fragile situations	21.8	31.1	28.3	16.8	20.8	20.0	21.9	15.5	17.1	9.4
CFA franc zone	15.2	10.6	15.7	23.3	11.9	17.5	15.6	11.7	7.8	3.6
CEMAC	18.0	11.5	20.0	31.8	11.3	17.6	17.1	6.2	2.8	-1.2
WAEMU	13.0	9.7	11.7	15.6	12.5	17.5	14.2	16.8	12.0	7.4
COMESA (SSA members)	28.5	20.2	26.7	26.1	21.6	15.1	18.6	18.1	9.7	14.1
EAC-5	26.7	12.9	24.2	29.3	14.4	14.7	19.1	19.4	6.2	4.9
ECOWAS	39.2	19.5	-0.0	7.6	9.1	12.5	19.1	8.2	20.1	-0.4
SACU	19.4	2.8	3.7	7.7	10.1	7.7	7.8	8.1	5.1	4.5
SADC	27.4	14.7	11.1	14.1	14.9	10.8	9.9	12.8	4.9	3.6

See sources and footnotes on page 91.

Table SA16. Claims on Nonfinancial Private Sector
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	8.5	21.5	20.2	20.2	22.5	23.4	22.9	27.2	21.5	15.4
Benin	14.4	19.8	20.8	22.0	20.6	21.5	21.5	21.0	21.8	20.5
Botswana	22.0	28.8	27.2	27.3	31.8	31.7	31.0	33.7	31.5	32.0
Burkina Faso	16.7	17.0	17.3	18.8	20.7	25.3	29.0	30.8	30.4	30.4
Burundi	14.1	13.7	15.2	20.3	17.4	15.8	15.3	15.5	16.6	12.6
Cabo Verde	41.4	58.0	61.9	65.7	64.3	64.2	63.3	61.8	62.2	62.2
Cameroon	8.6	9.7	9.9	11.9	11.4	12.2	12.9	13.5	13.9	13.7
Central African Rep.	6.9	7.2	8.9	10.1	12.3	14.9	14.0	12.3	12.5	14.6
Chad	2.6	3.9	4.2	4.8	5.8	5.9	7.6	8.4	8.6	8.6
Comoros	8.9	14.8	17.5	17.8	20.6	21.7	22.8	25.9	26.6	26.2
Congo, Dem. Rep. of	2.1	4.4	4.1	4.0	4.5	4.8	5.3	5.8	6.4	5.3
Congo, Rep. of	2.8	5.0	5.4	6.6	9.6	11.3	14.2	21.3	25.0	22.1
Côte d'Ivoire	14.3	16.4	16.6	16.9	16.8	18.3	19.7	22.7	23.8	24.8
Equatorial Guinea	2.7	5.8	6.7	7.0	5.3	7.5	9.1	15.4	19.1	18.5
Eritrea	24.5	16.6	14.8	13.8	14.1	28.3	34.1	10.4	10.0	9.7
Ethiopia ¹	10.9	9.3	10.4	9.8	9.3	8.8	8.7	9.3	9.6	10.7
Gabon	9.1	10.1	8.3	9.8	11.9	14.8	14.0	13.4	12.9	11.2
Gambia, The	12.6	15.4	15.9	17.4	16.5	17.9	15.4	12.8	10.3	9.1
Ghana	11.7	15.5	15.4	15.3	16.1	16.8	19.6	20.2	19.1	17.8
Guinea	3.9	3.5	4.2	7.0	5.9	7.2	9.7	11.6	10.6	9.9
Guinea-Bissau	2.5	5.2	6.6	11.1	15.8	13.0	12.0	15.3	14.5	5.9
Kenya	23.5	25.8	28.0	31.2	30.1	32.5	34.9	34.9	31.8	28.3
Lesotho	8.2	11.1	12.8	14.1	18.3	18.0	17.4	17.0	17.0	17.2
Liberia	4.6	7.7	9.6	10.6	10.3	11.7	12.0	12.9	12.8	14.6
Madagascar	10.1	11.3	11.5	11.2	10.8	11.7	12.6	13.2	12.9	13.6
Malawi	6.7	10.9	13.8	13.9	14.6	12.5	11.7	12.2	10.4	9.2
Mali	15.9	15.5	16.0	17.1	17.3	18.8	20.5	22.6	24.7	25.6
Mauritius	75.1	82.7	87.9	91.3	100.8	108.1	100.3	104.3	96.9	103.7
Mozambique	12.4	23.8	26.8	25.7	27.2	28.2	32.0	35.1	34.5	26.1
Namibia	48.0	48.0	48.0	48.6	48.5	47.9	49.9	53.4	53.2	53.0
Niger	6.5	11.3	11.7	12.8	12.7	12.9	13.0	13.9	15.0	14.3
Nigeria	12.0	21.1	15.9	14.2	13.3	13.0	13.8	13.7	15.7	13.4
Rwanda	9.9	11.8	11.8	13.0	15.2	15.4	16.6	19.7	19.3	19.3
São Tomé & Príncipe	25.0	34.9	39.5	40.6	38.4	32.0	27.4	27.0	26.4	25.6
Senegal	22.5	24.7	25.6	28.8	29.5	32.9	34.0	34.1	33.4	32.8
Seychelles	25.1	20.1	24.4	23.9	22.5	21.3	25.2	25.3	26.9	29.8
Sierra Leone	4.0	7.2	7.7	7.5	5.4	4.7	4.7	5.3	5.5	5.6
South Africa	68.3	72.3	68.0	65.9	66.9	65.9	65.7	66.6	65.0	63.4
South Sudan	...	...	...	0.2	0.6	0.7	1.0	1.5	1.5	0.9
Swaziland	18.2	20.3	18.9	22.1	19.7	21.7	21.8	21.1	20.9	20.5
Tanzania	10.4	13.2	13.7	14.4	14.7	14.6	15.6	17.1	16.0	14.6
Togo	15.1	18.3	20.5	27.3	30.1	35.6	33.6	36.0	38.8	35.5
Uganda	9.2	10.6	12.9	13.7	13.2	12.9	13.5	13.9	13.9	14.7
Zambia	8.8	10.0	9.2	10.0	12.0	11.7	13.4	15.7	12.1	11.5
Zimbabwe ²	3.8	8.2	16.5	22.5	24.5	23.5	23.7	22.8	21.9	22.3
Sub-Saharan Africa	27.3	31.2	28.5	27.4	27.5	27.3	27.6	28.3	28.0	26.4
<i>Median</i>	10.7	14.2	15.3	14.4	16.1	16.8	16.6	17.1	19.1	17.2
Excluding Nigeria and South Africa	13.2	16.4	17.0	17.4	18.3	19.2	19.9	21.4	20.4	19.2
Oil-exporting countries	10.6	19.1	15.2	13.8	13.6	13.8	14.4	15.2	16.1	13.6
Excluding Nigeria	7.1	13.9	13.4	12.6	14.6	15.7	16.0	19.2	17.4	14.3
Oil-importing countries	37.9	39.7	38.1	37.5	37.7	37.4	37.5	38.0	36.4	35.0
Excluding South Africa	15.1	17.2	18.2	19.2	19.5	20.3	21.2	22.1	21.3	20.6
Middle-income countries	31.8	36.4	32.7	31.6	31.6	31.3	31.5	32.3	32.1	30.2
Excluding Nigeria and South Africa	16.2	20.4	20.7	21.8	22.7	24.1	25.0	27.3	25.4	23.6
Low-income countries	9.6	11.4	12.5	12.6	13.2	13.5	14.2	14.9	15.0	14.5
Excluding low-income countries in fragile situations	10.9	12.9	13.9	14.2	14.3	14.5	15.2	16.3	16.0	15.4
Countries in fragile situations	8.7	10.2	11.2	11.1	12.3	13.1	14.1	15.3	16.1	16.0
CFA franc zone	10.9	12.6	13.0	14.4	14.7	16.6	17.8	20.0	21.1	20.9
CEMAC	6.0	7.5	7.6	8.9	9.3	10.7	11.8	14.1	15.3	14.4
WAEMU	15.5	17.6	18.1	19.7	20.1	22.2	23.4	25.2	26.0	25.9
COMESA (SSA members)	15.5	16.6	18.0	19.2	19.4	20.0	20.4	20.6	19.4	18.9
EAC-5	15.3	17.2	18.8	20.5	20.2	20.9	22.3	23.0	21.6	19.9
ECOWAS	12.5	19.8	16.1	15.1	14.5	14.7	15.7	16.0	17.6	16.0
SACU	64.9	68.9	64.8	62.9	64.0	62.9	62.7	63.7	62.1	60.7
SADC	46.2	49.5	46.8	45.7	46.6	45.8	45.4	46.6	44.3	42.2

See sources and footnotes on page 91.

Table SA17. Exports of Goods and Services
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	77.3	54.9	62.3	65.4	63.1	55.7	48.0	33.6	29.7	27.2	35.1	32.8
Benin	13.7	14.3	17.9	16.0	13.2	15.5	15.8	17.6	16.3	18.1	18.9	19.8
Botswana	50.9	40.7	43.7	49.8	44.2	61.5	60.8	52.1	49.7	44.3	44.0	44.5
Burkina Faso	10.6	12.6	21.4	23.8	23.9	26.4	25.9	26.6	27.4	27.5	24.4	23.6
Burundi	7.8	6.7	8.9	10.1	9.4	8.8	7.2	5.6	5.5	5.1	4.8	4.5
Cabo Verde	35.8	33.2	38.3	42.2	45.0	47.0	48.1	41.3	44.9	48.0	50.3	51.0
Cameroon	25.3	19.7	22.0	25.4	25.4	24.8	24.6	21.8	19.4	18.5	17.6	16.6
Central African Rep.	13.2	10.7	11.8	13.5	12.5	14.4	13.0	12.6	12.8	12.9	12.9	13.2
Chad	45.6	35.2	37.8	40.6	38.2	33.4	31.5	26.5	24.4	27.5	29.9	28.3
Comoros	14.8	13.8	15.7	16.6	14.9	15.6	18.2	16.5	17.8	17.1	16.7	16.3
Congo, Dem. Rep. of	29.5	27.4	43.0	41.6	32.8	38.4	35.4	27.4	25.5	31.6	37.6	40.4
Congo, Rep. of	80.2	66.9	73.3	77.8	75.3	67.8	67.5	59.4	54.6	65.8	72.2	70.8
Côte d'Ivoire	48.5	50.7	50.5	53.1	48.9	41.5	39.2	37.7	31.2	31.0	29.6	29.8
Equatorial Guinea	79.7	72.6	81.2	76.3	74.3	64.9	59.7	49.0	43.6	46.3	44.9	41.1
Eritrea	5.8	4.5	4.8	26.3	20.8	19.5	21.8	13.6	9.5	9.2	10.0	8.3
Ethiopia ¹	14.6	10.6	15.5	18.2	13.9	12.5	11.6	9.7	8.3	7.7	8.3	8.9
Gabon	59.0	52.0	59.2	64.1	64.8	61.5	54.5	43.5	36.2	40.6	43.9	42.6
Gambia, The	30.6	25.4	23.8	26.5	30.9	29.4	29.2	24.7	24.0	21.6	23.5	24.0
Ghana	23.8	29.7	29.3	36.9	40.1	33.9	39.4	44.7	40.8	43.3	40.0	38.2
Guinea	22.0	19.1	22.3	25.5	28.2	23.0	22.3	18.7	29.2	32.3	34.5	37.9
Guinea-Bissau	17.0	18.8	20.1	25.7	15.5	18.3	20.2	28.3	26.3	28.3	26.9	26.3
Kenya	23.5	20.0	22.5	24.0	22.2	19.9	18.3	16.6	14.6	14.8	15.5	15.9
Lesotho	46.9	39.5	39.6	41.1	38.7	34.0	34.1	41.8	39.9	40.3	41.2	41.9
Liberia	38.4	25.9	32.0	36.5	42.6	37.1	33.1	25.6	23.5	22.9	22.0	20.9
Madagascar	27.1	22.5	25.0	26.8	28.6	30.1	32.8	32.1	33.5	31.2	30.0	30.4
Malawi	17.1	17.0	19.6	17.6	23.8	30.6	29.1	25.5	29.3	27.3	27.5	28.1
Mali	24.0	22.9	22.9	21.6	26.9	24.9	22.5	24.0	23.4	23.2	21.8	21.1
Mauritius	55.6	47.0	50.9	51.7	52.9	47.3	49.8	48.0	43.0	41.4	40.0	39.7
Mozambique	29.0	24.5	24.7	26.5	30.6	29.8	27.5	27.9	33.4	38.0	40.0	40.6
Namibia	38.5	42.6	41.7	41.4	42.0	43.7	44.3	42.9	37.3	35.4	37.1	37.6
Niger	17.6	20.3	22.2	20.9	21.9	22.6	21.0	18.3	16.3	16.5	16.2	16.4
Nigeria	28.4	19.6	22.4	24.7	21.4	19.3	14.8	10.1	9.5	12.8	14.8	12.6
Rwanda	11.3	11.1	10.8	14.1	13.9	15.4	16.4	18.3	18.8	22.4	22.4	24.0
São Tomé & Príncipe	11.2	10.4	12.3	12.6	13.1	17.8	25.4	28.3	27.5	26.1	24.3	23.6
Senegal	26.3	24.4	24.9	26.4	27.9	28.3	28.1	29.4	27.5	27.8	26.6	26.2
Seychelles	85.1	108.0	93.8	100.2	105.2	94.7	102.2	94.2	94.7	99.0	104.6	103.2
Sierra Leone	15.0	15.0	16.2	18.3	32.4	35.9	30.2	17.8	22.8	27.3	30.2	33.9
South Africa	29.6	27.9	28.6	30.5	29.7	30.9	31.2	30.4	30.2	29.9	30.2	29.9
South Sudan	...	...	...	72.4	9.3	28.0	34.0	21.0	54.9	75.6	83.6	91.4
Swaziland	58.4	48.9	45.9	35.2	38.7	44.7	49.6	49.2	45.6	43.3	44.9	45.1
Tanzania	18.2	18.9	20.6	22.4	20.9	19.4	18.4	19.6	18.8	18.0	18.2	18.5
Togo	34.6	35.6	37.8	43.6	45.2	46.5	39.7	35.8	34.2	34.1	32.7	33.1
Uganda	16.3	18.1	17.2	20.4	20.1	19.1	17.5	18.7	18.9	18.9	19.6	20.5
Zambia	35.1	32.0	39.7	40.1	41.2	41.4	40.8	38.7	35.3	33.9	39.2	41.1
Zimbabwe ²	27.6	22.5	35.5	40.7	30.8	27.6	25.8	24.9	25.4	24.3	22.6	21.5
Sub-Saharan Africa	32.5	27.8	30.4	33.6	31.0	29.5	26.7	22.7	22.1	23.7	25.0	24.0
<i>Median</i>	27.3	23.7	24.8	26.5	29.7	29.8	29.2	26.6	27.5	27.5	29.6	28.3
Excluding Nigeria and South Africa	37.7	32.7	37.3	41.4	38.2	35.9	33.5	28.1	25.8	26.1	27.7	27.3
Oil-exporting countries	39.1	29.6	32.9	37.2	32.6	29.2	24.0	16.6	15.7	18.9	21.8	19.1
Excluding Nigeria	62.1	49.8	56.7	60.9	56.0	50.5	45.5	33.3	30.4	30.1	35.4	33.3
Oil-importing countries	28.7	26.5	28.7	30.8	29.7	29.8	29.3	27.7	26.5	26.7	27.0	27.0
Excluding South Africa	27.9	25.3	28.8	31.2	29.8	29.0	28.0	26.1	24.4	24.8	25.2	25.5
Middle-income countries	34.6	29.7	31.8	34.5	32.7	30.8	27.7	23.4	22.7	24.6	26.0	24.5
Excluding Nigeria and South Africa	48.1	42.0	46.1	49.6	48.3	44.2	41.4	34.7	30.7	30.2	32.3	31.3
Low-income countries	21.7	19.2	23.5	28.9	23.3	24.1	22.8	20.2	19.9	20.8	21.8	22.3
Excluding low-income countries in fragile situations	17.1	16.0	18.6	20.7	19.3	18.6	17.5	16.9	16.0	16.1	16.6	17.1
Countries in fragile situations	36.0	32.7	38.1	43.7	35.8	35.5	34.2	28.7	28.2	30.3	31.7	31.9
CFA franc zone	40.7	37.2	41.5	43.9	43.0	39.3	36.7	31.9	28.1	29.2	29.0	28.1
CEMAC	50.3	43.5	49.8	53.2	52.1	47.0	43.5	34.5	29.8	32.4	33.6	31.9
WAEMU	30.3	30.8	32.4	33.0	32.6	31.0	29.6	29.7	26.7	26.9	25.6	25.6
COMESA (SSA members)	26.4	21.9	27.4	29.3	26.4	26.2	24.8	21.6	19.7	20.1	21.4	22.0
EAC-5	19.5	18.5	19.8	21.9	20.7	19.1	17.9	17.8	16.6	16.6	17.1	17.5
ECOWAS	28.2	22.3	24.5	26.9	24.6	22.3	18.5	15.3	15.5	18.8	19.8	18.0
SACU	31.0	29.0	29.7	31.5	30.8	32.6	33.1	32.0	31.6	31.0	31.3	31.1
SADC	35.4	32.4	34.7	37.1	36.4	36.7	35.3	31.4	30.3	29.7	31.8	31.4

See sources and footnotes on page 91.

Table SA18. Imports of Goods and Services
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	48.3	55.4	42.9	42.2	40.2	39.4	42.2	37.0	28.8	25.7	30.1	25.8
Benin	24.9	27.0	29.2	26.1	25.2	28.3	31.0	29.7	29.2	30.9	30.6	31.2
Botswana	40.3	53.0	51.4	53.5	55.0	61.4	53.9	53.4	43.2	40.0	40.8	41.1
Burkina Faso	25.4	23.2	29.0	33.0	34.7	39.8	34.9	36.3	35.9	37.3	33.7	31.7
Burundi	34.3	28.2	43.4	43.5	46.7	41.5	37.3	32.9	24.9	23.4	23.4	20.9
Cabo Verde	64.5	63.4	66.8	73.8	68.1	62.8	66.4	56.7	61.6	68.2	69.7	70.8
Cameroon	25.8	24.1	24.8	28.0	28.0	27.3	27.7	25.2	22.0	20.7	19.8	18.9
Central African Rep.	22.1	23.2	26.5	24.4	23.9	25.0	37.6	34.6	31.7	32.5	34.1	32.7
Chad	44.3	46.8	48.6	48.1	48.0	43.1	43.9	42.9	39.4	41.5	43.0	41.6
Comoros	39.5	47.9	50.3	52.0	53.1	50.6	48.8	45.3	43.7	43.5	44.0	42.3
Congo, Dem. Rep. of	34.9	36.9	51.9	48.0	39.9	38.6	44.0	33.2	30.1	33.1	38.3	42.0
Congo, Rep. of	57.7	73.7	59.4	53.9	51.0	51.3	64.9	111.2	119.1	68.2	58.5	56.1
Côte d'Ivoire	41.2	39.8	43.2	36.8	44.7	38.6	34.4	34.2	28.6	27.7	27.4	27.7
Equatorial Guinea	35.9	47.9	58.9	43.4	41.3	41.9	42.1	48.0	37.3	28.4	29.7	41.5
Eritrea	41.6	23.4	23.3	32.3	24.2	21.3	22.8	19.8	16.9	16.3	15.5	14.1
Ethiopia ¹	36.3	27.9	33.1	36.5	32.8	28.8	28.2	30.3	27.6	23.7	23.1	23.7
Gabon	27.5	34.6	29.5	23.7	36.2	43.7	41.3	38.9	34.4	33.3	32.7	32.6
Gambia, The	45.5	41.9	42.7	40.5	43.3	41.2	48.5	50.4	41.9	49.3	55.3	53.5
Ghana	40.0	42.9	43.5	49.3	52.5	47.1	49.6	56.3	48.0	47.3	44.8	42.7
Guinea	24.2	21.1	25.4	43.2	44.4	31.6	33.0	30.7	60.7	54.5	51.7	44.3
Guinea-Bissau	28.7	35.2	35.2	30.9	25.7	25.8	31.4	32.6	30.3	32.9	33.4	32.5
Kenya	31.9	30.5	33.9	39.4	35.5	33.2	33.0	27.7	23.4	24.3	24.4	24.3
Lesotho	105.8	105.1	99.1	96.2	98.3	85.4	82.0	84.8	79.7	83.6	86.8	85.2
Liberia	128.1	87.8	82.8	87.0	90.0	73.6	91.8	88.0	72.3	59.8	56.7	50.8
Madagascar	43.5	45.8	39.2	38.2	39.1	38.7	37.2	35.5	35.8	38.4	37.0	37.6
Malawi	35.0	31.7	34.9	28.0	38.2	42.4	39.7	36.6	46.0	41.0	40.7	39.4
Mali	33.7	34.0	37.9	29.7	31.8	39.9	38.0	39.6	40.3	39.0	37.8	36.7
Mauritius	64.2	57.5	63.0	65.6	66.0	61.6	62.3	58.8	53.3	56.6	57.6	59.1
Mozambique	38.6	39.7	45.2	58.0	81.7	81.2	72.6	71.7	71.1	54.3	54.4	81.0
Namibia	41.8	55.8	52.1	50.6	55.7	59.3	66.7	68.1	57.7	45.8	48.2	48.7
Niger	31.2	46.7	49.0	47.8	39.4	39.1	38.9	40.9	33.5	32.9	34.1	34.7
Nigeria	17.7	16.6	19.2	21.9	17.5	14.9	15.1	14.9	11.6	12.5	15.1	13.5
Rwanda	26.1	28.7	28.6	34.2	34.0	32.0	33.2	35.6	36.7	32.3	33.6	35.0
São Tomé & Príncipe	55.6	54.7	61.0	63.1	54.0	58.9	66.0	58.9	53.1	54.2	53.4	50.6
Senegal	45.1	41.3	40.3	44.7	48.9	49.2	47.4	46.0	42.1	45.3	42.1	40.9
Seychelles	94.7	117.0	108.1	116.6	122.5	101.5	118.0	103.2	104.9	105.7	110.2	108.3
Sierra Leone	24.4	30.5	43.9	84.4	65.7	46.2	57.4	43.8	47.9	54.1	53.7	59.1
South Africa	30.6	27.5	27.4	29.7	31.2	33.3	33.0	31.4	30.1	28.6	29.7	29.8
South Sudan	...	...	...	30.4	34.1	29.9	31.6	28.9	59.1	86.1	87.1	92.2
Swaziland	67.5	62.2	58.3	41.3	41.4	43.3	45.5	39.5	40.7	40.0	39.1	38.1
Tanzania	26.8	28.4	29.5	34.2	33.0	30.2	28.3	27.1	22.1	20.5	22.0	22.8
Togo	50.7	50.2	53.4	64.5	59.2	66.3	57.7	57.8	54.3	52.5	51.6	50.6
Uganda	27.0	28.1	30.6	35.3	31.6	28.7	27.8	29.1	25.3	26.6	29.6	32.6
Zambia	30.4	26.7	27.6	32.2	36.3	39.3	37.7	41.7	37.9	36.5	41.0	42.3
Zimbabwe ²	37.0	48.9	64.0	76.8	59.7	56.5	51.7	46.7	39.9	36.5	35.0	32.9
Sub-Saharan Africa	30.3	30.3	30.6	32.8	31.9	30.7	30.4	29.5	27.1	26.6	28.0	27.3
Median	36.7	39.8	43.1	42.2	41.3	41.2	41.3	39.5	39.4	38.4	38.3	39.4
Excluding Nigeria and South Africa	38.0	40.2	40.8	41.9	42.0	40.4	40.5	38.8	34.5	32.4	33.3	33.2
Oil-exporting countries	24.8	27.0	26.2	27.8	24.5	22.4	22.8	21.6	18.2	18.3	20.7	18.4
Excluding Nigeria	39.9	48.0	42.0	39.0	39.2	38.6	40.8	39.0	33.7	28.9	31.4	29.1
Oil-importing countries	33.8	32.5	33.8	36.6	37.7	37.9	37.4	36.0	33.1	31.7	32.4	32.8
Excluding South Africa	37.3	36.8	40.3	43.4	43.3	41.2	40.3	38.7	34.8	33.6	33.9	34.5
Middle-income countries	29.6	29.5	29.1	31.0	30.1	29.0	28.7	27.9	25.2	25.1	26.6	25.3
Excluding Nigeria and South Africa	40.9	44.8	42.4	42.4	43.2	42.0	42.7	41.6	35.5	32.8	33.8	32.8
Low-income countries	33.6	33.5	38.3	41.2	40.2	38.0	37.5	35.5	33.3	31.9	32.6	33.8
Excluding low-income countries in fragile situations	30.1	29.7	32.8	37.4	37.5	35.4	33.5	33.6	29.6	27.0	27.5	29.9
Countries in fragile situations	40.2	41.8	46.4	44.7	44.5	41.6	42.8	40.8	40.3	38.1	38.1	37.6
CFA franc zone	35.6	38.4	40.3	37.2	39.2	39.7	39.2	40.5	36.5	33.7	32.6	32.6
CEMAC	34.1	39.8	40.8	36.9	38.2	38.7	40.4	43.2	38.8	32.0	31.1	31.6
WAEMU	37.1	37.0	39.7	37.6	40.3	40.8	38.0	38.2	34.8	34.9	33.7	33.3
COMESA (SSA members)	36.8	34.3	39.1	42.2	38.9	36.9	36.7	33.9	30.4	29.8	30.8	31.4
EAC-5	29.1	29.2	31.7	36.7	34.1	31.4	30.6	28.3	24.0	23.9	24.9	25.5
ECOWAS	23.7	22.6	24.6	27.3	24.3	21.6	21.1	21.5	19.9	21.4	22.9	21.1
SACU	32.1	30.0	29.6	31.6	33.3	35.6	35.4	34.0	32.1	30.2	31.3	31.5
SADC	34.5	35.3	33.8	35.9	37.2	38.4	38.7	36.1	32.6	30.5	32.5	32.7

See sources and footnotes on page 91.

Table SA19. Trade Balance on Goods
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	50.4	24.1	41.1	45.2	41.6	33.5	24.1	12.2	14.7	13.8	18.2	18.1
Benin	-10.7	-9.9	-10.2	-9.9	-11.1	-10.1	-11.0	-7.4	-8.4	-7.5	-6.0	-5.7
Botswana	9.5	-12.8	-7.8	-4.5	-12.3	-2.3	3.3	-5.6	2.0	0.2	-0.9	-0.7
Burkina Faso	-9.5	-5.8	-1.6	-2.5	-3.6	-5.6	-2.1	-2.3	-1.4	-3.1	-3.0	-2.0
Burundi	-16.4	-14.5	-30.2	-29.0	-32.2	-29.1	-24.4	-21.7	-14.9	-14.6	-15.4	-13.1
Cabo Verde	-39.0	-39.6	-40.9	-45.1	-36.6	-33.6	-32.5	-29.6	-32.6	-37.5	-39.0	-40.3
Cameroon	1.7	-1.6	-0.8	-2.2	-0.9	-0.6	-1.3	-1.2	-0.7	-0.9	-0.9	-1.1
Central African Rep.	-4.0	-7.8	-8.8	-5.7	-6.2	-7.3	-18.5	-16.4	-13.7	-14.8	-16.7	-15.7
Chad	24.4	4.8	8.0	10.8	7.7	6.6	2.9	0.5	2.2	3.1	5.8	5.0
Comoros	-22.9	-28.9	-29.2	-30.3	-32.2	-30.5	-31.3	-28.6	-24.9	-24.3	-24.7	-23.6
Congo, Dem. Rep. of	0.2	-3.2	2.1	2.3	0.2	6.8	-0.9	-0.6	-0.5	2.2	5.1	4.4
Congo, Rep. of	47.1	22.8	37.1	45.5	43.1	33.1	24.6	-13.0	-23.8	27.5	39.1	38.5
Côte d'Ivoire	15.0	17.5	14.5	23.2	11.4	9.6	10.9	9.6	9.1	9.8	8.6	8.3
Equatorial Guinea	54.8	40.7	37.8	48.2	47.5	37.8	33.3	17.8	20.3	26.9	24.9	7.9
Eritrea	-33.9	-19.9	-19.6	-8.6	-5.3	-3.3	-2.4	-7.4	-8.8	-8.1	-7.3	-7.0
Ethiopia ¹	-20.6	-15.8	-16.3	-16.6	-16.9	-17.6	-17.9	-20.8	-18.9	-15.9	-15.0	-15.1
Gabon	41.6	29.8	38.7	49.4	42.3	32.2	28.1	15.5	13.3	18.7	22.1	21.1
Gambia, The	-21.3	-22.4	-22.8	-21.2	-22.0	-19.1	-25.4	-29.4	-22.8	-31.6	-35.5	-33.4
Ghana	-14.9	-8.6	-9.2	-7.7	-10.0	-8.0	-3.6	-8.4	-4.1	2.3	0.4	-0.5
Guinea	2.2	1.8	1.8	-9.3	-3.5	-0.4	-5.0	-7.2	-23.8	-15.3	-10.7	-0.8
Guinea-Bissau	-6.0	-9.8	-8.2	-0.2	-5.1	-2.9	-4.6	4.8	4.6	4.4	2.3	1.9
Kenya	-12.2	-13.4	-15.6	-20.1	-18.5	-18.6	-17.4	-13.1	-11.2	-12.1	-11.9	-11.4
Lesotho	-38.4	-45.8	-43.1	-39.3	-45.1	-38.9	-36.1	-32.3	-29.7	-31.7	-32.7	-30.5
Liberia	-22.0	-19.9	-10.2	-16.5	-19.0	-12.3	-33.3	-34.4	-23.7	-16.5	-15.4	-14.8
Madagascar	-13.5	-19.2	-11.8	-10.1	-11.2	-8.0	-5.1	-3.4	-2.6	-7.1	-6.5	-6.7
Malawi	-12.8	-10.3	-10.7	-7.9	-10.9	-7.8	-7.4	-7.6	-11.1	-9.4	-9.2	-7.8
Mali	-4.4	-6.0	-8.6	-2.6	0.9	-1.9	-3.5	-3.6	-4.1	-3.9	-4.5	-4.4
Mauritius	-15.2	-17.5	-19.5	-20.9	-21.5	-19.0	-18.0	-16.0	-16.9	-21.4	-23.8	-25.6
Mozambique	-5.5	-11.3	-11.3	-17.1	-26.7	-31.1	-27.7	-28.1	-12.5	-4.8	-3.6	-23.5
Namibia	-4.0	-14.0	-9.9	-8.8	-16.4	-15.6	-21.5	-25.0	-19.7	-10.9	-11.3	-11.1
Niger	-6.9	-14.7	-14.2	-14.4	-6.6	-5.6	-8.6	-12.3	-9.1	-8.5	-9.8	-10.2
Nigeria	15.3	8.5	8.2	7.9	8.5	8.2	3.7	-1.3	-0.1	2.6	2.3	1.7
Rwanda	-10.3	-14.2	-13.6	-17.2	-18.8	-15.1	-15.8	-14.9	-15.3	-9.5	-9.7	-9.6
São Tomé & Príncipe	-35.6	-39.7	-43.2	-44.9	-38.2	-38.2	-36.6	-33.9	-30.1	-30.8	-31.0	-29.9
Senegal	-18.4	-15.9	-14.9	-17.4	-20.3	-20.1	-18.4	-15.8	-14.0	-16.3	-14.8	-14.0
Seychelles	-29.5	-37.6	-39.3	-43.0	-38.5	-29.7	-40.3	-34.4	-37.2	-43.4	-48.4	-49.3
Sierra Leone	-7.5	-14.3	-20.2	-56.9	-24.1	-0.6	-6.8	-18.0	-17.1	-17.4	-13.6	-13.8
South Africa	-0.6	1.1	2.2	1.6	-1.1	-2.1	-1.7	-0.9	0.3	1.5	0.7	0.3
South Sudan	...	...	...	49.1	-19.6	1.9	9.5	-1.3	15.2	11.7	14.7	18.7
Swaziland	-3.5	-3.6	-3.3	-0.9	1.9	9.6	11.8	14.7	10.4	8.7	11.5	12.8
Tanzania	-9.8	-10.0	-9.5	-12.2	-13.0	-12.2	-11.4	-9.4	-5.9	-5.7	-6.9	-7.5
Togo	-13.2	-12.2	-13.3	-21.7	-14.4	-20.1	-19.4	-24.7	-22.8	-21.0	-21.2	-20.0
Uganda	-8.9	-8.1	-10.9	-11.7	-10.0	-8.3	-8.5	-9.1	-5.9	-6.5	-7.9	-9.1
Zambia	4.7	6.3	13.7	9.8	6.3	5.9	6.0	-0.3	-0.2	0.4	1.1	1.5
Zimbabwe ²	-7.4	-18.2	-17.9	-23.9	-18.6	-15.9	-14.7	-9.1	-7.2	-7.7	-7.7	-7.0
Sub-Saharan Africa	6.0	2.6	4.5	5.7	3.5	3.0	0.7	-3.1	-2.0	-0.1	0.0	-0.6
<i>Median</i>	-8.2	-10.8	-10.2	-9.3	-11.1	-7.8	-7.4	-9.1	-9.1	-7.2	-7.3	-7.0
Excluding Nigeria and South Africa	5.4	-0.2	3.6	6.9	2.8	1.9	-0.3	-5.4	-4.0	-2.0	-1.4	-2.1
Oil-exporting countries	22.3	12.5	15.2	18.2	16.0	13.7	8.4	1.3	2.8	6.1	6.9	5.7
Excluding Nigeria	37.5	20.4	31.3	37.9	31.7	25.7	19.5	8.0	9.6	12.5	15.7	14.4
Oil-importing countries	-4.0	-4.3	-3.1	-3.8	-6.4	-6.3	-6.3	-6.8	-5.3	-3.8	-4.1	-4.5
Excluding South Africa	-7.5	-9.0	-8.5	-9.2	-10.9	-9.4	-9.4	-10.4	-8.3	-6.9	-6.8	-7.2
Middle-income countries	8.6	5.4	7.2	8.2	6.7	5.8	3.3	-1.0	0.2	2.3	2.3	1.7
Excluding Nigeria and South Africa	13.8	6.7	11.9	15.7	12.4	9.5	6.8	-0.5	0.5	2.6	3.4	2.6
Low-income countries	-7.5	-10.1	-9.3	-6.5	-11.3	-9.1	-9.8	-11.2	-9.5	-7.9	-7.4	-8.0
Excluding low-income countries in fragile situations	-11.3	-11.5	-11.5	-13.1	-14.1	-14.1	-13.8	-14.7	-11.6	-9.9	-9.8	-11.2
Countries in fragile situations	4.7	-0.4	1.7	8.1	-0.2	2.1	0.2	-4.0	-4.0	-0.4	1.1	1.4
CFA franc zone	12.9	7.4	9.8	14.8	12.3	8.2	6.3	0.3	-0.0	3.1	3.6	2.5
CEMAC	26.9	15.9	20.5	27.1	25.1	19.1	14.7	3.4	2.4	9.7	11.7	9.0
WAEMU	-2.0	-1.2	-1.9	0.4	-2.5	-3.4	-2.4	-2.4	-1.9	-1.9	-2.2	-2.0
COMESA (SSA members)	-9.9	-11.1	-9.9	-11.3	-11.7	-10.1	-10.9	-11.4	-10.3	-9.4	-9.0	-9.1
EAC-5	-10.8	-11.4	-12.9	-15.9	-15.3	-14.5	-13.8	-11.5	-9.0	-9.2	-9.7	-9.8
ECOWAS	9.2	5.1	4.9	4.8	5.0	5.0	2.0	-2.4	-1.5	0.9	0.6	0.4
SACU	-0.6	-0.1	1.2	0.9	-2.2	-2.6	-2.2	-2.0	-0.4	0.9	0.1	-0.2
SADC	3.8	1.7	5.3	5.8	3.3	2.6	1.0	-1.4	0.6	1.7	1.9	1.0

See sources and footnotes on page 91.

Table SA20. External Current Account¹
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	14.7	-10.0	9.1	12.6	12.2	6.7	-3.0	-10.0	-5.1	-4.5	-2.2	-0.1
Benin	-6.7	-8.3	-8.2	-7.3	-7.4	-7.4	-8.6	-9.0	-9.4	-9.4	-8.5	-7.9
Botswana	10.7	-6.3	-2.8	3.1	0.3	8.9	15.4	7.8	11.7	10.8	8.3	7.5
Burkina Faso	-10.4	-4.7	-2.3	-4.0	-6.7	-11.3	-8.1	-8.5	-7.3	-8.3	-7.5	-6.5
Burundi	-7.8	1.7	-12.2	-14.4	-18.6	-19.3	-18.5	-17.7	-13.1	-12.7	-13.2	-11.9
Cabo Verde	-9.5	-14.6	-12.4	-16.3	-12.6	-4.9	-9.1	-3.2	-2.8	-8.8	-9.5	-10.0
Cameroon	-0.9	-3.1	-2.5	-2.7	-3.3	-3.6	-4.0	-3.8	-3.2	-2.5	-2.5	-2.4
Central African Rep.	-5.5	-9.1	-10.2	-7.6	-4.6	-3.0	-5.6	-9.0	-9.1	-10.2	-9.3	-9.2
Chad	0.4	-8.2	-8.5	-5.8	-7.8	-9.1	-8.9	-13.6	-9.2	-5.2	-4.3	-5.5
Comoros	-6.3	-6.9	-0.4	-6.0	-5.5	-7.0	-6.3	0.0	-7.4	-4.9	-6.9	-8.5
Congo, Dem. Rep. of	-0.2	-6.1	-10.5	-5.2	-4.6	-5.0	-4.6	-3.7	-3.1	-0.5	0.3	-0.9
Congo, Rep. of	3.2	-14.6	7.3	14.0	17.7	13.8	1.4	-54.1	-74.1	-12.7	3.0	4.8
Côte d'Ivoire	1.1	6.6	1.9	10.4	-1.2	-1.4	1.4	-0.6	-1.1	-1.2	-1.5	-1.3
Equatorial Guinea	13.6	-9.7	-20.2	-5.7	-1.1	-2.5	-4.3	-17.7	-11.8	-0.5	-0.9	-13.3
Eritrea	-3.1	-7.6	-6.1	3.2	2.7	3.6	4.0	-1.4	-2.1	-2.4	-1.5	-2.1
Ethiopia ²	-8.4	-6.7	-1.4	-2.5	-6.9	-5.9	-6.4	-10.2	-9.0	-8.1	-6.5	-6.3
Gabon	17.2	4.4	14.9	24.0	17.9	7.3	7.6	-5.6	-10.1	-4.8	-1.5	-1.9
Gambia, The	-8.5	-12.5	-16.3	-11.7	-7.0	-10.3	-10.8	-15.0	-8.9	-14.3	-18.4	-16.9
Ghana	-8.1	-5.5	-8.6	-9.0	-11.7	-11.9	-9.5	-7.7	-6.7	-4.5	-4.1	-4.0
Guinea	-3.9	-5.7	-6.4	-18.4	-20.0	-12.5	-13.4	-15.4	-31.9	-23.0	-19.1	-10.0
Guinea-Bissau	-3.6	-5.8	-8.3	-1.3	-8.4	-4.6	0.5	2.3	1.3	0.1	-3.3	-2.6
Kenya	-2.6	-4.4	-5.9	-9.2	-8.4	-8.8	-10.4	-6.7	-5.2	-6.4	-6.2	-5.7
Lesotho	15.1	1.6	-8.9	-13.4	-8.4	-5.5	-4.9	-4.5	-7.4	-6.9	-12.2	-12.1
Liberia	-9.0	-15.0	-20.7	-17.6	-17.3	-21.6	-26.3	-26.5	-18.5	-22.4	-22.5	-22.4
Madagascar	-12.9	-21.1	-10.2	-7.0	-7.6	-5.9	-0.3	-1.9	0.6	-3.4	-4.0	-4.8
Malawi	-12.9	-10.2	-8.6	-8.6	-9.2	-8.4	-8.3	-9.4	-13.6	-10.0	-8.9	-8.1
Mali	-7.3	-10.8	-10.7	-5.1	-2.2	-2.9	-4.7	-5.3	-7.2	-6.2	-6.9	-6.4
Mauritius	-6.3	-7.4	-10.3	-13.8	-7.3	-6.3	-5.7	-4.9	-4.4	-6.0	-7.4	-8.7
Mozambique	-8.9	-10.9	-16.1	-25.3	-44.7	-42.9	-38.2	-40.3	-39.2	-16.1	-16.9	-44.6
Namibia	6.7	-1.5	-3.5	-3.0	-5.7	-4.0	-10.8	-12.6	-14.1	-1.4	-3.6	-5.1
Niger	-9.2	-24.4	-19.8	-25.1	-16.1	-16.8	-15.4	-20.5	-15.5	-13.2	-16.1	-16.7
Nigeria	14.0	4.7	3.6	2.6	3.8	3.7	0.2	-3.2	0.7	2.5	0.5	0.4
Rwanda	-3.3	-7.0	-7.2	-7.4	-11.2	-8.7	-11.8	-13.3	-14.3	-6.8	-8.4	-9.2
São Tomé & Príncipe	-27.3	-24.7	-22.9	-27.7	-21.9	-13.8	-21.9	-12.6	-6.0	-13.0	-11.3	-9.9
Senegal	-9.6	-6.7	-4.4	-8.0	-10.9	-10.5	-9.0	-7.0	-5.5	-9.4	-7.9	-7.5
Seychelles	-13.7	-14.8	-19.4	-23.0	-21.1	-11.9	-23.1	-18.6	-18.3	-16.0	-14.4	-13.9
Sierra Leone	-6.9	-13.3	-22.7	-65.0	-31.8	-17.5	-18.2	-17.4	-19.4	-21.9	-18.9	-21.6
South Africa	-4.3	-2.7	-1.5	-2.2	-5.1	-5.9	-5.3	-4.4	-3.3	-2.3	-2.9	-3.1
South Sudan	...	...	...	18.2	-15.9	-3.9	-1.6	-7.2	1.8	-6.0	-6.1	-4.3
Swaziland	-3.1	-11.4	-8.6	1.0	12.7	19.3	21.6	26.7	16.7	14.6	15.4	15.0
Tanzania	-6.5	-7.6	-7.7	-10.8	-11.6	-10.6	-10.1	-8.4	-4.5	-3.8	-5.4	-6.0
Togo	-8.1	-5.2	-5.8	-7.8	-7.6	-13.2	-10.0	-11.0	-9.6	-8.2	-7.8	-6.4
Uganda	-2.7	-5.6	-8.0	-9.9	-6.8	-7.2	-7.8	-6.7	-3.4	-4.5	-6.9	-9.5
Zambia	-1.1	6.0	7.5	4.7	5.4	-0.6	2.1	-3.9	-4.5	-3.3	-2.6	-1.9
Zimbabwe ³	0.3	-11.2	-14.3	-20.1	-13.1	-16.6	-14.2	-9.5	-3.4	-2.6	-2.6	-2.4
Sub-Saharan Africa	2.2	-2.4	-0.8	-0.6	-1.7	-2.2	-3.8	-6.0	-4.1	-2.6	-2.9	-3.1
Median	-4.9	-7.2	-8.3	-7.3	-7.4	-6.3	-7.8	-8.4	-7.2	-6.0	-6.5	-6.4
Excluding Nigeria and South Africa	-0.0	-6.5	-3.3	-1.6	-3.5	-4.5	-5.9	-8.7	-7.1	-5.1	-4.6	-5.0
Oil-exporting countries	12.7	0.5	3.5	4.8	4.8	3.6	-0.6	-5.4	-2.1	0.1	-0.4	-0.2
Excluding Nigeria	9.7	-7.8	3.5	9.2	7.0	3.4	-2.5	-11.2	-8.8	-4.4	-2.1	-1.5
Oil-importing countries	-4.2	-4.4	-3.9	-4.7	-6.9	-7.3	-6.6	-6.5	-5.4	-4.2	-4.5	-5.0
Excluding South Africa	-4.0	-5.9	-6.3	-7.2	-8.5	-8.3	-7.5	-7.8	-6.5	-5.4	-5.4	-6.0
Middle-income countries	3.7	-1.0	0.7	1.0	0.3	-0.4	-2.3	-4.9	-2.7	-1.4	-1.8	-1.7
Excluding Nigeria and South Africa	3.7	-4.9	0.0	2.7	1.7	-0.5	-3.2	-7.4	-5.9	-3.8	-2.9	-2.6
Low-income countries	-5.8	-8.7	-8.6	-8.1	-11.1	-10.2	-9.6	-10.3	-8.5	-6.8	-6.8	-7.9
Excluding low-income countries in fragile situations	-6.9	-8.0	-7.1	-9.8	-12.4	-11.9	-11.3	-12.1	-9.3	-7.3	-7.6	-9.6
Countries in fragile situations	-2.7	-6.7	-6.4	-1.8	-5.8	-5.3	-5.1	-8.8	-9.0	-5.3	-4.2	-3.9
CFA franc zone	0.4	-4.7	-3.5	0.8	-1.0	-3.1	-3.5	-9.3	-9.1	-5.2	-4.3	-4.6
CEMAC	5.7	-5.5	-2.5	3.6	3.3	0.3	-2.0	-13.2	-13.8	-4.3	-1.9	-3.3
WAEMU	-5.2	-4.0	-4.6	-2.5	-5.9	-6.7	-5.1	-5.9	-5.5	-5.9	-5.9	-5.5
COMESA (SSA members)	-4.1	-6.1	-5.7	-6.5	-5.8	-6.4	-6.4	-6.7	-5.6	-5.2	-4.9	-5.1
EAC-5	-4.0	-5.7	-7.1	-9.9	-9.4	-9.3	-10.0	-7.9	-5.3	-5.5	-6.3	-6.6
ECOWAS	8.2	2.0	1.0	0.2	0.7	0.6	-1.5	-4.2	-1.7	-0.6	-1.9	-1.6
SACU	-3.3	-2.9	-1.7	-2.1	-4.8	-5.0	-4.3	-3.8	-2.7	-1.5	-2.2	-2.5
SADC	-1.7	-4.9	-1.4	-1.3	-3.2	-4.3	-5.3	-6.3	-4.2	-2.7	-2.9	-3.4

See sources and footnotes on page 91.

Table SA21. Net Foreign Direct Investment
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	-0.6	2.9	-5.5	-4.9	-8.5	-10.5	-1.8	8.0	1.4	1.3	1.5	1.8
Benin	2.1	1.5	2.8	1.3	2.6	3.3	4.0	1.4	1.4	4.5	5.8	7.6
Botswana	4.2	2.0	1.7	9.0	5.3	5.3	2.5	2.1	-3.7	-3.2	-1.3	-1.2
Burkina Faso	1.6	1.1	0.4	0.4	2.3	3.6	2.3	2.1	2.7	3.4	2.8	2.0
Burundi	0.1	0.0	0.0	0.2	0.0	2.6	2.4	1.5	1.2	1.1	1.1	0.9
Cabo Verde	9.4	7.0	6.7	5.6	3.8	3.5	6.8	7.0	6.4	6.1	8.2	8.5
Cameroon	1.7	1.8	1.6	1.6	2.8	2.7	2.6	1.9	1.7	1.6	1.6	1.7
Central African Rep.	3.3	2.1	3.1	1.7	3.2	0.1	0.1	0.3	0.4	0.9	0.9	1.2
Chad	6.4	4.4	3.6	3.0	3.4	2.8	3.6	4.3	2.0	3.0	3.0	3.2
Comoros	0.6	2.6	1.5	3.8	1.7	1.4	0.7	0.8	0.4	1.3	1.3	1.3
Congo, Dem. Rep. of	5.3	-1.5	13.3	6.5	10.5	5.2	5.1	3.0	2.4	2.6	2.7	2.7
Congo, Rep. of	11.2	13.6	7.6	1.3	-2.1	4.3	15.9	33.4	45.6	20.4	19.1	18.4
Côte d'Ivoire	1.8	1.6	1.3	1.1	1.2	1.3	1.2	1.4	1.7	1.7	1.9	2.0
Equatorial Guinea	9.3	12.1	20.4	12.8	15.7	9.8	5.3	9.8	2.0	-0.8	2.6	17.5
Eritrea	1.4	4.9	4.3	1.5	1.4	1.2	1.2	1.1	1.0	1.0	0.9	0.9
Ethiopia ¹	1.4	0.7	1.0	2.0	0.6	2.6	2.6	3.4	4.5	5.2	4.9	5.2
Gabon	4.2	5.2	3.5	4.1	3.9	5.1	5.8	6.9	8.9	8.4	10.1	10.7
Gambia, The	9.6	8.1	9.0	6.7	11.2	9.5	9.2	8.2	7.5	8.3	8.9	9.3
Ghana	2.9	11.3	7.9	8.1	7.9	6.7	8.7	8.1	8.1	6.9	6.0	5.0
Guinea	4.0	2.1	2.2	5.6	8.8	1.6	0.7	3.0	18.8	15.9	11.5	7.4
Guinea-Bissau	1.2	2.1	3.3	2.2	0.7	1.9	2.5	1.6	1.4	1.4	2.3	2.5
Kenya	0.5	0.2	0.4	3.3	2.3	1.7	1.2	0.6	0.5	0.5	0.6	0.6
Lesotho	2.2	3.6	0.9	2.2	2.1	1.9	4.2	4.5	3.1	2.0	2.0	2.0
Liberia	3.7	8.7	16.2	17.0	16.6	17.6	11.0	9.1	7.1	7.4	10.2	11.1
Madagascar	3.7	8.1	3.9	7.8	7.8	5.2	2.9	4.5	4.5	3.6	3.4	3.4
Malawi	1.8	0.9	2.3	0.8	1.4	1.7	0.8	1.8	3.1	2.0	2.2	2.3
Mali	1.8	7.3	3.7	4.2	3.1	2.3	1.0	1.5	1.8	2.3	2.3	2.2
Mauritius	1.6	2.5	127.6	-9.0	49.5	10.1	4.4	2.9	107.0	97.5	86.5	72.4
Mozambique	3.8	8.0	9.8	27.1	37.1	38.6	29.1	26.1	27.4	12.1	12.4	34.5
Namibia	6.3	5.7	7.0	7.0	8.6	6.5	4.7	8.1	2.8	3.8	3.7	3.0
Niger	2.3	13.4	17.5	16.5	12.1	8.1	8.9	6.9	3.5	3.6	5.1	5.7
Nigeria	2.1	2.4	1.4	1.9	1.2	0.8	0.5	0.3	0.8	0.8	0.7	0.6
Rwanda	1.2	2.2	0.7	1.6	2.2	3.4	3.9	2.7	2.9	2.7	2.6	3.1
São Tomé & Príncipe	16.8	8.1	25.6	13.5	8.6	1.5	6.6	8.1	5.9	11.3	2.5	2.5
Senegal	1.6	2.0	2.0	2.0	1.5	1.9	2.5	2.8	1.6	2.7	2.7	2.8
Seychelles	11.8	20.2	19.2	19.5	23.8	12.2	16.1	10.8	12.8	10.9	9.4	8.7
Sierra Leone	3.9	4.5	9.2	32.3	19.0	7.3	7.7	6.2	13.2	15.1	14.1	16.8
South Africa	1.1	2.1	1.0	1.1	0.4	0.5	-0.5	-1.3	-0.4	-1.7	-0.7	-0.2
South Sudan	...	...	...	-0.4	-0.5	-3.8	-0.1	0.1	-1.5	-0.3	0.5	0.3
Swaziland	1.8	1.6	2.9	2.2	0.8	2.0	0.6	1.1	0.7	-2.1	0.5	0.5
Tanzania	3.5	3.7	4.0	4.5	4.4	4.5	3.8	3.4	2.9	2.6	2.6	2.9
Togo	2.8	0.3	1.4	-13.9	-7.7	4.7	-6.7	-2.2	-2.4	-2.4	-2.4	-2.8
Uganda	4.7	4.4	2.5	4.3	4.7	4.4	3.7	2.9	2.1	2.3	3.7	5.4
Zambia	5.9	2.8	3.1	4.7	9.5	6.0	11.8	5.5	7.3	6.3	6.3	6.4
Zimbabwe ²	0.7	1.3	1.2	2.9	2.5	2.5	3.0	2.5	2.1	1.8	1.9	1.8
Sub-Saharan Africa	2.0	2.9	2.9	2.2	2.2	1.4	1.7	2.1	3.0	2.3	2.5	2.8
<i>Median</i>	2.6	2.7	3.1	3.0	3.1	3.3	3.0	2.9	2.4	2.6	2.6	2.8
Excluding Nigeria and South Africa	2.8	3.7	5.2	3.1	4.0	2.4	3.6	4.9	5.6	4.7	4.7	5.1
Oil-exporting countries	2.3	3.1	1.2	1.2	0.1	-0.6	0.8	2.3	1.8	1.4	1.6	1.7
Excluding Nigeria	2.7	4.6	0.6	-0.3	-2.1	-3.7	1.4	7.5	4.1	2.6	3.2	4.3
Oil-importing countries	1.9	2.8	4.1	3.0	3.9	3.2	2.6	1.9	3.8	2.8	3.0	3.4
Excluding South Africa	2.9	3.3	7.2	4.9	6.9	5.2	4.6	3.9	6.1	5.4	5.1	5.3
Middle-income countries	1.8	2.9	2.5	1.6	1.4	0.5	1.1	1.6	2.6	1.8	2.0	2.1
Excluding Nigeria and South Africa	2.6	4.1	5.7	1.8	2.6	0.2	3.0	5.5	6.7	5.2	5.2	5.2
Low-income countries	3.2	3.2	4.5	5.1	6.1	5.4	4.5	4.1	4.3	4.0	4.0	5.0
Excluding low-income countries in fragile situations	2.9	3.4	3.6	6.0	6.6	7.1	5.9	5.1	4.8	4.3	4.5	6.3
Countries in fragile situations	3.9	3.5	5.0	3.4	4.1	2.9	3.4	3.9	5.1	4.0	3.8	3.6
CFA franc zone	3.7	4.8	5.1	3.5	3.9	3.8	3.9	4.7	4.3	3.4	3.8	4.6
CEMAC	5.5	6.3	6.9	4.6	5.4	4.9	5.6	7.8	7.6	4.7	5.5	7.3
WAEMU	1.9	3.2	3.1	2.2	2.3	2.8	2.1	2.0	1.7	2.4	2.6	2.7
COMESA (SSA members)	2.6	1.7	9.8	3.1	6.6	3.8	3.8	2.7	7.1	6.5	6.2	5.8
EAC-5	2.3	2.2	2.0	3.7	3.4	3.2	2.7	2.0	1.6	1.5	1.8	2.2
ECOWAS	2.2	3.1	2.2	2.7	2.1	1.7	1.3	1.2	1.9	2.0	1.9	1.7
SACU	1.3	2.2	1.2	1.5	0.8	0.9	-0.2	-0.8	-0.4	-1.6	-0.6	-0.1
SADC	1.5	2.5	3.2	1.4	2.0	0.6	1.5	2.4	3.6	2.1	2.5	3.1

See sources and footnotes on page 91.

Table SA22. Real Effective Exchange Rates¹*(Annual average; index, 2010 = 100)*

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	76.2	106.0	100.0	103.2	114.3	121.6	126.8	128.1	125.0	157.8
Benin	103.6	107.0	100.0	99.4	97.7	99.1	98.0	87.4	87.5	87.3
Botswana	89.9	91.8	100.0	99.6	107.6	92.2	87.8	88.5	90.4	97.4
Burkina Faso	101.1	109.0	100.0	101.8	101.1	102.8	107.0	100.1	94.9	91.8
Burundi	87.4	97.5	100.0	99.5	102.4	102.5	106.7	121.9	122.1	135.5
Cabo Verde	98.0	102.6	100.0	102.1	99.7	103.1	103.0	100.1	98.7	99.1
Cameroon	101.3	106.7	100.0	100.2	96.7	99.6	100.9	97.9	99.9	100.1
Central African Rep.	94.9	104.8	100.0	98.9	99.2	107.4	119.8	118.6	124.1	127.1
Chad	95.9	108.1	100.0	94.0	101.8	101.8	103.2	101.2	97.7	92.3
Comoros	103.4	105.1	100.0	100.3	95.6	99.2	98.2	81.7	76.9	73.0
Congo, Dem. Rep. of	142.6	141.9	100.0	105.7	118.8	119.1	120.4	137.7	131.5	106.0
Congo, Rep. of	97.7	107.2	100.0	99.0	96.4	103.1	104.8	98.8	102.4	102.9
Côte d'Ivoire	102.2	106.4	100.0	102.0	97.9	102.3	103.3	98.8	99.3	99.2
Equatorial Guinea	88.3	101.2	100.0	103.6	99.8	104.0	106.8	98.3	100.1	100.7
Eritrea	58.2	89.5	100.0	110.6	130.8	151.8	176.8	227.0	271.5	324.2
Ethiopia	101.7	116.8	100.0	105.1	124.7	126.2	129.3	148.2	151.4	154.2
Gabon	98.9	103.9	100.0	98.6	96.5	98.4	102.8	98.8	100.7	102.5
Gambia, The	102.2	103.0	100.0	92.5	90.2	83.5	76.2	76.1	91.3	93.0
Ghana	102.5	93.7	100.0	95.1	89.1	89.7	69.6	70.6	80.6	79.1
Guinea	95.9	107.8	100.0	96.5	107.6	120.7	131.0	147.4	133.9	139.3
Guinea-Bissau	98.5	104.5	100.0	102.1	99.6	101.2	100.3	97.8	99.7	99.6
Kenya	91.8	101.3	100.0	95.7	108.8	112.7	116.8	122.1	126.8	130.8
Lesotho	90.1	87.8	100.0	100.6	94.7	84.7	79.2	73.8	68.8	76.6
Liberia	91.6	98.4	100.0	99.8	109.0	107.7	107.9	132.0	132.1	119.4
Madagascar	85.8	100.2	100.0	105.3	104.2	107.9	104.2	101.7	100.6	108.1
Malawi	95.9	106.5	100.0	97.0	79.2	66.9	72.8	83.6	72.6	74.6
Mali	98.4	105.4	100.0	100.5	101.0	101.5	103.4	99.7	97.9	98.6
Mauritius	94.1	96.8	100.0	106.3	107.9	107.8	111.2	110.0	111.2	115.9
Mozambique	102.8	103.4	100.0	105.8	113.3	112.8	112.7	104.6	81.3	84.8
Namibia	91.7	88.9	100.0	98.5	94.7	86.5	81.5	79.5	77.0	85.3
Niger	101.1	107.2	100.0	100.0	94.7	98.2	97.7	92.8	92.9	94.3
Nigeria	88.0	92.0	100.0	100.4	111.5	119.0	127.4	126.5	116.2	105.5
Rwanda	87.0	102.5	100.0	96.7	99.1	96.7	92.5	100.0	97.4	93.5
São Tomé & Príncipe	82.4	102.8	100.0	111.7	117.4	128.5	137.5	138.4	147.6	154.2
Senegal	105.0	106.6	100.0	101.1	97.3	99.5	98.7	92.8	94.2	93.7
Seychelles	129.8	95.7	100.0	92.7	91.8	108.1	104.7	116.8	116.9	110.8
Sierra Leone	95.0	103.4	100.0	100.7	117.4	127.1	131.0	142.8	130.0	112.2
South Africa	92.0	86.5	100.0	98.0	92.7	83.0	77.8	77.4	71.8	81.0
South Sudan	...	...	...	...	...	...	...	...	...	...
Swaziland	93.9	92.6	100.0	100.1	100.2	94.2	90.4	89.8	87.5	94.3
Tanzania	99.7	104.5	100.0	93.4	108.6	116.4	119.2	113.8	110.5	109.3
Togo	100.6	106.5	100.0	100.7	96.8	98.9	100.1	93.0	94.0	92.5
Uganda	103.5	107.3	100.0	95.9	107.9	109.1	111.2	105.7	103.1	99.7
Zambia	90.7	94.4	100.0	97.4	100.7	104.4	100.2	91.1	88.6	96.5
Zimbabwe	...	...	...	...	...	...	...	...	...	...
Sub-Saharan Africa	92.6	96.2	100.0	99.5	104.1	104.7	105.5	105.4	101.1	101.9
<i>Median</i>	95.9	103.4	100.0	100.1	100.2	102.8	103.4	100.0	99.7	99.6
Excluding Nigeria and South Africa	95.5	104.7	100.0	99.7	105.1	107.5	107.3	107.9	107.7	110.5
Oil-exporting countries	87.5	95.5	100.0	100.6	109.8	116.5	123.5	122.3	114.8	110.0
Excluding Nigeria	87.0	105.7	100.0	101.3	105.1	110.0	113.4	111.4	111.0	123.7
Oil-importing countries	96.3	96.7	100.0	98.7	100.1	96.8	93.8	94.4	91.9	96.0
Excluding South Africa	98.7	104.4	100.0	99.2	105.1	106.7	105.4	106.7	106.6	107.0
Middle-income countries	90.7	93.1	100.0	99.4	102.8	103.1	103.4	102.6	97.9	99.5
Excluding Nigeria and South Africa	91.9	101.1	100.0	99.6	102.1	104.5	102.5	101.2	103.4	110.0
Low-income countries	100.5	109.5	100.0	99.8	109.0	111.4	113.5	116.6	113.4	111.7
Excluding low-income countries in fragile situations	100.7	108.7	100.0	99.1	111.1	114.1	116.1	117.2	114.3	114.0
Countries in fragile situations	100.3	109.5	100.0	101.1	103.0	105.5	107.6	110.5	108.4	105.4
CFA franc zone	99.4	106.1	100.0	100.4	98.2	101.1	102.6	97.6	98.0	97.7
CEMAC	96.9	105.4	100.0	99.6	98.0	101.2	103.4	99.1	100.6	100.4
WAEMU	101.8	106.7	100.0	101.1	98.4	101.0	101.9	96.3	95.8	95.4
COMESA (SSA members)	97.9	107.2	100.0	100.2	110.1	111.6	113.4	119.4	119.5	120.0
EAC-5	96.2	103.6	100.0	95.1	107.9	112.1	114.8	114.3	114.0	114.0
ECOWAS	91.3	94.7	100.0	100.0	107.4	113.4	117.3	116.1	110.1	102.5
SACU	91.9	86.8	100.0	98.1	93.4	83.6	78.4	78.0	72.8	81.8
SADC	92.2	93.7	100.0	99.0	99.2	94.1	91.3	90.8	85.7	94.2

See sources and footnotes on page 91.

Table SA23. Nominal Effective Exchange Rates¹*(Annual average; index, 2010 = 100)*

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	114.0	118.9	100.0	94.2	96.9	96.6	95.5	88.9	66.6	64.1
Benin	104.1	105.8	100.0	101.2	96.1	99.6	102.2	93.1	96.3	99.1
Botswana	115.5	95.7	100.0	95.4	98.3	81.4	75.5	74.2	73.7	78.5
Burkina Faso	92.1	103.4	100.0	104.2	104.0	110.4	121.7	120.9	124.2	128.9
Burundi	108.4	99.2	100.0	96.1	87.8	84.4	87.1	96.8	94.3	89.9
Cabo Verde	101.7	102.4	100.0	101.1	99.1	102.8	104.4	102.7	104.1	106.3
Cameroon	100.4	104.6	100.0	101.2	98.1	101.7	103.3	99.5	103.1	105.8
Central African Rep.	101.7	104.4	100.0	100.8	97.8	101.3	103.0	98.6	99.8	100.5
Chad	98.4	103.0	100.0	101.1	98.8	100.7	102.1	98.5	101.0	102.4
Comoros	99.6	104.5	100.0	102.9	100.1	105.2	106.7	99.3	102.2	107.9
Congo, Dem. Rep. of	194.0	113.1	100.0	94.9	100.0	100.9	102.4	117.9	111.6	75.8
Congo, Rep. of	101.7	105.2	100.0	101.1	98.2	102.0	103.4	97.1	99.2	99.8
Côte d'Ivoire	101.6	105.1	100.0	100.6	97.9	102.0	104.6	100.5	101.8	102.9
Equatorial Guinea	98.9	104.7	100.0	102.0	97.0	99.4	99.2	90.2	91.2	92.8
Eritrea	96.9	98.1	100.0	98.7	102.7	104.1	105.6	118.2	123.1	130.7
Ethiopia	164.0	122.3	100.0	81.9	81.4	78.3	76.6	81.7	79.4	75.7
Gabon	101.6	103.5	100.0	100.3	97.8	100.7	102.0	98.8	99.8	100.4
Gambia, The	107.9	105.2	100.0	91.7	88.2	79.1	69.5	66.3	75.4	72.7
Ghana	155.6	101.1	100.0	90.8	80.4	74.4	51.1	44.9	44.4	39.7
Guinea	167.0	120.9	100.0	82.3	81.7	84.0	85.0	90.1	77.0	75.1
Guinea-Bissau	100.9	103.6	100.0	100.5	98.3	100.7	101.9	98.6	100.1	100.7
Kenya	107.4	102.5	100.0	89.0	96.7	97.6	97.2	97.7	97.3	95.5
Lesotho	106.8	89.2	100.0	98.8	89.8	78.1	70.8	64.5	57.3	62.1
Liberia	122.9	103.4	100.0	95.0	99.7	93.5	86.3	98.7	91.4	76.1
Madagascar	113.0	107.0	100.0	99.6	95.7	95.6	88.6	81.3	76.2	77.2
Malawi	115.5	110.3	100.0	94.3	67.7	45.4	41.3	40.5	29.8	28.3
Mali	99.5	103.8	100.0	101.2	99.3	102.8	105.9	102.9	105.1	106.7
Mauritius	104.9	96.9	100.0	103.3	104.0	102.8	104.8	103.8	105.6	108.3
Mozambique	143.7	128.9	100.0	112.4	121.0	118.9	119.2	109.4	73.4	68.2
Namibia	104.5	90.6	100.0	97.6	90.8	81.0	74.3	71.5	66.6	71.7
Niger	99.7	104.9	100.0	100.9	98.1	102.1	104.9	100.8	102.8	104.4
Nigeria	118.4	101.8	100.0	94.1	95.9	96.7	98.0	91.2	74.3	58.8
Rwanda	102.9	101.9	100.0	97.4	98.5	95.2	91.8	99.7	93.9	88.7
São Tomé & Príncipe	156.6	114.1	100.0	101.0	98.4	101.4	103.1	99.7	101.9	103.0
Senegal	100.5	104.7	100.0	101.4	99.1	103.1	105.7	101.5	103.6	104.1
Seychelles	200.7	91.4	100.0	93.5	88.9	102.6	99.2	108.5	110.9	107.4
Sierra Leone	139.6	119.1	100.0	87.9	92.4	93.2	90.4	91.5	75.8	64.1
South Africa	110.4	88.2	100.0	96.3	88.3	76.2	68.4	65.7	57.9	63.2
South Sudan	...	...	...	...	...	...	...	...	...	...
Swaziland	105.7	93.7	100.0	98.3	94.1	87.2	82.5	80.3	75.3	79.1
Tanzania	120.0	108.2	100.0	87.4	90.2	92.0	91.3	84.5	79.6	76.7
Togo	100.2	104.7	100.0	101.6	98.6	102.3	106.3	99.7	102.7	105.6
Uganda	122.8	108.3	100.0	85.4	88.7	88.3	89.9	81.0	78.6	74.2
Zambia	119.5	99.6	100.0	94.9	94.9	94.7	86.8	73.8	61.9	65.0
Zimbabwe	...	...	...	...	...	...	...	...	...	...
Sub-Saharan Africa	116.6	101.0	100.0	94.5	93.0	89.9	86.9	82.8	73.5	68.7
<i>Median</i>	106.8	104.4	100.0	98.7	97.8	99.4	99.2	97.7	94.3	89.9
Excluding Nigeria and South Africa	118.0	107.6	100.0	93.9	93.4	92.5	89.5	86.4	81.1	78.5
Oil-exporting countries	114.6	104.1	100.0	95.1	96.3	97.3	98.3	91.7	76.4	64.2
Excluding Nigeria	106.3	110.8	100.0	97.9	97.5	98.9	99.0	93.2	82.5	81.8
Oil-importing countries	117.6	98.7	100.0	94.1	90.7	84.8	79.3	76.7	71.2	71.5
Excluding South Africa	122.3	106.5	100.0	92.6	92.1	90.5	86.7	84.2	80.5	77.4
Middle-income countries	114.2	98.6	100.0	95.2	93.4	89.6	85.8	80.9	70.5	65.7
Excluding Nigeria and South Africa	111.6	105.0	100.0	95.7	94.8	93.8	88.6	83.5	78.0	77.2
Low-income countries	126.6	110.9	100.0	91.8	91.7	90.9	90.7	89.9	85.0	80.1
Excluding low-income countries in fragile situations	127.6	112.4	100.0	89.4	90.7	90.5	90.5	88.3	83.6	80.5
Countries in fragile situations	117.6	107.4	100.0	97.4	94.8	94.5	94.5	94.7	91.3	85.2
CFA franc zone	100.0	104.5	100.0	101.3	98.5	102.1	104.6	100.0	102.3	104.0
CEMAC	100.2	104.3	100.0	101.2	97.9	101.0	102.2	97.2	99.6	101.3
WAEMU	99.9	104.6	100.0	101.4	99.0	103.2	107.0	102.8	104.8	106.6
COMESA (SSA members)	127.4	107.8	100.0	90.1	91.2	89.1	87.4	87.6	83.4	78.8
EAC-5	114.3	105.5	100.0	88.2	92.6	93.2	93.0	89.3	86.4	83.4
ECOWAS	117.9	102.6	100.0	94.7	94.8	95.4	94.1	87.9	75.8	63.7
SACU	110.3	88.6	100.0	96.4	88.9	76.7	69.1	66.4	58.9	64.2
SADC	115.3	96.7	100.0	95.6	91.4	83.2	77.5	74.0	64.3	65.8

See sources and footnotes on page 91.

Table SA24. External Debt, Official Debt, Debtor Based
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	28.2	20.2	20.6	19.5	19.0	23.6	27.4	35.3	46.7	36.5	41.0	42.1
Benin	20.1	15.0	17.0	15.8	15.7	17.3	18.4	20.9	21.4	23.1	23.5	24.9
Botswana	3.6	13.6	15.3	12.3	12.4	12.1	11.6	11.3	15.6	15.2	12.0	10.2
Burkina Faso	29.4	25.6	26.7	21.7	22.9	22.1	21.8	25.9	26.1	24.4	23.1	22.7
Burundi	120.2	21.2	22.4	24.0	22.6	21.0	18.9	18.2	16.7	25.9	35.2	41.1
Cabo Verde	46.0	45.5	51.2	53.2	70.0	81.4	82.6	95.1	92.7	100.0	94.7	94.9
Cameroon	17.9	4.9	5.6	6.3	8.2	11.4	14.9	19.4	19.9	23.2	23.2	24.5
Central African Rep.	61.0	9.0	9.0	8.0	9.9	15.0	35.0	32.6	28.2	28.8	25.8	24.1
Chad	23.4	27.4	24.6	20.7	20.5	21.8	29.1	25.0	27.1	28.5	26.1	25.5
Comoros	73.0	51.9	48.9	44.9	41.4	18.7	18.7	24.4	29.0	28.5	26.5	26.5
Congo, Dem. Rep. of	86.0	67.1	23.2	18.9	17.9	15.9	13.7	12.5	11.6	11.0	10.7	10.4
Congo, Rep. of	61.5	11.1	17.1	17.0	25.3	26.0	25.1	43.8	50.1	46.3	36.8	34.7
Côte d'Ivoire	67.6	52.9	47.0	48.1	29.1	27.2	24.5	28.9	26.9	30.7	33.0	31.8
Equatorial Guinea	2.0	4.5	8.0	6.7	7.3	6.2	5.6	9.6	10.0	10.5	12.0	15.7
Eritrea	60.0	49.1	45.8	35.8	29.4	25.1	22.5	22.6	20.5	20.1	20.1	19.9
Ethiopia ¹	37.2	14.7	18.8	24.4	20.6	23.5	25.2	37.9	33.8	33.5	29.8	30.2
Gabon	32.8	20.3	16.8	15.4	16.6	24.2	25.3	33.3	35.6	42.1	42.8	45.4
Gambia, The	83.7	41.0	39.7	43.0	41.3	49.4	53.9	55.9	56.5	62.2	61.4	59.4
Ghana	24.1	19.6	19.4	19.3	21.8	24.9	35.8	42.8	38.5	36.5	35.3	32.0
Guinea	61.9	47.7	45.9	53.3	17.9	18.8	20.8	21.4	22.8	22.7	28.6	31.9
Guinea-Bissau	161.7	128.7	38.7	24.5	27.3	25.7	22.7	23.4	21.7	19.5	17.4	17.1
Kenya	25.2	20.9	21.5	22.4	21.1	19.3	22.8	24.7	26.2	28.3	30.7	29.7
Lesotho	39.7	33.0	29.3	27.6	29.4	33.0	31.2	35.8	34.2	31.1	31.5	31.4
Liberia	345.4	95.5	6.9	6.9	6.6	7.5	11.5	16.3	20.1	24.7	28.7	31.4
Madagascar	46.0	26.0	23.5	21.6	22.8	22.5	22.7	26.0	25.4	25.5	26.2	28.2
Malawi	42.2	12.9	12.4	11.4	20.1	26.6	30.0	27.8	32.7	32.6	30.8	31.3
Mali	27.9	20.9	21.4	19.0	22.2	22.2	19.5	22.2	23.7	25.7	23.5	23.4
Mauritius	11.9	11.0	11.9	12.7	13.2	16.1	15.7	16.3	14.7	12.8	11.7	10.3
Mozambique	46.6	36.8	38.4	33.7	33.2	47.0	52.4	66.6	89.3	89.9	93.7	99.7
Namibia	4.7	4.9	4.3	6.4	7.8	7.9	8.0	13.1	17.1	16.4	16.7	17.0
Niger	31.2	19.6	16.9	15.5	17.1	18.2	20.5	27.2	29.7	30.6	30.2	31.9
Nigeria	11.4	3.5	3.2	3.5	3.8	2.6	2.6	3.1	4.0	7.4	8.3	7.7
Rwanda	36.3	13.7	13.5	15.2	14.5	20.4	22.8	26.9	34.1	37.1	37.1	38.6
São Tomé & Príncipe	207.5	72.4	79.5	78.0	81.0	71.1	69.6	86.0	79.6	72.8	66.0	62.4
Senegal	28.7	28.2	27.2	27.8	31.2	33.6	37.5	40.2	40.3	49.8	51.3	49.2
Seychelles	61.5	87.6	49.3	48.1	48.3	39.2	37.3	35.6	31.7	29.8	28.2	26.2
Sierra Leone	71.4	28.2	30.4	32.4	25.8	21.3	22.5	29.4	36.1	43.5	45.1	47.2
South Africa	7.2	7.6	9.5	10.0	14.1	14.4	15.3	12.9	18.9	19.5	18.2	18.4
South Sudan	...	...	...	...	...	...	...	...	...	...	...	...
Swaziland	12.2	9.8	7.9	7.2	7.1	7.7	7.6	9.4	9.2	10.3	12.6	14.2
Tanzania	26.7	17.4	19.3	21.1	21.7	22.8	23.6	27.6	28.7	28.5	28.9	29.9
Togo	70.2	51.8	16.7	11.9	13.7	14.8	16.8	21.2	19.3	20.8	22.6	24.3
Uganda	27.1	12.2	13.4	14.2	14.7	16.2	15.2	19.5	21.3	24.4	27.0	30.6
Zambia	41.6	9.0	7.3	8.0	13.7	13.6	19.9	34.5	38.2	37.1	40.5	43.1
Zimbabwe ²	56.9	64.8	58.4	47.3	42.9	41.2	39.6	40.6	42.1	38.9	36.2	33.8
Sub-Saharan Africa	19.6	13.5	12.4	12.5	13.5	13.9	14.8	17.2	20.8	22.5	22.8	22.5
Median	38.5	20.9	20.0	19.4	20.5	21.5	22.6	26.0	27.0	28.5	28.7	30.1
Excluding Nigeria and South Africa	34.9	23.2	20.8	20.1	19.7	21.6	23.7	29.3	31.1	30.8	31.5	31.8
Oil-exporting countries	15.9	7.5	7.3	7.5	7.8	8.0	8.5	10.4	13.9	16.5	17.4	16.6
Excluding Nigeria	25.7	15.8	16.6	15.7	16.6	20.2	23.2	30.4	37.5	33.3	35.2	36.3
Oil-importing countries	22.1	17.7	16.1	16.1	17.9	18.9	20.5	22.8	25.6	26.1	26.0	26.2
Excluding South Africa	38.6	26.5	22.6	22.3	21.1	22.2	24.0	28.9	29.2	30.0	30.4	30.4
Middle-income countries	14.3	10.1	10.2	10.5	11.8	11.9	12.7	14.3	18.4	20.4	20.8	20.2
Excluding Nigeria and South Africa	27.7	19.6	19.1	18.6	18.5	20.6	23.6	29.7	32.8	31.8	33.3	33.1
Low-income countries	45.8	28.5	23.5	22.7	21.6	23.1	23.9	28.7	29.1	29.6	29.2	30.2
Excluding low-income countries in fragile situations	31.4	18.0	19.9	21.2	20.6	23.6	24.9	32.8	33.0	33.6	32.8	34.1
Countries in fragile situations	63.9	42.7	30.9	28.1	24.3	23.7	23.2	25.1	25.3	26.2	26.6	26.5
CFA franc zone	34.8	23.2	21.1	19.6	18.7	20.1	21.2	26.2	26.8	29.8	29.9	30.2
CEMAC	25.3	11.1	12.3	11.5	13.5	16.0	18.4	24.1	25.7	28.3	27.5	28.7
WAEMU	44.9	35.5	30.8	29.1	24.6	24.5	24.2	28.0	27.7	30.9	31.7	31.2
COMESA (SSA members)	39.8	24.6	20.0	20.0	19.9	20.2	21.6	26.8	26.9	27.6	27.7	28.1
EAC-5	28.5	17.6	18.7	19.9	19.7	19.9	21.6	24.7	26.4	28.2	30.1	30.6
ECOWAS	21.4	11.7	9.4	9.4	8.5	7.9	8.0	9.7	11.7	15.5	16.6	15.5
SACU	7.3	7.9	9.7	10.0	13.9	14.1	15.0	12.9	18.7	19.2	17.9	18.1
SADC	16.0	14.6	13.7	13.6	16.5	18.1	19.8	20.9	26.5	25.1	25.1	25.6

See sources and footnotes on page 91.

Table SA25. Terms of Trade on Goods
(Index, 2010 = 100)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	91.7	83.8	100.0	124.4	131.4	129.4	118.4	69.2	59.3	72.1	86.7	80.5
Benin	42.1	78.5	100.0	107.4	74.5	63.9	62.4	60.0	58.7	55.3	52.2	47.5
Botswana	105.3	97.2	100.0	102.0	112.4	126.7	121.1	125.9	139.3	112.4	111.0	111.9
Burkina Faso	158.8	140.4	100.0	100.1	116.4	107.6	89.0	101.4	109.7	113.7	114.6	109.3
Burundi	68.8	65.9	100.0	91.0	72.3	65.3	81.9	47.0	60.2	58.5	54.3	56.0
Cabo Verde	101.2	86.7	100.0	107.4	106.7	95.1	89.3	67.4	69.2	77.7	86.5	84.1
Cameroon	113.8	89.7	100.0	100.5	110.5	108.9	100.9	87.0	89.1	84.6	78.4	75.2
Central African Rep.	93.3	99.4	100.0	100.6	103.5	124.4	134.0	165.8	205.8	182.1	165.5	167.7
Chad	76.1	78.3	100.0	121.2	123.1	134.8	128.2	67.0	62.3	79.9	92.7	87.7
Comoros	109.4	91.8	100.0	135.8	148.1	121.2	99.6	101.9	155.6	167.7	164.3	149.3
Congo, Dem. Rep. of	93.8	85.1	100.0	89.4	83.9	79.8	87.0	87.6	88.1	120.0	130.7	130.8
Congo, Rep. of	102.4	67.4	100.0	124.9	110.8	102.2	97.9	73.7	64.0	93.2	96.1	93.8
Côte d'Ivoire	65.1	85.8	100.0	96.6	91.5	93.2	101.1	108.9	135.2	137.0	123.8	124.3
Equatorial Guinea	71.9	85.2	100.0	111.1	129.0	95.2	77.2	43.5	47.1	56.4	68.1	65.1
Eritrea	157.9	99.4	100.0	100.5	100.9	101.3	101.3	101.3	101.3	101.3	101.3	101.3
Ethiopia ¹	62.8	76.7	100.0	120.2	127.5	106.2	108.6	109.3	109.7	113.1	111.2	110.9
Gabon	90.4	81.5	100.0	131.4	122.0	120.7	109.6	60.4	54.2	69.4	80.5	74.4
Gambia, The	158.1	117.3	100.0	93.7	118.1	137.1	120.0	96.4	111.8	83.5	81.4	86.9
Ghana	60.9	83.1	100.0	118.7	116.8	107.8	100.0	85.7	87.4	82.6	82.0	80.7
Guinea	97.3	88.9	100.0	78.2	119.0	128.5	134.5	150.4	159.0	150.1	155.1	169.0
Guinea-Bissau	124.2	87.3	100.0	142.2	100.5	98.8	122.3	168.8	171.2	224.7	219.7	226.1
Kenya	86.7	100.9	100.0	81.3	79.1	79.5	81.0	98.5	95.1	93.5	85.5	87.0
Lesotho	128.8	100.0	100.0	98.1	97.9	99.2	98.9	108.2	103.9	100.5	99.0	101.9
Liberia	72.8	70.6	100.0	99.8	76.6	84.6	77.7	57.2	65.8	71.6	65.5	65.7
Madagascar	87.5	77.3	100.0	108.6	123.5	152.6	172.5	159.9	197.0	183.4	188.1	182.1
Malawi	83.3	94.5	100.0	100.2	85.6	83.3	85.3	87.4	87.2	77.2	75.6	74.9
Mali	76.0	91.6	100.0	130.8	144.9	122.0	129.4	147.9	170.3	169.5	163.7	167.3
Mauritius	97.5	104.2	100.0	96.4	96.4	97.6	96.6	112.4	115.7	112.0	108.0	103.9
Mozambique	91.2	87.9	100.0	101.5	93.0	93.1	91.7	89.6	91.3	94.2	94.2	93.8
Namibia	78.3	91.5	100.0	110.2	106.0	116.3	119.5	114.3	94.1	94.1	94.1	94.1
Niger	69.5	94.7	100.0	100.3	103.0	99.8	80.8	74.4	72.9	69.0	67.0	65.8
Nigeria	96.0	90.8	100.0	113.0	113.0	114.2	111.0	81.4	76.2	83.5	90.0	86.3
Rwanda	73.9	85.0	100.0	96.9	102.9	117.9	114.3	130.1	112.8	121.5	120.4	122.9
São Tomé & Príncipe	152.5	93.7	100.0	87.6	141.6	106.9	114.4	95.0	125.2	125.8	141.5	147.2
Senegal	83.6	100.4	100.0	94.8	95.0	87.5	89.3	100.2	101.0	96.5	100.5	102.7
Seychelles	103.7	99.2	100.0	99.6	101.5	101.7	101.9	98.9	96.0	97.5	100.1	99.1
Sierra Leone	98.8	93.6	100.0	93.0	95.9	92.7	77.9	60.5	65.9	74.1	73.7	74.1
South Africa	84.5	94.7	100.0	106.8	102.3	101.5	100.1	103.5	105.0	112.3	109.3	107.8
South Sudan	...	...	...	...	...	...	...	...	...	...	...	...
Swaziland	88.5	98.4	100.0	85.8	87.9	115.6	120.3	121.4	115.1	104.2	106.6	105.8
Tanzania	66.1	93.4	100.0	103.0	103.8	100.8	97.1	96.2	98.4	94.9	91.5	92.3
Togo	96.6	97.0	100.0	105.1	101.0	99.6	103.0	110.1	106.2	105.7	103.6	104.2
Uganda	102.0	120.2	100.0	112.4	106.5	109.0	117.7	126.0	143.4	132.2	126.8	125.3
Zambia	78.8	73.2	100.0	106.1	91.6	86.0	83.8	80.9	80.2	91.9	97.5	98.0
Zimbabwe ²	51.3	70.5	100.0	152.1	126.5	99.7	91.8	93.2	96.8	86.6	86.5	84.3
Sub-Saharan Africa	88.2	91.1	100.0	109.7	108.9	107.6	105.0	92.0	92.7	98.3	99.8	97.7
<i>Median</i>	90.8	91.1	100.0	101.7	103.7	101.6	100.5	97.4	97.6	95.7	98.3	98.5
Excluding Nigeria and South Africa	85.9	89.1	100.0	109.4	110.1	106.0	102.8	94.3	97.0	99.1	100.3	99.2
Oil-exporting countries	95.4	88.3	100.0	115.2	116.9	116.2	110.8	78.3	72.7	80.3	88.1	84.1
Excluding Nigeria	94.1	83.4	100.0	119.9	125.6	121.0	110.5	69.9	64.2	74.4	84.4	79.2
Oil-importing countries	83.3	93.0	100.0	105.6	102.7	100.3	99.7	103.0	106.4	109.2	106.8	106.2
Excluding South Africa	82.2	91.5	100.0	104.4	103.1	99.4	99.5	102.8	107.2	107.4	105.4	105.3
Middle-income countries	89.2	91.2	100.0	109.8	108.9	108.5	105.2	89.0	88.0	94.3	96.3	93.7
Excluding Nigeria and South Africa	87.7	88.0	100.0	109.7	110.8	107.6	102.0	86.9	87.5	89.4	91.7	90.0
Low-income countries	83.0	90.6	100.0	108.9	109.0	103.6	103.9	103.4	108.6	111.7	111.4	111.0
Excluding low-income countries in fragile situations	80.4	94.7	100.0	108.1	109.0	102.1	100.8	103.7	106.7	106.0	103.0	102.2
Countries in fragile situations	83.0	83.8	100.0	109.0	106.0	103.1	106.2	102.7	114.4	122.9	122.8	122.9
CFA franc zone	88.3	89.7	100.0	110.0	111.2	103.7	99.1	90.5	99.7	103.4	101.5	100.3
CEMAC	95.3	83.5	100.0	114.8	118.3	110.6	101.3	72.8	73.6	80.6	83.4	79.8
WAEMU	80.6	96.0	100.0	104.4	103.1	96.2	96.8	105.9	119.8	120.3	114.5	114.4
COMESA (SSA members)	84.2	90.3	100.0	103.0	100.2	95.7	98.4	103.6	105.7	108.8	107.3	106.8
EAC-5	82.0	100.9	100.0	95.6	93.6	94.0	94.9	103.3	104.3	100.7	94.6	95.4
ECOWAS	91.1	91.1	100.0	111.5	111.7	111.1	108.3	85.8	85.8	91.7	95.4	92.7
SACU	85.3	94.8	100.0	106.4	102.6	103.0	101.8	105.0	106.4	111.5	108.7	107.5
SADC	85.6	91.4	100.0	108.8	106.6	106.1	103.4	96.6	96.9	102.9	104.8	102.9

See sources and footnotes on page 91.

Table SA26. Reserves*(Months of imports of goods and services)*

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	3.1	4.4	5.0	7.1	7.8	7.2	8.8	10.7	9.2	6.0	6.9	7.1
Benin ¹	...	...	...	...	...	...	...	...	...	...	...	...
Botswana	20.7	15.9	11.5	10.9	10.0	10.6	12.9	13.4	14.2	14.3	15.3	17.6
Burkina Faso ¹	...	...	...	...	...	...	...	...	...	...	...	...
Burundi	3.6	4.4	4.1	3.3	3.5	3.5	3.9	2.1	1.7	2.6	3.0	3.9
Cabo Verde	3.2	4.1	3.4	3.7	4.0	4.5	7.4	6.0	6.1	5.2	5.4	5.2
Cameroon ²	...	...	...	...	...	...	...	...	...	...	...	...
Central African Rep. ²	...	...	...	...	...	...	...	...	...	...	...	...
Chad ²	...	...	...	...	...	...	...	...	...	...	...	...
Comoros	6.3	6.4	5.5	6.4	6.8	6.0	8.4	9.2	7.1	6.2	6.5	6.2
Congo, Dem. Rep. of	0.3	1.1	1.1	1.3	1.5	1.4	1.6	1.2	0.5	0.4	0.8	1.0
Congo, Rep. of ²	...	...	...	...	...	...	...	...	...	...	...	...
Côte d'Ivoire ¹	...	...	...	...	...	...	...	...	...	...	...	...
Equatorial Guinea ²	...	...	...	...	...	...	...	...	...	...	...	...
Eritrea	2.1	2.6	1.9	2.2	2.4	2.0	2.3	2.2	2.0	1.5	1.6	1.6
Ethiopia ³	2.3	1.9	2.0	2.6	2.0	1.8	1.5	1.9	2.1	1.9	2.1	2.4
Gabon ²	...	...	...	...	...	...	...	...	...	...	...	...
Gambia, The	3.7	5.3	5.2	5.2	6.0	4.8	3.0	2.3	1.4	2.9	3.5	3.8
Ghana	2.7	2.7	2.9	2.9	2.9	2.9	2.5	2.6	2.6	2.9	3.3	2.7
Guinea	0.5	2.4	1.2	3.2	2.9	2.9	3.3	1.1	1.3	1.5	2.1	2.2
Guinea-Bissau ¹	...	...	...	...	...	...	...	...	...	...	...	...
Kenya	2.9	3.4	2.9	2.8	3.7	3.9	5.3	5.5	4.7	4.0	4.1	4.3
Lesotho	4.7	5.3	4.3	3.9	5.5	5.4	6.2	5.9	4.5	3.6	3.1	2.7
Liberia	0.3	2.2	2.2	1.9	2.0	1.6	1.7	2.3	2.8	2.7	2.9	2.9
Madagascar	2.5	3.5	2.6	3.6	3.1	2.3	2.7	2.8	3.1	3.6	3.7	3.9
Malawi	1.3	0.9	1.6	1.0	1.1	2.0	3.0	3.2	2.9	3.3	3.0	3.1
Mali ¹	...	...	...	...	...	...	...	...	...	...	...	...
Mauritius	3.8	4.5	4.2	4.4	5.0	5.3	6.9	7.8	8.4	8.6	8.3	8.6
Mozambique	4.2	5.0	3.4	2.3	2.6	3.1	3.5	3.7	3.4	3.8	2.7	2.0
Namibia	2.0	3.9	3.0	2.9	2.8	2.1	1.8	2.9	2.7	3.4	2.9	2.7
Niger ¹	...	...	...	...	...	...	...	...	...	...	...	...
Nigeria	10.7	7.2	4.3	4.8	6.9	6.0	5.6	7.2	6.9	7.6	8.1	7.3
Rwanda	3.5	6.5	5.2	6.5	5.6	4.8	3.9	3.6	4.1	4.2	4.0	4.0
São Tomé & Príncipe	4.6	6.6	3.9	4.6	3.5	3.3	4.1	4.7	3.7	3.4	3.5	3.6
Senegal ¹	...	...	...	...	...	...	...	...	...	...	...	...
Seychelles	0.8	2.2	2.6	2.6	2.7	3.2	3.9	4.3	4.0	3.8	3.5	3.5
Sierra Leone	3.8	3.4	1.6	1.8	2.2	2.0	3.5	3.8	3.1	2.8	2.8	2.8
South Africa	3.5	4.6	4.3	4.7	5.0	5.1	5.9	6.2	5.7	5.5	5.4	5.1
South Sudan	...	...	...	6.3	3.5	2.5	1.4	0.3	0.2	0.1	0.1	0.1
Swaziland	2.5	4.0	4.0	3.2	4.2	4.7	5.2	4.2	3.8	3.8	4.0	3.8
Tanzania	4.8	4.6	4.1	3.5	3.6	4.0	4.3	4.7	5.0	5.0	4.6	4.6
Togo ¹	...	...	...	...	...	...	...	...	...	...	...	...
Uganda	5.6	4.9	3.9	3.7	4.7	4.8	5.3	5.4	5.2	5.1	4.5	4.3
Zambia	1.7	3.8	3.0	2.8	2.7	2.6	3.4	3.4	2.4	1.8	2.0	2.0
Zimbabwe ⁴	0.2	0.8	0.6	0.5	0.6	0.4	0.5	0.6	0.8	0.5	0.5	0.5
Sub-Saharan Africa	5.1	5.1	4.1	4.5	5.2	4.9	5.2	5.8	5.2	5.0	5.3	5.1
Median	3.1	4.1	3.4	3.3	3.5	3.3	3.9	3.7	3.4	3.6	3.5	3.6
Excluding Nigeria and South Africa	3.6	4.1	3.8	4.2	4.3	4.1	4.6	4.7	4.0	3.6	3.9	4.0
Oil-exporting countries	7.3	6.4	4.4	5.3	6.7	6.0	6.0	7.3	6.6	6.5	7.1	6.8
Excluding Nigeria	3.6	4.8	4.7	6.1	6.4	5.9	6.8	7.5	6.0	4.6	5.3	5.7
Oil-importing countries	3.5	4.2	3.8	4.0	4.1	4.0	4.5	4.6	4.2	4.1	4.1	4.1
Excluding South Africa	3.6	3.8	3.3	3.2	3.3	3.2	3.6	3.6	3.4	3.3	3.4	3.5
Middle-income countries	5.5	5.5	4.3	4.9	5.8	5.5	5.8	6.7	6.0	5.8	6.2	5.9
Excluding Nigeria and South Africa	4.1	4.7	4.5	5.1	5.3	5.1	6.0	6.5	5.3	4.6	5.1	5.3
Low-income countries	2.9	3.2	2.7	2.8	2.7	2.6	2.7	2.5	2.4	2.3	2.3	2.4
Excluding low-income countries in fragile situations	3.8	3.8	3.2	2.8	3.0	3.0	3.1	3.2	3.2	3.1	3.0	3.1
Countries in fragile situations	2.1	3.0	3.0	3.8	3.1	2.7	2.7	2.0	1.6	1.7	2.2	2.4
CFA franc zone	3.6	4.6	4.1	4.1	4.1	3.9	4.0	3.5	2.2	2.5	3.1	3.4
CEMAC	4.3	5.4	4.6	5.4	5.6	5.4	5.8	4.3	2.4	2.5	3.3	4.0
WAEMU	5.4	5.9	6.6	5.7	5.1	4.5	4.7	5.0	4.0	4.2	4.2	4.3
COMESA (SSA members)	2.4	3.0	2.7	2.7	3.0	2.9	3.4	3.4	3.1	2.8	2.9	3.1
EAC-5	4.1	4.3	3.7	3.4	4.0	4.1	4.9	5.0	4.8	4.4	4.3	4.4
ECOWAS	7.4	6.2	4.0	4.4	5.9	5.3	5.0	6.2	5.6	6.0	6.4	5.9
SACU	4.0	5.0	4.4	4.9	5.1	5.2	6.1	6.3	6.0	5.8	5.7	5.5
SADC	3.7	4.5	4.2	4.8	5.0	5.0	5.8	6.2	5.7	5.1	5.2	5.1

See sources and footnotes on page 91.

Table SA27. Banking Penetration
(Total banking sector assets in percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	27.6	58.4	57.4	57.2	57.1	57.7	60.5	72.7	68.9	53.0
Benin	31.6	43.0	46.9	50.9	51.5	55.6	60.3	67.7	70.0	65.2
Botswana	51.4	64.2	61.0	53.0	57.7	54.6	52.1	60.6	55.3	55.0
Burkina Faso	26.5	31.7	35.5	37.8	39.6	45.1	52.0	60.5	65.8	70.5
Burundi	28.8	31.5	36.1	36.1	35.1	33.7	34.7	34.9	35.2	37.1
Cabo Verde	90.0	98.5	103.0	111.2	120.6	134.5	137.0	141.1	148.8	151.4
Cameroon	20.7	23.5	26.0	26.9	25.7	27.4	27.6	28.6	29.5	30.1
Central African Rep.	12.6	15.8	17.3	19.1	19.2	25.7	25.4	24.6	24.1	...
Chad	7.3	9.4	10.0	10.3	11.0	11.7	14.6	17.0	21.3	21.7
Comoros	25.1	34.4	37.6	41.5	44.5	42.5	42.9	47.4	53.4	49.7
Congo, Dem. Rep. of	6.7	12.3	11.4	12.2	14.0	14.0	14.3	14.9	15.6	...
Congo, Rep. of	12.2	17.0	18.4	23.1	28.0	29.6	34.2	44.8	47.5	...
Côte d'Ivoire	22.3	27.0	29.5	35.0	33.9	35.1	38.1	42.0	44.0	46.8
Equatorial Guinea	9.0	14.2	16.1	14.1	18.0	20.2	21.8	29.6	32.1	30.4
Eritrea	143.7	126.0	124.7	113.1	105.6	110.0	104.9	...	...	...
Ethiopia	...	...	...	...	...	...	...	...	...	...
Gabon	23.6	26.5	23.4	25.5	28.8	32.3	29.9	33.2	34.6	24.5
Gambia, The	48.3	61.7	66.8	70.5	70.6	73.6	81.1	...	...	...
Ghana	29.7	40.1	39.5	38.1	37.3	39.6	46.4	47.6	50.2	47.6
Guinea	12.5	13.0	19.9	24.1	19.4	19.8	21.7	24.6	23.5	...
Guinea-Bissau	10.8	19.2	24.3	27.6	27.0	28.4	30.2	31.8	32.0	22.7
Kenya	57.4	54.1	56.0	57.6	58.1	60.7	63.6	63.3	59.2	55.3
Lesotho	37.5	45.4	45.7	41.3	39.8	46.4	43.2	44.2	39.6	43.9
Liberia	...	...	...	...	...	...	...	...	...	...
Madagascar	23.8	25.6	25.5	26.2	26.3	24.8	25.0	25.3	26.3	...
Malawi	15.3	23.5	27.3	29.8	31.8	31.6	30.2	32.1	...	...
Mali	27.6	32.3	34.9	33.2	33.9	39.1	45.0	49.4	51.8	49.3
Mauritius ¹	284.6	316.8	369.9	377.9	377.4	365.1	352.7	349.7	326.8	348.4
Mozambique	33.2	46.5	52.7	53.7	61.0	63.7	71.7	80.0	78.1	73.1
Namibia	66.3	95.3	93.3	93.6	88.1	85.2	82.1	88.3	88.5	91.8
Niger	13.2	20.0	22.7	23.1	24.4	26.0	28.7	29.6	31.1	32.3
Nigeria	27.5	39.0	31.2	30.4	29.2	30.1	30.5	29.7	31.2	30.4
Rwanda	23.9	22.7	25.5	31.5	31.7	35.3	37.8	38.1	37.7	37.9
São Tomé & Príncipe	63.1	80.3	77.2	74.7	85.6	81.4	78.4	80.5	73.5	64.0
Senegal	36.6	44.5	47.3	49.9	49.8	55.6	60.7	66.6	71.5	69.6
Seychelles	118.8	100.0	109.3	113.0	102.2	117.5	116.5	93.0	93.7	99.0
Sierra Leone	16.2	25.9	24.9	24.5	23.0	21.3	23.1	26.5	27.8	30.2
South Africa	116.4	120.9	116.3	115.4	115.1	111.4	113.0	122.4	114.8	113.6
South Sudan	...	...	...	6.7	14.7	13.4	19.3	68.7	75.2	51.5
Swaziland	27.3	34.3	34.2	34.9	33.2	35.2	34.1	35.9	37.8	38.1
Tanzania	24.2	27.7	30.0	28.8	29.0	28.8	29.4	31.3	28.4	...
Togo	34.6	44.2	48.9	58.4	65.2	74.2	72.9	77.8	90.1	86.4
Uganda	24.0	23.1	26.6	26.1	27.1	28.0	29.1	28.9	30.5	31.1
Zambia	24.9	25.9	25.5	25.8	27.6	29.2	31.8	38.1	33.1	32.6
Zimbabwe	...	...	...	...	...	...	...	...	...	...
Sub-Saharan Africa	42.4	49.2	51.9	52.0	52.8	54.6	55.9	58.1	58.9	63.2
Median	26.6	32.3	34.9	34.9	33.9	35.2	38.0	43.1	44.0	49.3
Excluding Nigeria and South Africa	40.8	47.6	50.8	50.9	51.9	53.8	55.1	57.1	58.2	62.6
Oil-exporting countries	18.3	26.8	26.1	24.3	26.6	27.8	29.8	40.5	42.5	34.5
Excluding Nigeria	16.7	24.8	25.2	23.4	26.2	27.5	29.7	42.1	44.2	35.2
Oil-importing countries	47.3	53.7	57.3	58.5	59.0	61.0	62.1	62.5	63.2	70.9
Excluding South Africa	45.2	51.7	55.5	56.8	57.3	59.4	60.5	60.5	61.4	69.2
Middle-income countries	57.3	66.3	69.0	69.9	70.7	72.4	72.7	75.6	74.0	75.0
Excluding Nigeria and South Africa	55.7	64.8	68.5	69.6	70.5	72.6	72.8	75.5	74.1	75.4
Low-income countries	28.1	32.8	35.7	35.7	36.6	38.5	40.7	40.6	43.0	47.0
Excluding low-income countries in fragile situations	25.2	30.7	34.3	36.0	37.7	40.4	44.2	48.0	48.8	51.7
Countries in fragile situations	30.1	35.2	37.3	37.0	38.3	39.4	40.9	40.1	42.7	45.9

See sources and footnotes on page 91.

Table SA28. Banking Sector: Loan-to-Deposit Ratio¹
(Percent of deposits)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	42.6	55.8	72.5	79.3	89.1	85.8	75.0	67.2	60.2	62.0
Benin	74.7	76.0	72.6	74.8	73.2	72.5	72.2	63.4	61.0	76.9
Botswana	55.8	55.4	55.4	67.5	74.0	79.1	82.5	76.4	76.9	76.7
Burkina Faso	84.8	78.1	73.3	74.3	79.2	85.6	90.4	87.2	79.9	80.9
Burundi	67.7	59.3	66.1	81.8	81.4	75.6	75.7	73.9	72.1	59.1
Cabo Verde	54.8	72.5	74.2	80.2	73.9	64.7	59.2	57.2	53.6	54.0
Cameroon	69.3	68.3	69.4	70.3	80.1	81.4	82.3	87.9	90.3	87.1
Central African Rep.	118.0	98.2	103.7	99.6	109.1	108.3	108.2	99.1	100.9	...
Chad	82.7	85.5	73.4	73.5	77.5	80.2	80.9	83.3	87.7	94.9
Comoros	49.5	54.2	57.6	55.1	56.5	64.7	67.9	70.0	67.0	75.5
Congo, Dem. Rep. of	49.7	58.6	57.5	68.8	68.0	68.7	71.4	73.7	80.0	...
Congo, Rep. of	36.4	38.7	39.5	38.3	49.8	59.6	55.3	72.8	82.0	...
Côte d'Ivoire	89.3	84.7	77.3	66.9	71.1	76.1	75.0	79.4	81.7	84.3
Equatorial Guinea	43.0	56.6	59.0	68.1	38.0	48.1	54.1	74.9	91.5	95.5
Eritrea	24.6	25.3	23.8	24.0	24.7	23.3	21.9	...	...	...
Ethiopia	...	...	...	...	...	...	...	...	...	...
Gabon	62.5	59.6	62.7	62.9	65.1	77.7	81.4	73.3	80.0	82.4
Gambia, The	38.0	42.1	43.7	40.8	39.9	37.5	30.8	...	...	...
Ghana	73.3	73.4	65.5	57.9	63.2	69.5	70.6	70.3	65.8	62.9
Guinea	...	...	...	...	...	...	...	...	...	...
Guinea-Bissau	42.8	93.5	66.0	65.9	92.0	83.3	72.0	84.2	82.8	62.5
Kenya	76.6	72.5	72.6	77.8	76.9	80.5	83.7	87.0	88.6	83.5
Lesotho	26.4	34.9	36.6	37.2	50.9	45.3	47.9	45.7	50.8	44.9
Liberia	...	...	...	...	...	...	...	...	...	...
Madagascar	72.2	72.2	73.8	69.1	64.0	68.9	72.7	77.0	68.4	69.8
Malawi	...	...	...	...	...	...	...	...	...	...
Mali	78.7	71.9	71.3	75.7	76.3	80.3	78.9	79.3	84.1	92.2
Mauritius	65.5	67.7	68.2	80.9	77.2	72.6	74.9	68.0	66.8	66.1
Mozambique	53.3	67.7	74.4	74.4	71.1	74.4	73.5	61.7	66.2	67.2
Namibia	110.1	73.6	73.9	74.8	78.3	81.1	88.8	92.5	95.4	92.8
Niger	77.1	90.2	78.3	93.8	89.9	98.7	89.9	96.1	101.3	111.0
Nigeria	76.3	79.1	64.0	56.2	54.8	57.4	65.3	68.3	77.9	72.1
Rwanda	78.4	85.9	83.2	88.7	94.9	84.4	86.2	81.3	85.9	89.8
São Tomé & Príncipe	66.7	74.9	108.1	110.0	84.0	78.2	58.9	76.0	72.3	63.8
Senegal	80.8	78.8	77.8	83.8	84.4	87.6	84.9	78.8	81.6	91.4
Seychelles	30.9	30.7	35.9	33.9	34.7	28.9	31.8	42.6	43.8	43.4
Sierra Leone	38.7	47.2	47.5	46.5	40.5	37.0	34.4	31.9	30.6	33.3
South Africa	122.8	120.1	120.7	113.2	119.0	118.7	117.3	118.1	117.5	115.6
South Sudan	...	...	...	9.8	11.8	15.2	11.3	7.7	8.7	8.7
Swaziland	96.7	79.6	74.4	85.8	79.8	81.7	86.2	79.3	72.8	73.9
Tanzania	52.0	64.6	62.1	67.1	69.9	71.2	75.6	81.4	87.3	...
Togo	72.7	63.1	67.8	73.4	77.5	85.9	75.0	78.2	71.6	71.2
Uganda	58.8	71.4	77.2	85.5	79.5	80.0	74.6	75.4	75.8	71.2
Zambia	50.5	60.1	52.9	56.5	65.2	61.1	65.7	60.1	54.1	49.7
Zimbabwe	...	...	...	...	...	...	...	...	...	...
Sub-Saharan Africa	65.2	67.8	67.5	68.6	69.7	70.8	70.1	73.2	74.1	72.5
<i>Median</i>	66.1	71.4	69.4	71.8	73.9	75.9	74.8	75.7	77.4	73.0
Excluding Nigeria and South Africa	63.3	66.0	66.2	67.7	68.8	69.9	69.0	72.1	72.8	71.2
Oil-exporting countries	59.0	63.4	62.9	57.3	58.3	63.2	63.2	66.9	72.3	71.8
Excluding Nigeria	56.1	60.8	62.8	57.4	58.8	64.0	62.9	66.7	71.5	71.8
Oil-importing countries	66.5	68.7	68.5	71.4	72.5	72.7	71.8	74.8	74.6	72.7
Excluding South Africa	64.7	67.1	66.9	70.1	71.0	71.2	70.4	73.3	73.1	71.1
Middle-income countries	66.5	66.9	68.0	70.1	70.5	71.8	72.0	73.8	75.2	73.8
Excluding Nigeria and South Africa	62.8	63.2	65.3	68.4	68.6	69.9	69.9	71.6	72.7	71.4
Low-income countries	63.7	68.7	67.0	67.1	68.8	69.8	68.2	72.5	72.8	70.9
Excluding low-income countries in fragile situations	68.4	76.3	74.4	79.8	79.7	81.0	80.3	78.1	79.6	82.8
Countries in fragile situations	61.6	64.6	65.2	62.4	64.0	65.2	61.9	70.5	70.7	65.0

See sources and footnotes on page 91.

Publications of the IMF African Department, 2012–18

BOOKS AND MONOGRAPHS

2017

Women, Work, and Economic Growth: Leveling the Playing Field
Kochhar, Kalpana, Monique Newiak, Sonali Jain-Chandra

2016

Building Integrated Economies in West Africa: Lessons in Managing Growth, Inclusiveness and Volatility
Alexei Kireyev

Africa on the Move: Unlocking the Potential of Small Middle-Income States
Lamin Leigh, Ali M Mansoor

2015

The Quest for Regional Integration in the East African Community:
Drummond, Paulo, S.K. Wajid, Oral Williams

2014

The Mystery of Missing Real Spillovers in Southern Africa: Some Facts and Possible Explanations
Basdevant, Olivier, Andrew W. Jonelis, Borislava Mircheva, Slavi T. Slavov

2013

Building a Common Future in Southern Africa
Mongardini, Joannes, Tamon Asonuma, Olivier Basdevant, Alfredo Cuevas, Xavier Debrun, Lars Holger Engstrom, Imelda M. Flores Vazquez, Vitaliy Kramarenko, Lamin Leigh, Paul R. Masson, Geneviève Verdier

2012

Oil Wealth in Central Africa: Policies for Inclusive Growth
Coorey, Sharmini, Bernardin Akitoby

DEPARTMENTAL PAPERS

17/4

Structural Transformation in Employment and Productivity: What Can Africa Hope For?
Louise Fox, Alun H. Thomas, Cleary Haines

17/4

A Rebalancing Act for China and Africa : The Effects of China's Rebalancing on Sub-Saharan Africa's Trade and Growth
Wenjie Chen, Roger Nord

16/6

A Work in Progress: Integrating Markets for Goods, Labor, and Capital in the East African Community
Alper, Emre, Fan Yang, Hervé Joly, Jemma Dridi, Wenjie Chen

16/5

Financial Development in Sub-Saharan Africa: Promoting Inclusive and Sustainable Growth
Montfort Mlachila, Larry Cui, Ahmat Jidoud, Monique Newiak, Bozena Radzewicz-Bak, Misa Takebe, Yanmin Ye, Jiayi Zhang

16/4

Cyclical Behavior of Fiscal Policy among Sub-Saharan African Countries
Tetsuya Konuki, Mauricio Villafuerte

16/3

Walking a Fine Line: Public Investment Scaling-Up and Debt Sustainability in Burkina Faso
Lonkeng Ngouana, Constant A., Malangu Kabedi-Mbuyi, Mame Astou Diouf

16/2

Trade Integration and Global Value Chains in Sub-Saharan Africa: In Pursuit of the Missing Link
Allard, Céline, Jorge Iván Canales Kriljenko, Jesus Gonzalez-Garcia, Emmanouil Kitsios, Juan P. Trevino, Wenjie Chen

16/1

Make Investment Scaling-up Work in Benin: A Macro-Fiscal Analysis
Barhoumi, Karim, Larry Cui, Christine Dieterich, Nicolas End, Matteo Ghilardi, Alexander Raabe, Sergio Sola

15/10

Strengthening the West African Economic and Monetary Union: The Role of Fiscal and Market Institutions in Economic Stabilization
Basdevant, Olivier, Patrick A. Imam, Tidiane Kinda, Aleksandra Zdzienicka

15/8

Evolving Banking Trends in Sub-Saharan Africa: Key Features and Challenges
Mecagni, Mauro, Daniela Marchettini, Rodolfo Maino

15/7

Monitoring and Managing Fiscal Risks in the East African Community
Mauro, Paolo, Herve Joly, Ari Aisen, Emre Alper, François Boutin-Dufresne, Jemma Dridi, Nikoloz Gigineishvili, Tom Josephs, Clara Mira, Vimal Thakoor, Alun H. Thomas, Fan Yang

15/6

Toward a Monetary Union in the East African Community: Asymmetric Shocks, Exchange Rates, and Risk-Sharing Mechanisms
Drummond, Paulo, Ari Aisen, C. Emre Alper, Ejona Fuli, Sebastien Walker

15/5

Building Resilience in Sub-Saharan Africa's Fragile States
Gelbard, Enrique, Corinne Délechat, Ejona Fuly, Mumtaz Hussain, Ulrich Jacoby, Dafina Mulaj, Marco Pani, Gustavo Ramirez, Rui Xu

15/4

Dollarization in Sub-Saharan Africa: Experiences and Lessons
Mecagni, Mauro, Juan S. Corrales, Jemma Dridi, Rodrigo Garcia-Verdu, Patrick A. Imam, Justin Matz, Carla Macario, Rodolfo Maino, Yibin Mu, Ashwin Moheput, Futoshi Narita, Marco Pani, Manuel Rosales, Sebastian Weber, Etienne B. Yehoue

15/3

Pan-African Banking: Opportunities and Challenges for Cross-Border Oversight
 Enoch, Charles, Paul Henri Mathieu, Mauro Mecagni,
 Jorge Iván Canales Kriljenko

15/2

Sustaining More Inclusive Growth in the Republic of Congo
 Hakura, Dalia, Adrian Alter, Matteo Ghilardi,
 Rodolfo Maino, Cameron McLoughlin,
 Maximilien Queyranne

15/1

Making Senegal a Hub for West Africa: Reforming the State, Building to the Future
 Kireyev, Alexei, Ali M. Mansoor

14/4

Mozambique Rising: Building a New Tomorrow
 Ross, Doris C., Victor Duarte Lledo, Alex Segura-Ubiergo,
 Yuan Xiao, Iyabo Masha, Alun H. Thomas, Keiichiro Inui

14/3

The Mystery of Missing Real Spillovers in Southern Africa: Some Facts and Possible Explanations
 Basdevant, Olivier, Andrew W. Jonelis, Borislava Mircheva,
 Slavi T. Slavov

14/2

Issuing International Sovereign Bonds: Opportunities and Challenges for Sub-Saharan Africa
 Mecagni, Mauro, Jorge Iván Canales Kriljenko,
 Cheikh A. Gueye, Yibin Mu, Masafumi Yabara,
 Sebastian Weber

14/1

Managing Volatile Capital Flows: Experiences and Lessons for Sub-Saharan African Frontier Markets
 Gueye, Cheikh A., Javier Arze del Granado, Rodrigo Garcia-Verdu, Mumtaz Hussain, B. Jang, Sebastian Weber,
 Juan S. Corrales

13/8

Mali: Achieving Strong and Inclusive Growth with Macroeconomic Stability
 Josz, Christian

13/7

Responding to Shocks and Maintaining Stability in the West African Economic and Monetary Union
 Kolerus, Christina, Aleksandra Zdzienicka, Eral Hitaj,
 Douglas J. Shapiro

13/6

West African Economic and Monetary Union: Financial Depth and Macrostability
 Imam, Patrick A., Christina Kolerus

13/5

Senegal: Financial Depth and Macrostability
 Imam, Patrick A., Christina Kolerus

13/4

Senegal: Achieving High and Inclusive Growth While Preserving Fiscal Sustainability
 Kireyev, Alexei, Gaston K. Mpatswe

13/3

Banking in Sub-Saharan Africa: The Macroeconomic Context
 Mlachila, Montfort, Seok Gil Park, Masafumi Yabara

13/2

Energy Subsidy Reform in Sub-Saharan Africa: Experiences and Lessons
 Alleyne, Trevor, Mumtaz Hussain

13/2

Boom, Bust, or Prosperity? Managing Sub-Saharan Africa's Natural Resource Wealth
 Lundgren, Charlotte J., Alun H. Thomas, Robert C. York

13/1

Restoring Sustainability in a Changing Global Environment: Options for Swaziland
 Basdevant, Olivier, Emily Forrest, Borislava Mircheva

POLICY PAPERS

12/14

Pan-African Banks - Opportunities and Challenges for Cross-Border Oversight
 Prepared by a staff team led by Charles Enoch, Paul Mathieu,
 Mauro Mecagni.

SPILLOVER NOTES

2016/Issue 9

Sub-Saharan Migration: Patterns and Spillovers
 Gonzalez-Garcia, Jesus, Eral Hitaj, Montfort Mlachila,
 Arina Viseth, Mustafa Yenice

STAFF DISCUSSION NOTES

15/11

Is the Glass Half Empty or Half Full? Issues in Managing Water Challenges and Policy Instruments
 Kalpana Kochhar, Catherine Pattillo, Yan Sun, Nujin Suphaphiphat, Andrew Swiston, Robert Tchaidze, Benedict Clements, Stefania Fabrizio, Valentina Flamini, Laure Redifer, Harald Finger, and an IMF Staff Team

12/13

Economic Diversification in LICs: Stylized Facts and Macroeconomic Implications
 Papageorgiou, Chris, Nicola Spatafora

WORKING PAPERS

17/281

The Impact of Fiscal Consolidations on Growth in Sub-Saharan Africa
 Francisco Arizala, Jesus R. Gonzalez-Garcia, Charalambos G. Tsangarides, Mustafa Yenice

17/243

Enforcing Public-Private Partnership Contract: How do Fiscal Institutions Matter?
 Manabu Nose

- 17/236**
Inequality in Financial Inclusion and Income Inequality
Goksu Aslan, Corinne Deléchat, Monique Newiak, and Fan Yang
- 17/203**
Medium-Term Budget Frameworks in Sub-Saharan African Countries
Richard Allen, Taz Chaponda, Lesley Fisher, and Rohini Ray
- 17/202**
Growth Breaks and Growth Spells in Sub-Saharan Africa
Tsangarides, Charalambos, Francisco Arizala, Jesus Gonzalez-Garcia, Mustafa Yenice.
- 17/163**
Financial Resource Curse in Resource-Rich Countries
Mlachila, Montfort, Rasmané Ouedraogo
- 17/156**
The Informal Economy in Sub-Saharan: Size and Determinants
Medina, Leandro, Andrew W. Jonelis, Mehmet Cangul
- 17/112**
Farms, Fertiliser, and Financial Frictions: Yields from DSGE Model
Sébastien Walker
- 17/48**
Understanding Inflation in Malawi: A Quantitative Investigation
Wu, Dong Frank
- 17/109**
Evaluating the Impact of Non-Financial IMF Programs Using the Synthetic Control Method
Newiak, Monique, Tim Willems
- 16/247**
Food Inflation in Sub-Saharan Africa: Causes and Policy Implications
Uppal, Ali, Emre Alper, Niko Hobdari
- 16/205**
Surprise, Surprise: What Drives the Rand/U.S. Dollar Exchange Rate Volatility?
Schimmelpfennig, Axel, Nasha Maveé, Roberto Perrelli
- 16/140**
Gender Equality and Economic Diversification
Kazandjian, Romina, Lisa Kolovich, Kalpana Kochhar, Monique Newiak
- 16/137**
South Africa: Labor Market Dynamics and Inequality
Anand, Rahul, Siddharth Kothari, Naresh Kumar
- 16/120**
Monetary Policy Implementation and Volatility Transmission along the Yield Curve: The Case of Kenya
Alper, Emre, R. Armando Morales, Fan Yang
- 16/118**
Women's Opportunities and Challenges in Sub-Saharan African Job Markets
Dieterich, Christine, Anni Huang, Alun H. Thomas
- 16/115**
Investing in Electricity, growth, and Debt Sustainability: The Case of Lesotho
Andreolli, Michele, Aidar Abdychev
- 16/113**
The Consequences of Policy Uncertainty: Disconnects and Dilutions in the South African Real Effective Exchange Rate-Export Relationship
Hlatshwayo, Sandile, Magnus Saxegaard
- 16/111**
Inequality, Gender Gaps and Economic Growth: Comparative Evidence for Sub-Saharan Africa
Hakura, Dalia, Mumtaz Hussain, Monique Newiak, Vimal Thakoor, Fan Yang
- 16/24**
South Africa's Exports Performance: Any Role for Structural Factors?
Anand, Rahul, Roberto Perrelli, Boyang Zhang
- 16/17**
Unintended Consequences: Spillovers from Nigeria's Fuel Pricing Policies to Its Neighbor
Mlachila, Montfort, Edgardo Ruggiero, David Corvino
- 16/12**
Commodity Price Shocks and Financial Sector Fragility
Kinda, Tidiane, Montfort Mlachila, Rasmané Ouedraogo
- 15/268**
Exiting From Fragility in sub-Saharan Africa: The Role of Fiscal Policies and Fiscal Institutions
Deléchat, Corinne, Ejona Fuli, Dafina Mulaj, Gustavo Ramirez, Rui Xu
- 15/236**
Public Investment in a Developing Country Facing Resource Depletion
Alter, Adrian, Matteo Ghilardi, Dalia Hakura
- 15/235**
Financial Inclusion and Development in the CEMAC
Alter, Adrian, Boriana Yontcheva
- 15/221**
Spillovers from China onto Sub-Saharan Africa: Insights from the Flexible System of Global Models (FSGM)
Anderson, Derek, Jorge Iván Canales Kriljenko, Paulo Drummond, Pedro Espaillet, Dirk Muir
- 15/190**
Systemic Risk Assessment in Low Income Countries: Balancing Financial Stability and Development
Marchettini, Daniela, Rodolfo Maino
- 15/189**
On the Drivers of Inflation in Sub-Saharan Africa
Nguyen, Anh D. M., Jemma Dridi, D. Filiz Unsal, Oral Williams
- 15/185**
Sub-Saharan Employment Developments: The Important Role of Household Enterprises with an Application to Rwanda
Thomas, Alun H.

15/169

Household Financial Access and Risk Sharing in Nigeria
Carlson, Stacey, Era Dabla-Norris, Mika Saito, Yu Shi

15/149

Network Effects of International Shocks and Spillovers
Kireyev, Alexei, Andrei Leonidov

15/126

Pension Reforms in Mauritius: Fair and Fast—Balancing Social Protection and Fiscal Sustainability
Soto, Mauricio, Vimal Thakoor, Martin Petri

15/99

How to Improve the Effectiveness of Monetary Policy in the West African Economic and Monetary Union
Kireyev, Alexei

15/83

Do Resource Windfalls Improve the Standard of Living in Sub-Saharan African Countries?: Evidence from a Panel of Countries
Munseob Lee, Cheikh A. Gueye

15/49

Remittances and Macroeconomic Volatility in African Countries
Ahmat Jidoud

15/25

Harnessing Resource Wealth for Inclusive Growth in Fragile States
Delechat, Corinne, Will Clark, Pranav Gupta, Malangu Kabedi-Mbuyi, Mesmin Koulet-Vickot, Carla Macario, Toomas Orav, Manuel Rosales, Rene Tapsoba, Dmitry Zhdankin, Susan Yang

15/17

Fiscal Policy Implications for Labor Market Outcomes in Middle-Income Countries
Stepanyan, Ara, Lamin Leigh

15/12

Revisiting the Concept of Dollarization: The Global Financial Crisis and Dollarization in Low-Income Countries
Mwase, Nkunde, Francis Y. Kumah

14/241

Global Financial Transmission into Sub-Saharan Africa—A Global Vector Autoregression Analysis
Canales Kriljenko, Jorge Iván, Mehdi Hosseinkouchack, Alexis Meyer-Cirkel

14/231

Safe Debt and Uncertainty in Emerging Markets: An Application to South Africa
Saxegaard, Magnus

14/172

A Quality of Growth Index for Developing Countries: A Proposal
Mlachila, Montfort, Rene Tapsoba, Sampawende J.-A. Tapsoba

14/159

Introducing a Semi-Structural Macroeconomic Model for Rwanda
Charry, Luisa, Pranav Gupta, Vimal Thakoor

14/150

How Solid is Economic Growth in the East African Community?
Gigineishvili, Nikoloz, Paolo Mauro, Ke Wang

14/149

Islamic Finance in Sub-Saharan Africa: Status and Prospects
Gelbard, Enrique, Mumtaz Hussain, Rodolfo Maino, Yibin Mu, Etienne B. Yehoue

14/143

Africa Rising: Harnessing the Demographic Dividend
Drummond, Paulo, Vimal Thakoor, Shu Yu

14/94

Does Openness Matter for Financial Development in Africa?
David, Antonio, Montfort Mlachila, Ashwin Moheput

14/51

Surging Investment and Declining Aid: Evaluating Debt Sustainability in Rwanda
Clark, Will, Birgir Arnason

13/261

Natural Gas, Public Investment and Debt Sustainability in Mozambique
Melina, Giovanni, Yi Xiong

13/250

Africa's Rising Exposure to China: How Large Are Spillovers Through Trade?
Drummond, Paulo, Estelle X. Liu

13/239

Money Targeting in a Modern Forecasting and Policy Analysis System: an Application to Kenya
Andrle, Michal, Andrew Berg, Enrico Berkes, Rafael A. Portillo, Jan Vlcek, R. Armando Morales

13/237

The Investment-Financing-Growth Nexus: The Case of Liberia
Clark, Will, Manuel Rosales

13/226

Making Monetary Policy More Effective: The Case of the Democratic Republic of the Congo
Fischer, Felix, Charlotte J. Lundgren, Samir Jahjah

13/216

Fiscal Discipline in WAEMU: Rules, Institutions, and Markets
Hitaj, Eral, Yasin Kursat Onder

13/215

Inclusive Growth and Inequality in Senegal
Kireyev, Alexei

13/201

Africa's Got Work to Do: Employment Prospects in the New Century
Fox, Louise, Cleary Haines, Jorge Huerta Muñoz, Thomas, Alun H.

- 13/188**
Resource Dependence and Fiscal Effort in Sub-Saharan Africa
Thomas, Alun H., Juan P. Treviño
- 13/176**
Benchmarking Structural Transformation Across the World
Dabla-Norris, Era, Alun H. Thomas, Rodrigo Garcia-Verdu, Yingyuan Chen
- 13/173**
Tax Administration Reform in the Francophone Countries of Sub-Saharan Africa
Fossat, Patrick, Michel Bua
- 13/161**
Financial Depth in the WAEMU: Benchmarking Against Frontier SSA Countries
Ahokpossi, Calixte, Kareem Ismail, Sudipto Karmakar, Mesmin Koulet-Vickot
- 13/147**
Investing Volatile Oil Revenues in Capital-Scarce Economies: An Application to Angola
Richmond, Christine, Irene Yackovlev, Shu-Chun Yang
- 13/144**
Fiscal Sustainability, Public Investment, and Growth in Natural Resource-Rich, Low-Income Countries: The Case of Cameroon
Samaké, Issouf, Priscilla Muthoora, Bruno Versailles
- 13/139**
Inclusive Growth: An Application of the Social Opportunity Function to Selected African Countries
Adedeji, Olumuyiwa, Huancheng Du, Maxwell Opoku-Afari
- 13/116**
Inclusive Growth and the Incidence of Fiscal Policy in Mauritius — Much Progress, But More Could be Done
David, Antonio, Martin Petri
- 13/53**
The Quality of the Recent High-Growth Episode in Sub-Saharan Africa
Mlachila, Montfort, Marcelo Martinez
- 13/51**
Benchmarking Banking Sector Efficiency Across Regional Blocks in Sub-Saharan Africa: What Room for Policy?
Boutin-Dufresne, Francois, Santiago Peña, Oral Williams, Tomasz A. Zawisza
- 13/39**
Monetary Transmission Mechanism in the East African Community: An Empirical Investigation
Davoodi, Hamid, Shiv Dixit, Gabor Pinter
- 13/34**
Determinants of Bank Interest Margins in Sub-Saharan Africa
Ahokpossi, Calixte
- 13/32**
Exchange Rate Liberalization in Selected Sub-Saharan African Countries: Successes, Failures, and Lessons
Mæhle, Nils, Haimanot Teferra, Armine Khachatryan
- 13/31**
Inward and Outward Spillovers in the SACU Area
Canales-Kriljenko, Jorge Iván, Farayi Gwenhamo, Thomas, Saji
- 13/12**
Bond Markets in Africa
Mu, Yibin, Peter Phelps, Janet Stotsky
- 12/290**
Inequalities and Growth in the Southern African Customs Union (SACU) Region
Basdevant, Olivier, Dalmacio Benicio, Yorbol Yakhshilikov
- 12/280**
Striking an Appropriate Balance Among Public Investment, Growth, and Debt Sustainability in Cape Verde
Mu, Yibin
- 12/272**
The East African Community: Prospects for Sustained Growth
McAuliffe, Catherine, Sweta Saxena, Masafumi Yabara
- 12/249**
Financing Growth in the WAEMU through the Regional Securities Market: Past Successes and Current Challenges
Diouf, Mame Astou, Francois Boutin-Dufresne
- 12/208**
Exchange Rate and Foreign Interest Rate Linkages for Sub-Saharan Africa Floaters
Thomas, Alun H.
- 12/196**
A Financial Conditions Index for South Africa
Gumata, Nombulelo, Nir Klein, Eliphas Ndou
- 12/177**
Estimating the Implicit Inflation Target of the South African Reserve Bank
Klein, Nir
- 12/160**
Monetization in Low- and Middle-Income Countries
McLoughlin, Cameron, Noriaki Kinoshita
- 12/148**
The Relationship between the Foreign Exchange Regime and Macroeconomic Performance in Eastern Africa
Stotsky, Janet Gale, Olumuyiwa Adedeji, Manuk Ghazanchyan, Nils O. Maehle
- 12/141**
Exchange Rate Pass-Through in Sub-Saharan African Economies and its Determinants
Razafimahefa, Ivohasina Fizara
- 12/136**
Welfare Effects of Monetary Integration: The Common Monetary Area and Beyond
Asonuma, Tamon, Xavier Debrun, Paul R. Masson
- 12/127**
As You Sow So Shall You Reap: Public Investment Surges, Growth, and Debt Sustainability in Togo
Andrle, Michal, Antonio David, Raphael A. Espinoza, Marshall Mills, Luis-Felipe Zanna

12/119

Tracking Short-Term Dynamics of Economic Activity in Low-Income Countries in the Absence of High-Frequency GDP Data

Opoku-Afari, Maxwell, Shiv Dixit

12/108

Mobilizing Revenue in Sub-Saharan Africa: Empirical Norms and Key Determinants

Drummond, Paulo, Wendell Daal, Nandini Srivastava, Luiz E. Oliveira

12/94

Monetary Policy in Low-Income Countries in the Face of the Global Crisis: The Case of Zambia

Baldini, Alfredo, Jaromir Benes, Andrew Berg, Mai Dao, Rafael Portillo

12/93

Fiscal Policies and Rules in the Face of Revenue Volatility Within Southern Africa Customs Union Countries (SACU)

Basdevant, Olivier

12/92

Real Wage, Labor Productivity, and Employment Trends in South Africa: A Closer Look

Klein, Nir

12/73

Exchange Rate Volatility Under Peg: Do Trade Patterns Matter?

Lonkeng Ngouana, Constant

12/32

Assessing Bank Competition within the East African Community

Sanya, Sarah, Matthew Gaertner

12/20

Prudential Liquidity Regulation in Developing Countries: A Case Study of Rwanda

Sanya, Sarah, Wayne Mitchell, Angelique Kantengwa

12/18

Capital Market Integration: Progress Ahead of the East African Community Monetary Union

Yabara, Masafumi

12/7

International Reserves in Low-Income Countries: Have They Served as Buffers?

Cripolti, Valerio, George Tsibouris