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Regional Economic Outlook

Sub-Saharan Africa

Time for a Policy Reset

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Contents

Abbreviations vi
Acknowledgments vii
Executive Summary ix
1. Time for a Policy Reset 1
Anatomy of a Slowdown 3
Outlook and Risks 11
Policies Generally Need to Adjust at a Faster Pace 13
2. Weathering the Commodity Price Slump 25
Commodity Terms-of-Trade Cycles in Sub-Saharan Africa 26
Commodity Price Swings and Macroeconomic Performance 30
Policies to Enhance Resilience to Shocks 36
Conclusions 40
Annex 2.1. Commodity Terms of Trade: Variable Construction and Methods 45
3. Financial Development and Sustainable Growth 51
How Has the Region's Financial Sector Developed in the Past Few Decades? 52
Financial Stability and Regulatory Reforms 58
To What Extent Has Financial Development Boosted Growth and Lowered Its Volatility? 61
What Drives or Inhibits Financial Development in Sub-Saharan Africa? 66
Policy Recommendations 68
Statistical Appendix 79
References 113
Publications of the IMF African Department, 2009–16 117
Boxes
1.1. Impact of the Drought in Southern and Eastern Africa 15
1.2. Private Sector Credit Growth Developments in Sub-Saharan Africa 17
1.3. Fiscal Dominance—An Illustrative Exercise 19
1.4. Regional Spillovers Within Sub-Saharan Africa 21
1.5. The Threat of Terrorism 23
2.1. Commodity Terms of Trade 41
2.2. Commodity Price Slumps Hold Back Economic Activity: The Cases of Nigeria and the Republic of Congo 42
3.1. Gender Inequality in Financial Access and Macroeconomic Outcomes 71
3.2. Supporting Financial Development and Inclusion Through Mobile Payments and Banking Services 74
3.3. The Roles of Microfinance in Promoting Financial Inclusion 76
3.4. Measuring Financial Development and Inclusion 78

Tables

1.1. Sub-Saharan Africa: Real GDP Growth 11
1.2. Sub-Saharan Africa: Other Macroeconomic Indicators 12
2.1. Sub-Saharan Africa Commodity Exporters: Largest Commodity Terms-of-Trade Declines 31
2.2. Impact of Commodity Shocks on Real GDP Growth: Regression Results 37
3.1. Sub-Saharan Africa: Financial Sector Supervisory Standards 60
3.2. Sub-Saharan Africa: Estimation Results of Impact of Financial Development on Growth 63
3.3. Sub-Saharan Africa: Estimation Results of Impact of Financial Development on Growth Volatility 65
3.4. Sub-Saharan Africa: Drivers of Financial Development 67
3.5. Sub-Saharan Africa: Top Ranking of Coefficients between the Distance to the Benchmark and Detailed Institutional Quality 69

Figures

Chapter 1

1.1. Sub-Saharan Africa: Change in Real GDP Growth, Average 2010–14 to Average 2015–16 2
1.2. Episodes of Largest 18-Month Decline in Real Crude Oil Prices, 1970–2015 2
1.3. Emerging Market Spreads: 2014–16 3
1.4. Sub-Saharan Africa: Trade Balance with China, 2005–15 4
1.5. Selected Average Commodity Price Changes from 2013 4
1.6. Sub-Saharan Africa: Change in Current Account Balance and Nominal Exchange Rate, 2014–15 5
1.7. Sub-Saharan Africa: End-of-Period Inflation, 2014 versus 2015 5
1.8. Sub-Saharan Africa: Change in Expenditure and Revenue, Average 2010–13 to 2015 6
1.9. Sub-Saharan Africa: Trends in Public Debt and Borrowing Costs 7
1.10. Sub-Saharan Africa: Current Account Balance and Change in Reserves, 2015 8
1.11. Sub-Saharan Africa: Change in Monetary Policy Rate since December 2014 8
1.12. Sub-Saharan Africa: Change in Base Money Growth, 2014–15 8
1.13. Sub-Saharan Africa: Growth of Credit to the Private Sector 9
1.14. Sub-Saharan Africa: Nonperforming Loans, Average 2010–13 versus 2015 9
1.15. Sub-Saharan African Selected Countries: Advances from the Central Bank, Average 2010–13 and 2015 10
1.16. CFA Franc Zone: Central Bank Financing versus Commercial Banks' Exposure to Government, Average 2010–13 to 2015 10

Chapter 2

2.1. Selected Regions: Net Commodity Exports to GDP 27
2.2. Sub-Saharan African Commodity-Exporting Countries by Decade 27
2.3. Sub-Saharan African Energy and Metal Exporters: Net Commodity Exports to GDP, 2010–14 Average 28
2.4. World Commodity Prices, 1971–2015 28
2.5. Sub-Saharan Africa and Comparator Countries: Commodity Terms of Trade 29

2.6. Sub-Saharan African Extractive Commodity Exporters: Commodity Terms of Trade, 2000–15 29
2.7. Sub-Saharan Africa: Commodity Terms of Trade and GDP Growth, 2000–11 30
2.8. Selected Country Groupings: Real GDP Growth during Commodity Price Upswings and Downswings 32
2.9. Sub-Saharan African Energy Exporters: Key Macroeconomic Variables during Commodity Price Upswings and Downswings 32
2.10. Sub-Saharan Africa: Exchange Rate Flexibility and Public Debt during Episodes of Low and High Resilience of Output Growth 33
2.11. Sub-Saharan Africa: Inflation during Commodity Price Upswings and Downswings by Type of Exchange Rate Regime 33
2.12. Sub-Saharan Africa: Effects of Commodity Terms-of-Trade Shocks 35
2.13. Sub-Saharan Africa and Other Countries: Total International Reserves 39
2.14. Sub-Saharan Africa and Other Countries: External Debt 39
2.15. Sub-Saharan Africa and Other Countries: Inflation 39

Chapter 3

3.1. Sub-Saharan Africa: Standard Measures of Financial Depth 53
3.2. Sub-Saharan Africa: Sector Assets, 2012 54
3.3. Sub-Saharan Africa: Indicators of Financial Inclusion 55
3.4. Sub-Saharan African Countries: Financial Inclusion 56
3.5. Sub-Saharan Africa: Financial Development Index, 1980–2013 57
3.6. Sub-Saharan Africa: Dimensions of Financial Development 58
3.7. Systemic Banking Crises, 1976–2010 59
3.8. Sub-Saharan Africa: Financial Soundness Indicators, 2006–14 59
3.9. Sub-Saharan Africa: Actual and Predicted Financial Development, 2013 62
3.10. Long-Term Impact on GDP of Relaxing Financial Constraints 64
3.11. Sub-Saharan Africa: Impact of Financial Development on Growth Volatility 64
3.12. Sub-Saharan Africa: Financial Development and Institutional Quality in 2013 68

Abbreviations

ATMs	automated teller machines
BCEAO	Central Bank of West African States
BDEAC	La Banque de développement des États de l'Afrique centrale
BLNS	Botswana, Lesotho, Namibia, and Swaziland
CEMAC	Economic and Monetary Community of Central Africa
CFA	currency zone of CEMAC and WAEMU
CPIA	Country Policy and Institutional Assessment
CTOT	commodity terms-of-trade index
EMBIG	Emerging Markets Bond Index Global (JP Morgan)
FD	financeable deficit
FDI	foreign direct investment
FEWS NET	Famine Early Warning Systems Network
GDP	gross domestic product
GMM	generalized method of moments
HIPC	heavily indebted poor countries
IPC	Integrated Food Security Phase Classificaion
LFP	labor force participation
LICs	low-income countries
MFIs	microfinance institutions
NPLs	nonperforming loans
PABs	pan-African banks
RBI	required fiscal improvement
REO	*Regional Economic Outlook* (IMF)
SACU	Southern African Customs Union
SSA	sub-Saharan Africa
TFP	total factor productivity
USAID	United States Agency for International Development
VAR	vector autoregression
VIX	Chicago Board Options Exchange Volatility Index
WAEMU	West African Economic and Monetary Union
WEO	*World Economic Outlook* (IMF)

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The following conventions are used in this publication:

- In tables, a blank cell indicates "not applicable," ellipsis points (. . .) indicate "not available," and 0 or 0.0 indicates "zero" or "negligible." Minor discrepancies between sums of constituent figures and totals are due to rounding.
- An en dash (–) between years or months (for example, 2009–10 or January–June) indicates the years or months covered, including the beginning and ending years or months; a slash or virgule (/) between years or months (for example, 2005/06) indicates a fiscal or financial year, as does the abbreviation FY (for example, FY2006).
- "Billion" means a thousand million; "trillion" means a thousand billion.
- "Basis points" refer to hundredths of 1 percentage point (for example, 25 basis points are equivalent to ¼ of 1 percentage point).

Executive Summary

TIME FOR A POLICY RESET

Economic activity in sub-Saharan Africa has weakened markedly, but, as usual, with a large variation in country circumstances. Growth for the region as a whole fell to 3½ percent in 2015, the lowest level in some 15 years, and is set to decelerate further this year to 3 percent—well below the 5 to 7 percent range experienced over the past decade.

- The sharp decline in commodity prices has put severe strains on many of the largest sub-Saharan African economies. Oil exporters, which include Angola and Nigeria, continue to face difficult economic conditions (with growth for oil exporters as a whole forecast to slow further to 2¼ percent this year from 6 percent in 2014), but so do non-energy-commodity exporters, such as Ghana, South Africa, and Zambia. Meanwhile, Guinea, Liberia, and Sierra Leone are only gradually recovering from the Ebola epidemic, and several southern and eastern African countries, including Ethiopia, Malawi, and Zimbabwe, are suffering from a severe drought.
- At the same time, many other countries continue to register robust growth. Most oil importers are generally faring better, with growth in excess of 5 percent and even higher in countries such as Côte d'Ivoire, Kenya, and Senegal. In most of these countries, growth is being supported by ongoing infrastructure investment efforts and strong private consumption. The decline in oil prices has also helped these countries, though the windfall has tended to be smaller than expected, as exposure to the decline in other commodity prices and currency depreciations have partly offset the gains in many of them.

Although this overall markedly weaker picture begs the question as to whether the region's recent growth momentum has stalled, our view is that medium-term growth prospects remain favorable. Clearly, with the advent of a far less supportive external environment, the immediate outlook for many sub-Saharan African countries remains difficult and clouded by downside risks. But beyond these current challenges, the underlying drivers of growth that have been in play domestically in the region over the past decade or so—most importantly, the much improved business environment—generally continue to be in place, and favorable demographics are poised to support these drivers over the coming decades.

However, to realize this potential, a substantial policy reset is critical in many cases.

- To date, the policy response among most commodity exporters to the historically large terms-of-trade shock has generally been behind the curve. A year and a half into the shock, and with fiscal and foreign reserves running low and financing constrained, a robust and prompt policy response is needed urgently to prevent a disorderly adjustment. For countries outside monetary unions, exchange rate flexibility, coupled with supportive monetary and fiscal policies, should be the first line of defense. Because the reduction in revenue from the extractive sector is expected to persist, many affected countries also critically need to contain fiscal deficits and build a sustainable tax base from the rest of the economy.
- With the external financing environment markedly tighter, fiscal policy will also need to be recalibrated among the region's market access countries where fiscal and current account deficits have been elevated over the last few years, lest they find themselves with low buffers and vulnerable to a financial crisis if external conditions worsen further.

WEATHERING THE COMMODITY PRICE SLUMP

The second chapter of this publication examines in more detail how the dependence on natural resources has made nearly half of the countries in the region vulnerable to a decline in commodity prices. As a result, though higher commodity prices have in part supported these countries' strong growth of the past decade or so, their exposure to commodity price fluctuations also has a strong macroeconomic impact in downturns, as recent developments attest.

The most vulnerable countries by far are the region's oil exporters. For them, the commodity terms-of-trade shock since mid-2014 has represented an income loss from oil price fluctuations of about 20 percent of GDP. A shock of such a magnitude typically shaves annual growth by some 3 to 3½ percentage points for several years—which is broadly consistent with the growth deceleration observed for oil exporters since 2014. Comparatively, metal exporters have tended to be less affected, although there are important price thresholds, beyond which mines close and jobs are lost, with a detrimental impact on activity.

Evidence from past downswings also highlights the critical role of exchange rate flexibility as a shock absorber for countries that are not part of a currency union. Countercyclical policies too can be important to smooth temporary shocks, and in the last few years, commodity exporters have indeed allowed fiscal deficits to widen in response to declining revenues. However, with fiscal space rapidly diminishing among sub-Saharan African commodity exporters, and commodity prices foreseen to remain low for long, adjustment is increasingly called for. Better domestic revenue mobilization offers substantial potential to strengthen the fiscal balance, while efforts to improve the prioritization, quality, and efficiency of public investment and to enhance the business climate should be actively pursued, so as to further economic diversification and increase economic resilience.

FINANCIAL DEVELOPMENT AND SUSTAINABLE GROWTH

The third chapter documents the substantial progress made by the region in financial development, including in financial services based on mobile telephone and through large home-grown pan-African banks. Empirical evidence suggests that financial development has indeed supported growth and reduced its volatility in the region, as it helped mobilize and allocate financial resources, and supported other economic policies in enhancing growth and stabilizing the economy.

Even so, there is still considerable scope for further financial development, especially compared to other regions—a gap that, if filled, could yield as much as 1½ percentage points of additional growth on average for countries in the region. With the exception of the region's middle-income countries, both financial market depth and institutional development remain lower than in other developing regions.

The region's improving financial development has been largely driven by better macroeconomic fundamentals, but hindered by weak institutional quality, and policies should focus especially on improving legal frameworks and corporate governance to further support financial development.

1. Time for a Policy Reset

Economic activity in sub-Saharan Africa in 2015 slumped to its lowest level in some 15 years. Output expanded by 3.4 percent, just a little above population growth, down from 5 percent in 2014 and the still higher growth rates that were customary in recent years. The main reason for the slowdown is the sharp decline in commodity prices, which has placed a number of the region's larger countries under severe strain, with a pronounced impact on the regionwide aggregate.

Much in the same vein, this year is set to be another difficult one. We project growth to be still lower at 3 percent as many countries grapple with the more difficult external environment. Beyond that, drought (particularly in eastern and southern Africa) is set to be an added source of economic difficulties for several countries.

There is, though, considerable heterogeneity in growth performance over 2015–16, which is evident from the three broad country groupings (Figure 1.1):

- In close to half of the 45 countries in the region, growth has dropped from their trajectory prior to the advent of the more difficult external environment, in some cases significantly so. This group includes the region's oil exporters (Angola, most CEMAC countries,[1] and Nigeria) and several non-energy-resource exporters (such as Ghana, South Africa, and Zambia). Also in this category are Liberia and Sierra Leone, which had been severely impacted by the recent Ebola epidemic and are now suffering from lower commodity prices, as well as several countries in southern and eastern Africa that are suffering from the drought.
- In one-third of countries—all oil-importers—and most with limited dependence on commodity exports, growth looks set to remain broadly unchanged relative to recent years.[2] Indeed, in many of these countries, especially low-income countries, this represents a continuation of the strong growth trend of recent years, stimulated by strong domestic investment and supported by lower oil prices. In a few countries though, this represents a persistence of lackluster growth.
- In a third (much smaller) group of countries growth prospects in 2015–16 have strengthened, reflecting either (1) a rebound from severe shocks or attenuation of conflict (such as in the Central African Republic); or (2) elevated public infrastructure investment, a good agricultural season, and an improved business environment (such as in Côte d'Ivoire and Senegal); and (3) a positive impact from the lower oil prices.

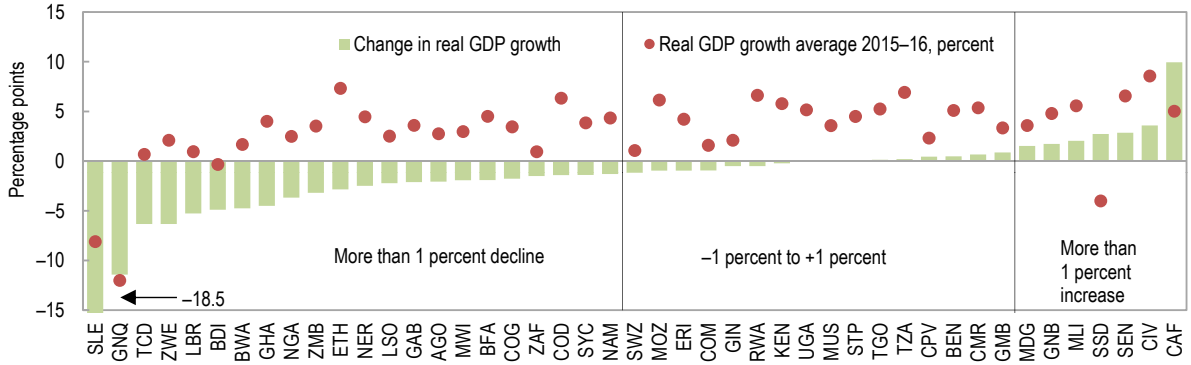
The overall weaker outturns beg the question as to whether the region's recent growth momentum has stalled with the advent of a more difficult external environment. We remain optimistic about the region's medium-term growth prospects. For one, as noted above, even the current growth picture is highly varied across countries. Second, and perhaps more important, the underlying drivers of growth over the medium term (including favorable demographics) remain in place. What the current slowdown shows instead is that the region is not immune to the multiple transitions afoot in the global economy. The high growth over the last decade was made possible by economic reforms and sound policies on the domestic front, coupled with a highly favorable external environment, including high commodity prices and ample inexpensive

This chapter was prepared by a team led by Bhaswar Mukhopadyay comprised of Francisco Arizala, Cleary Haines, Monique Newiak, Marco Pani, and Tim Willems.

[1] The Economic and Monetary Community of Central African States (CEMAC) includes Cameroon, the Central African Republic, Chad, Republic of Congo, Equatorial Guinea, and Gabon.

[2] This corresponds to growth remaining within a 1 percent band of its pre-shock average over 2010–14.

Figure 1.1. Sub-Saharan Africa: Change in Real GDP Growth, Average 2010–14 to Average 2015–16



Source: IMF, World Economic Outlook database.
Note: See page 82 for country abbreviations.

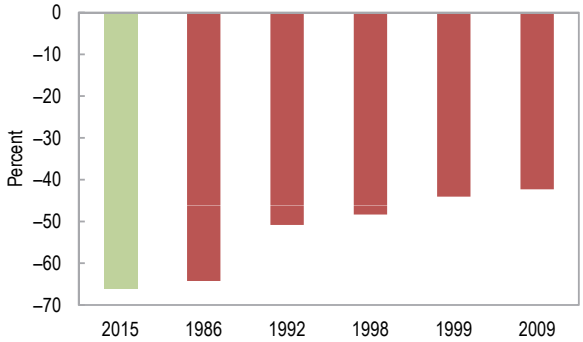
capital inflows.[3] With the external environment now much less supportive though, a policy reset is needed to reinvigorate the growth momentum.

In the broadest of terms, the policy reset required is as follows:

- For natural resource exporters, a robust and prompt policy response is needed given the prospect of an extended period of sharply lower commodity prices. To date, the policy response—particularly among oil exporters—to a terms-of-trade decline of historic magnitude (Figure 1.2) has to a large extent been hesitant and insufficient. But with fiscal and foreign exchange reserve buffers limited and financing constrained, the required adjustment will happen, one way or another: the options really are between orderly and disorderly adjustment. And by far the best way to lay the groundwork for a quicker, durable, and inclusive economic recovery lies in an orderly adjustment process. Accordingly, for countries outside monetary unions, exchange rate flexibility coupled with supportive policies should be the first line of defense. As revenue from the extractive sector is expected to be durably reduced, countries need to contain fiscal deficits, with the urgency of adjustment depending on the extent of macroeconomic and debt vulnerabilities, and available external and fiscal buffers. To the extent possible, this adjustment should take place on the revenue side where there is much scope in many countries (see October 2015 *Regional Economic Outlook: Sub-Saharan Africa*). However, expenditure measures will also be necessary where adjustment needs are urgent and benefits from revenue measures will take time to materialize.
- In the region's market access countries, adequate policy recalibration consistent with the more difficult external financing environment is also needed. Mainly playing off the favorable external financing environment of recent years, fiscal and external current account deficits have been elevated in many of the region's frontier markets as they have sought to address extensive infrastructure gaps. However, the external financing environment has now tightened markedly—the increase in financing costs for sub-Saharan African borrowers has been much more pronounced than for most emerging markets (Figure 1.3). Against this backdrop,

[3] Of course, though high commodity prices benefited natural resource exporters, they adversely impacted a majority of countries in the region that do not rely much on minerals exports.

Figure 1.2. Episodes of Largest 18-Month Decline in Real Crude Oil Prices, 1970–2015



Source: IMF, Commodity Price System.

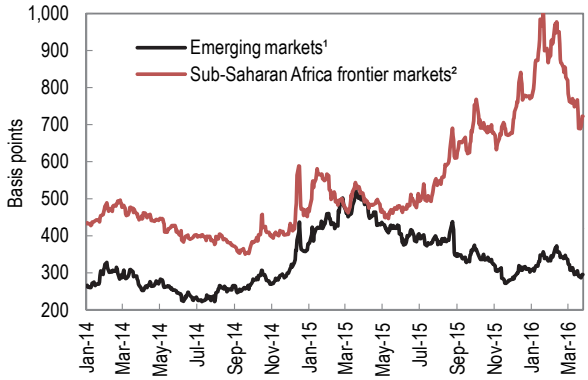
it is important that fiscal deficits are curtailed, depending on country circumstances, through better prioritization of spending initiatives and/or stronger revenue mobilization. If deficits are not curbed, these countries will be left without buffers and, worse still, remain vulnerable to a financing crisis (should external financing conditions get even more difficult).

The rest of Chapter 1 outlines the strong external headwinds the region is facing, highlights their impact on growth performance across various country groupings, and gives an overview of how domestic policies have dealt with this unfavorable environment. It presents the outlook and risks for the region, and ends with policy recommendations.

Complementing the analysis, evidence from past swings in commodity prices in sub-Saharan Africa suggests that commodity price cycles have long-lasting effects on key macroeconomic variables but that stronger macroeconomic policies, in particular exchange rate flexibility, substantially mitigate the impact of commodity price shocks. Chapter 2 elaborates in detail on these findings.

Looking at more medium-term issues, Chapter 3 finds that financial development in the region has increased significantly over the past decades. However, based on an analysis of sub-Saharan Africa's structural characteristics and a comparison with other developing regions, the chapter highlights that there is scope for further financial development in the region. Further development of financial institutions and markets could, in turn, boost the region's economic growth and lower its volatility. The chapter identifies sound macroeconomic fundamentals as a major driver of financial development in the region, whereas weak institutions have impeded development in the past.

Figure 1.3. Emerging Market Spreads: 2014–16



Source: Bloomberg, L.P.

Note: Data as of March 25, 2016.

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

[2] The frontier markets spread includes the spreads of Côte d'Ivoire, Gabon, Ghana, Kenya, Nigeria, Senegal, Tanzania, and Zambia.

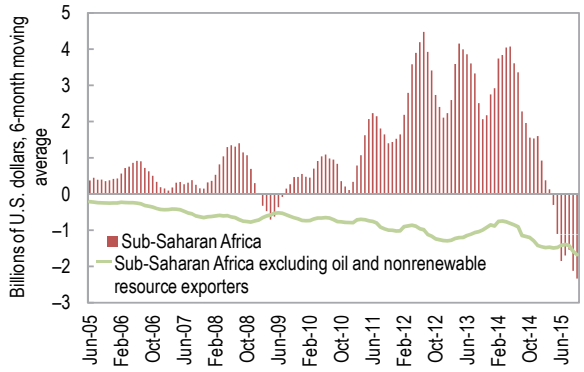
ANATOMY OF A SLOWDOWN

A world of multiple shocks

Global growth was 3.1 percent in 2015 and is expected to remain modest at 3.2 percent in 2016, before picking up gradually to 3.6 percent in 2017. Global growth remains broadly unchanged, but its composition has become less favorable for sub-Saharan Africa. In particular, the rebalancing and slowdown of the Chinese economy is a driving force behind low commodity prices. Together with lower oil prices—associated also with increased global supply—and tighter global financing conditions, this is adversely affecting growth and posing significant policy challenges for a number of sub-Saharan African countries (see April 2016 *World Economic Outlook*).

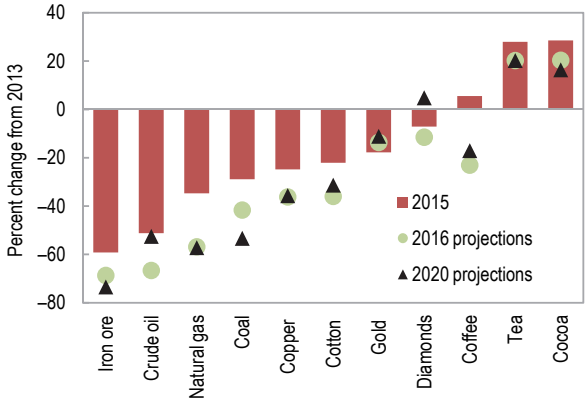
- China has become the region's major trade partner and increasingly also a source of foreign direct investment and other financial flows. The region had a surplus in its trade balance with China for nearly 15 years, which had improved sharply since the global financial crisis. However, as a result of the ongoing transition in China, the trade balance has recently turned into a deficit. This is predominantly the result of collapsing exports from the region, primarily on account of lower prices and demand for commodities from China. But, as is evident from Figure 1.4, the trade deficit of countries in the region that are not oil and resource exporters has also deteriorated recently. The decline in the region's exports to China has far outweighed the more moderate decline in China's exports to the region. These trends are likely to remain a drag on growth over the medium term.

Figure 1.4. Sub-Saharan Africa: Trade Balance with China, 2005–15



Source: IMF, Direction of Trade Statistics.

Figure 1.5. Selected Average Commodity Price Changes from 2013



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

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

- In the 18-month period through end-2015, crude oil prices declined more than in any other 18-month period since 1970 (see Figure 1.2). Other commodity prices have also fallen sharply since 2013, and are expected to remain even below their 2015 levels in 2016, and subdued in the medium term (Figure 1.5). For instance, under current projections, by 2020, energy and some metal prices are expected to recover to just about half of their 2013 peak levels. The shock is amplified by the fact that the share of commodities in exports has increased over the past 15 years for most commodity exporters in the region (see Chapter 2). Furthermore, the shock could also affect investment in countries in which exploration of oil and other commodities is planned.
- Global financial conditions have tightened substantially for most of the region's frontier markets. This development reflects in part the inception of a gradual tightening of monetary policy in the United States and a broader episode of financial volatility amid concerns about growth prospects in emerging markets. However, the region's frontier markets' spreads have widened significantly more than for the global emerging market group, possibly reflecting larger vulnerabilities in some of the region's countries (see Figure 1.3).[4] In parallel, some forms of capital flows to the region, notably cross-border bank loans, on which a broader group of countries than just the frontier markets rely, declined significantly from its level in 2014.

Large parts of southern and eastern Africa are facing a severe drought, putting millions of people in a situation of food insecurity and impacting macroeconomic activity (Box 1.1). Growth is expected to be significantly affected in a number of countries (Ethiopia, Malawi, Zambia), and food inflation is accelerating in many countries. Several are also facing pressures on their budgetary and external positions, with additional humanitarian assistance needs.

A severe impact

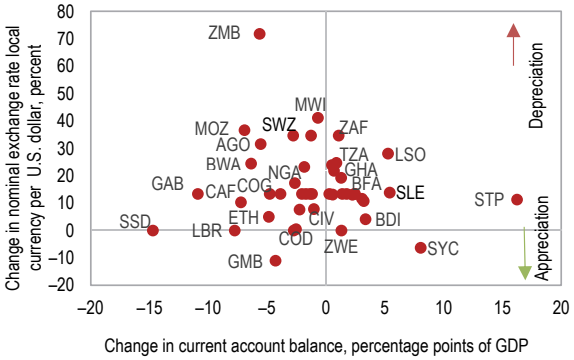
The region's growth has already slowed markedly. Growth in 2015 is estimated to have declined to 3.4 percent, from 5.1 percent in 2014.

Oil exporters have been hit very hard by the greater than anticipated decline in oil prices.[5] Their growth rate in 2015 is estimated to have more than halved to 2.6 percent compared with 5.9 percent the year before, and fiscal and current account balances have deteriorated sharply.

[4] For an analysis of the general drivers of spreads, see April 2015 *Regional Economic Outlook: Sub-Saharan Africa,* and Box 1.4, including on evidence of spillovers from larger economies of the region.

[5] See Table 1.1 for a list of countries classified as oil exporters and nonrenewable resource exporters. Any country that is not an oil exporter is considered an oil importer.

Figure 1.6. Sub-Saharan Africa: Change in Current Account Balance and Nominal Exchange Rate, 2014–15



Source: IMF, World Economic Outlook database.
Note: See page 82 for country abbreviations.

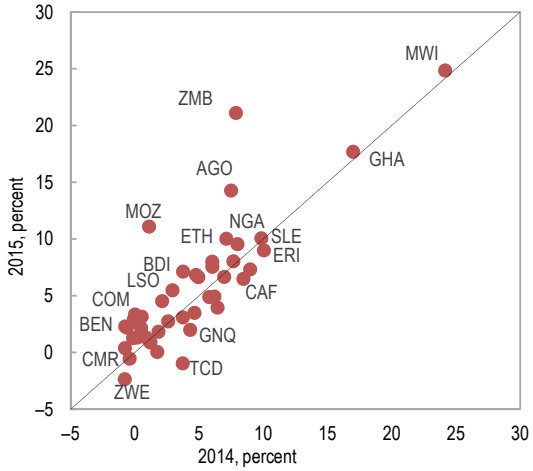
Meanwhile, gains for oil importers have been smaller than expected. Typically, the decline in oil prices should have translated into an increase in real disposable incomes and higher aggregate demand. However, abstracting from country-specific factors, two developments appear to have impeded the full realization of such benefits:

- The decline in commodity prices has adversely impacted the exports of sub-Saharan Africa's 15 major exporters of non-oil, nonrenewable resources in 2015. In some cases, this has more than offset the improvement in the oil trade balance, widening current account deficits.
- Many currencies in the region have depreciated significantly against a strong U.S. dollar (Figure 1.6), limiting the decline of oil prices in domestic currency terms and accelerating inflation (Figure 1.7). In addition, in some countries, administered energy prices have not been adjusted to transmit the full decline of lower fuel prices to final consumers.[6]

Nonetheless, growth remained strong in many oil-importing countries, with the region's non-fragile low-income countries in particular experiencing growth of 7.2 percent, aided in many instances by large ongoing infrastructure spending (for example, in some countries of the West African Economic and Monetary Union—WAEMU).

[6] Box 1.2 in the April 2015 *Regional Economic Outlook: Sub-Saharan Africa*, notes that only 35 percent of countries in the region allow automatic adjustment of fuel prices, with the others setting them administratively.

Figure 1.7. Sub-Saharan Africa: End-of-Period Inflation, 2014 versus 2015



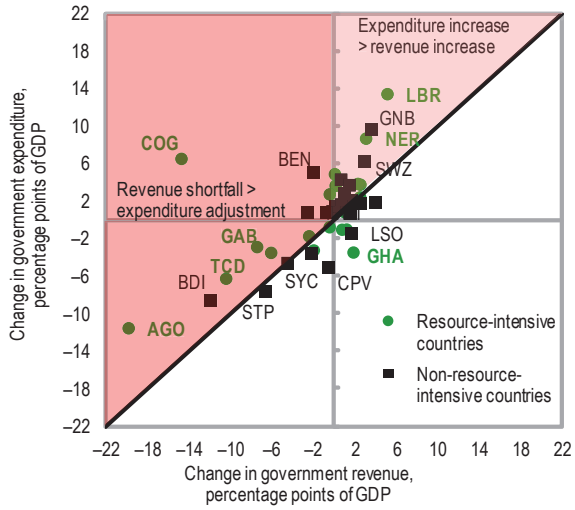
Source: IMF, World Economic Outlook database.
Note: See page 82 for country abbreviations.

Fiscal policy has responded, but as yet not sufficiently…

In most resource-rich countries, revenue shortfalls have been significant, and fiscal balances have deteriorated despite some adjustment in expenditures.

- Oil exporters, which are more heavily dependent on resource revenues than other commodity exporters, have in nearly all cases seen a substantial reduction in commodity (and total) revenues compared to 2010–13 levels, that is, before oil prices slumped (Figure 1.8). At the same time, spending has risen substantially in Cameroon and the Republic of Congo, while other countries have enacted spending cuts varying from substantial (Angola, Chad) to modest (Nigeria). With fiscal adjustment or financing lagging, delays in domestic payments have increased in a number of countries (for example, Angola, Chad, Nigeria).
- Some non-energy-resource exporters have also seen a sharp drop in revenue collection (Central African Republic, Liberia, Sierra Leone, and Zambia) which have not been fully compensated by governments' fiscal responses. Indeed, in some instances expenditures have even increased. This has been the case in Zambia, where the decline in copper prices and

Figure 1.8. Sub-Saharan Africa: Change in Expenditure and Revenue, Average 2010–13 to 2015



Source: IMF, World Economic Outlook database.
Note: See page 82 for country abbreviations.

electricity shortages have produced an especially acute shock on economic activity, as well as in Niger, where the public investment program has been scaled up. By contrast, Ghana's fiscal position improved in 2015, but the high level of its deficit and debt still puts a high premium on further fiscal consolidation.

In a number of other countries, fiscal policy was not suitably consolidated. For instance, in Kenya, fiscal consolidation could help reduce the burden on monetary policy and support the adjustment to an external environment of lower financial inflows. Côte d'Ivoire, which is investing heavily, could also take advantage of its presently strong growth to start consolidating its fiscal position.

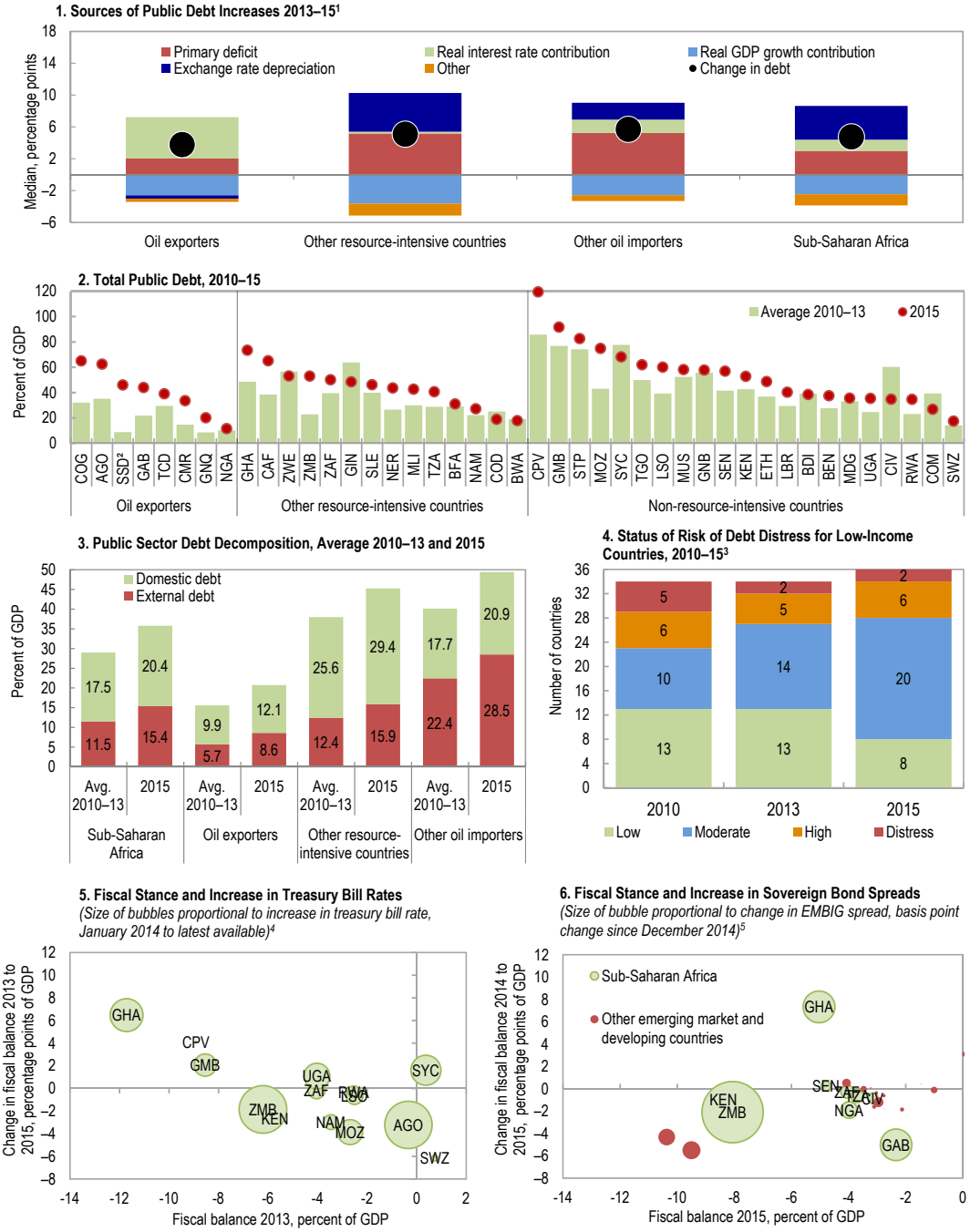
... triggering increased debt financing under difficult market conditions.

In the context of weak growth and elevated deficits, the region's debt level is on the rise (Figure 1.9, panel 1). Even before 2014, debt was already rising notwithstanding relatively strong growth rates. Between 2014 and 2015, with weaker growth, larger fiscal deficits and exchange rate depreciations, public debt increased even more markedly (the median public-debt-to-GDP ratio rose by 5¼ percentage points to about 43 percent).

- In most oil-exporting and other resource-intensive countries, the decline in commodity revenue and resulting fiscal expansion have driven the debt dynamics as fiscal gaps have been increasingly filled with debt creating flows (Figure 1.9, panel 2). Oil exporters, such as Angola, Cameroon, the Republic of Congo, and Gabon, experienced particularly large increases (17 to 33 percentage points between the 2010–13 average and 2015) to levels up to 65 percent of GDP. The rise in debt in other resource-intensive countries was smaller, with some exceptions (Ghana, Zambia). In some countries, a depreciating exchange rate has also contributed to rising debt levels (Angola, Tanzania).
- With a few exceptions (Cabo Verde, The Gambia, Mozambique, and Seychelles), increases were much smaller in most non-resource-intensive countries. The sources of debt increases vary, but public infrastructure investments appear to be a common denominator (Cabo Verde, Mozambique, São Tomé and Príncipe), while poor growth and a depreciating exchange rate (Cabo Verde), unsustainable policies (The Gambia) or weak fiscal revenue (Lesotho) also played a role.
- Both external and domestic debt contributed to the increase in public debt, and debt sustainability assessments have deteriorated in a number of countries (Figure 1.9, panels 3 and 4). In addition, the rise in domestic debt has increased the exposure of commercial banks to the government, especially among oil exporters and other resource-intensive countries, including notably in Angola and Gabon. Conversely, Ghana and Zambia have raised substantial funds from recent Eurobond issuances.

Furthermore, borrowing costs have generally increased (Figure 1.9, panels 5 and 6). The cost of external debt has increased sharply since the end of 2014, triggered by the continued decline in commodity prices, oil price volatility, and heightened risk aversion by foreign investors. Yields on Eurobonds are now at or close to double-digit levels in a number of the region's frontier markets,

Figure 1.9. Sub-Saharan Africa: Trends in Public Debt and Borrowing Costs



Sources: Bloomberg, L.P.; Country authorities; IMF Debt Sustainability Analysis database; IMF, International Financial Statistics; IMF, World Economic Outlook database; and IMF staff calculations.

Note: See page 82 for country abbreviations.

[1] Lesotho and South Sudan have been excluded due to data availability. The "Other" category comprises debt relief (Heavily Indebted Poor Country and other), privatization proceeds, recognition of implicit or contingent liabilities, other country-specific factors (such as bank recapitalization), asset valuation changes, and other unidentified debt-creating flows as defined in the IMF-World Bank Debt Sustainability Framework.
[2] For South Sudan data are average 2012–13 compared with 2015.
[3] Excludes Angola and Nigeria as they are no longer classified as a low-income countries. Debt risk ratings for Cabo Verde begin in 2014 and for South Sudan in 2015.
[4] Data as of March 25, 2016.
[5] Data as of March 25, 2016. EMBIG = JP Morgan Emerging Market Bond Index Global.

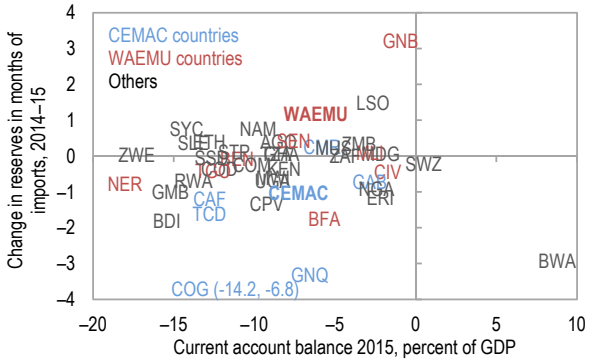
compared to about a 4½ percent to 8 percent range at the end of 2013. Treasury bill rates have also increased beyond the increase in inflation, mostly in countries with large or expanding fiscal deficits, and some countries have not been able to mobilize needed financing as treasury bill auctions have on occasion been undersubscribed (The Gambia, Ghana, Kenya, Tanzania, Zambia). Looking ahead, with the external environment projected to remain unfavorable, mobilizing sufficient financing may become even more challenging.

Exchange rate and monetary policy measures have been attempted to mitigate the shock

The severe external shock has triggered exchange rate pressures to which monetary policy responses have varied.

- In some cases, terms-of-trade shocks have been exacerbated by reduced net inflows of capital from official and private sources triggered, for instance, by policy uncertainty (South Africa, Zambia), or delayed monetary tightening (Mozambique).
- In general, countries have allowed their currencies to adjust, but many have tried to smooth the exchange rate depreciation by dipping into already scarce international reserves (Figure 1.10). In the CEMAC, which maintains a fixed peg to the euro, the decline in international reserves has been substantial, despite the depreciation of the euro against the U.S. dollar.
- In addition, the pass-through of nominal exchange rate depreciation and the impact of the drought on food supply (for example, Lesotho, South Africa, Zambia; Box 1.1) have pushed up inflation in some countries. To mitigate these pressures, many monetary authorities have lowered the growth in monetary aggregates (Madagascar did not), or raised their policy rates. Nigeria initially lowered its policy rate but partially reversed this stance in late March (Figures 1.11 and 1.12).

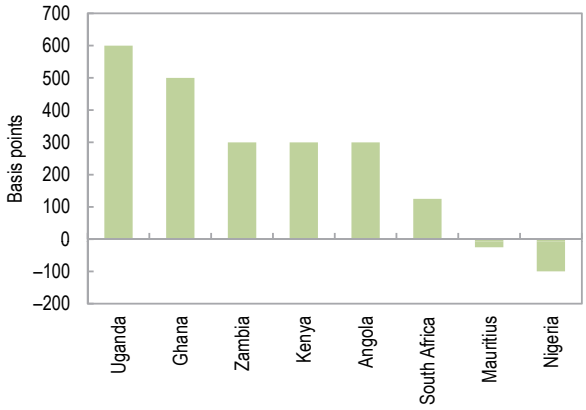
Figure 1.10. Sub-Saharan Africa: Current Account Balance and Change in Reserves, 2015



Source: IMF, World Economic Outlook database.

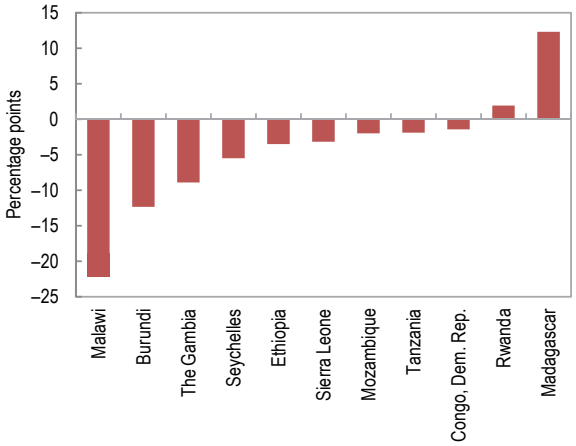
Note: International reserves are pooled within the WAEMU and within the CEMAC and thus regional reserves are available to all member countries of the respective currency union. However, this chart depicts changes in international reserves for individual WAEMU and CEMAC member countries as this information helps assess individual countries' balance of payments pressures. CEMAC = Economic Community of Central African States; WAEMU = West African Economic and Monetary Union. See page 82 for country abbreviations.

Figure 1.11. Sub-Saharan Africa: Change in Monetary Policy Rate since December 2014



Source: Haver Analytics.

Figure 1.12. Sub-Saharan Africa: Change in Base Money Growth, 2014–15



Source: IMF, International Financial Statistics.

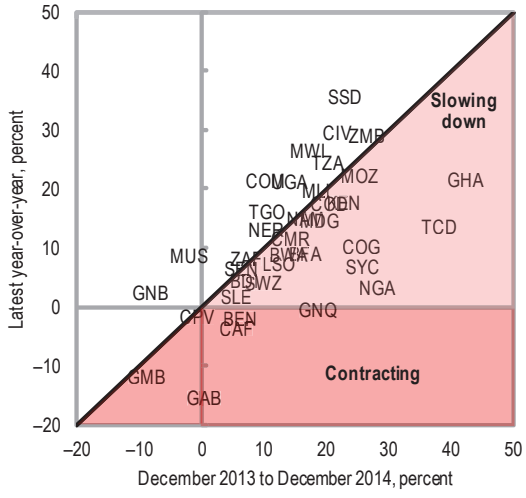
- However, in some cases, central banks have sought to preserve their external buffers by introducing formal or informal administrative restrictions on the foreign exchange market (Angola, Nigeria). Such measures have led to the emergence and widening of exchange rate spreads with the parallel market. They have also triggered pressures on commercial banks' net foreign asset positions, as some commercial banks are trying to match the demand for foreign exchange by using their foreign assets, or by increasing liabilities with counterparties abroad. Widening parallel market spreads and pressure on international reserves suggest that further depreciation may be needed.

Tighter monetary stances, together with greater recourse to domestic financing by the public sector, may have amplified the shock's effect on private sector borrowing activity. Larger fiscal deficits and tighter monetary policies are increasing borrowing costs for the private sector. In addition, administrative measures on foreign exchange which, as noted above, widened parallel market rate spreads and limited imports of key inputs (Angola, Nigeria), have distorted private sector activity. As a result, most countries are experiencing a decline in the growth of credit to the private sector, or even a contraction (Figure 1.13). This slowdown also comes in a broader context of slower financial deepening in some cases and a correction of possibly excessive credit growth in others (Box 1.2).

Relatedly, indicators of financial soundness have deteriorated. Significant increases in nonperforming loans have been observed in some oil exporters (Angola, Equatorial Guinea) and small and fragile states (Cabo Verde, The Gambia, Malawi, São Tomé and Príncipe, Sierra Leone, Zimbabwe—Figure 1.14), giving rise to recapitalization needs (Angola, The Gambia). In almost half of the region's resource-intensive countries, capital adequacy ratios have worsened. Likewise, banking sector profitability has declined in two-thirds of the countries for which data are available, most notably in oil exporters (Chad, Republic of Congo), but also in some non-resource-intensive middle-income countries (Lesotho, Mauritius, Senegal), and fragile states (Burundi, Liberia). Given the shocks the region is experiencing, macroeconomic conditions and the accompanying deterioration of these indicators could worsen further (Box 1.2; see Chapter 3 for longer-term trends in financial development and stability).

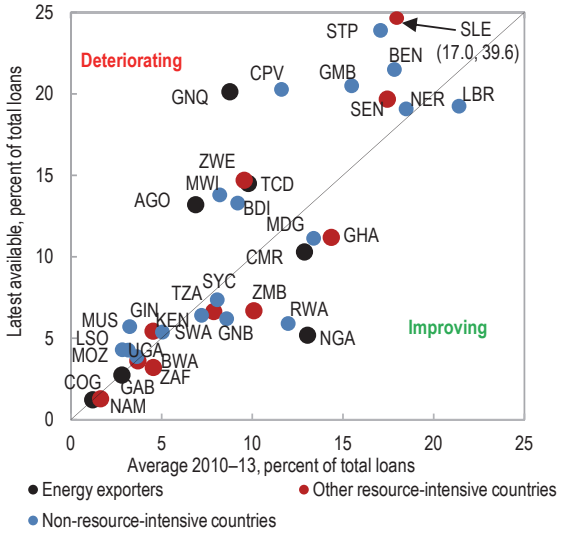
Furthermore, there is a risk that balancing fiscal and monetary objectives will become increasingly challenging. An analysis conducted on countries

Figure 1.13. Sub-Saharan Africa: Growth of Credit to the Private Sector



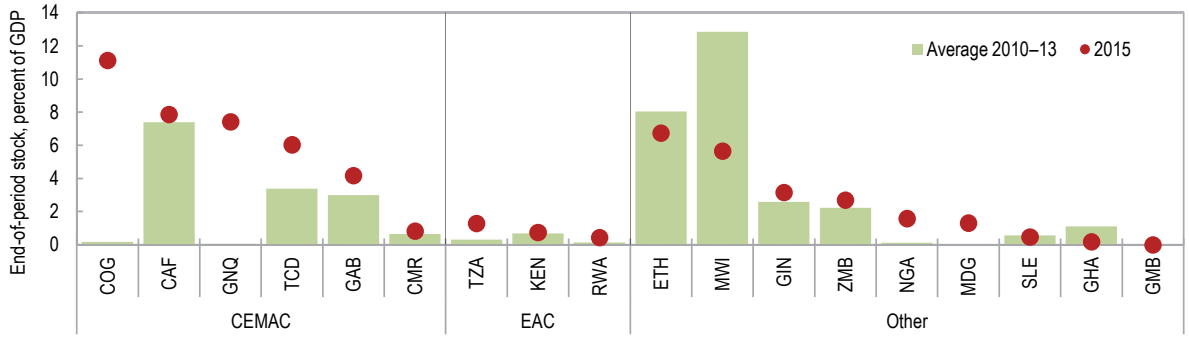
Source: IMF, International Financial Statistics.
Note: See page 82 for country abbreviations.

Figure 1.14. Sub-Saharan Africa: Nonperforming Loans, Average 2010–13 versus 2015



Sources: Country authorities; and IMF staff estimates.
Note: See page 82 for country abbreviations.

Figure 1.15. Sub-Saharan African Selected Countries: Advances from the Central Bank, Average 2010–13 and 2015



Sources: Country authorities; and IMF staff estimates.

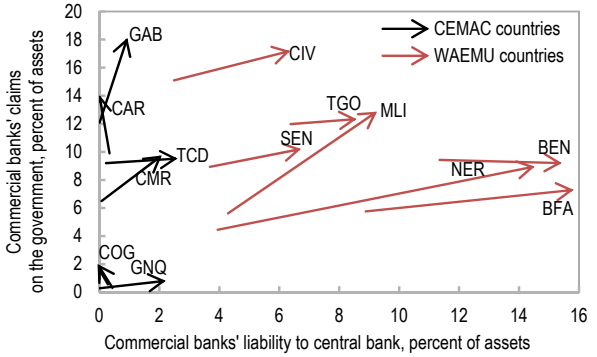
Note: Data for 2015 are latest available month. CEMAC = Economic Community of Central African States; EAC = East African Community. See page 82 for country abbreviations.

with an inflation objective suggests that the size of the fiscal deficit in some of them may not be consistent with their inflation targets and some stylized notions of sustainable debt (Box 1.3). This illustrative exercise highlights that fiscal vulnerabilities must be addressed, if these countries are to avert further tensions between fiscal and monetary policies, including the risk of resorting to monetary financing at the cost of higher inflation.

Indeed, most recent data highlight that direct financing from the central bank has increased in many countries (Figure 1.15). In the CEMAC, limits for statutory advances to the government were increased in August 2015 (from 20 percent of fiscal receipts in 2008 to 20 percent of fiscal receipts in 2014, representing increases in individual country limits of up to 1¼ percent of 2015 GDP). Nonetheless, most of the union's countries have already reached their new limits for direct central bank financing (in the case of Chad even with an exceptional increase in the limit). Direct financing by the central bank to the government has also increased in other countries compared to 2014, such as Tanzania (within existing legal limits), Guinea and Sierra Leone (largely due to the Ebola outbreak), and Ethiopia. In The Gambia, overdue advances have been securitized into long-term loans but remain on the central bank's balance sheet. In most cases, direct financing has taken place at below-market rates (for example, Ethiopia, The Gambia, Zambia). Bucking that trend, Ghana eliminated large previous balances in 2015 as part of the government's adjustment program.

In some other cases, the provision of financing by the central bank to the banking system has facilitated the placement of new domestic government debt (Figure 1.16). In the WAEMU in particular, the positive spread between the Central Bank of West African States' (BCEAO) key refinancing rate and rates on treasury bills and bonds has increased banks' incentives to borrow from the central bank to invest in public debt, increasing maturity mismatches on banks' balance sheets (IMF 2015f). Meanwhile, the CEMAC's regional central bank injected $660 million into the regional development bank, the Central African State Development Bank (BDEAC), in January to support its role in financing regional public and private investment projects, blurring the line between the traditional role of a central bank and development financing.

Figure 1.16. CFA Franc Zone: Central Bank Financing versus Commercial Banks' Exposure to Government, Average 2010–13 to 2015



Source: IMF, International Financial Statistics.

Note: Arrows point from average 2010–13 to 2015. CEMAC = Economic Community of Central African States; WAEMU = West African Economic and Monetary Union. See page 82 for country abbreviations.

OUTLOOK AND RISKS

A subdued macroeconomic outlook …

In light of the environment sketched in the previous section, sub-Saharan Africa is set to continue on a trajectory of subpar growth in 2016 (Tables 1.1 and 1.2). As the severe external shocks persist, average growth for the region in 2016 is expected to reach just 3 percent, revised downward by 1¼ percentage points since the October 2015 *Regional Economic Outlook*, and the lowest rate since 1999. However, the observed heterogeneity in growth for countries across the region is expected to persist in 2016. In 2017, helped by a small rebound in commodity prices and timely policy implementation, particularly in those countries that are most affected by the shock, growth is expected to recover to 4 percent.

The outlook in 2016 remains grim for oil exporters and a number of other commodity exporters.

- Growth in oil-exporting countries is expected to decline to 2.2 percent. In particular, growth is forecast to slow further in Angola, given, among other factors, limited foreign exchange supply and lower levels of public spending, and in Nigeria as the adverse impact of lower oil prices is compounded by disruptions to private sector activity through exchange rate restrictions. In the Republic of Congo though, growth is expected to pick up owing to the planned increase in oil production.
- In a number of large non-oil commodity exporters, growth is also expected to remain depressed. Indeed, activity is expected to further slow in Zambia because of depressed copper prices, electricity shortages, and weak domestic demand, and to halve to just 0.6 percent in South Africa on the back of low investor confidence, tighter policies, the decline in commodity prices, and the incidence of drought. In Ghana, non-oil growth is expected to be stable, albeit at a low level, while total GDP growth is expected to pick up slightly on account of increased oil production.
- Growth in the countries affected by the Ebola epidemic is expected to remain low in 2016. As the epidemic abates, however, growth in Guinea and Liberia is expected to pick up (by more than 3 percentage points in each case, to 4.1 percent and 2.5 percent, respectively), and to reach 5.3 percent in Sierra Leone, after a double-digit contraction in 2015.

In most other countries, growth is projected to remain relatively robust. Stimulated by strong domestic investment and lower oil prices, growth in oil-importing countries (excluding South Africa)

Table 1.1. Sub-Saharan Africa: Real GDP Growth
(Percent change)

	2004–08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Sub-Saharan Africa	**6.8**	**4.0**	**6.6**	**5.0**	**4.3**	**5.2**	**5.1**	**3.4**	**3.0**	**4.0**
Of which:										
Oil-exporting countries	9.2	7.0	8.5	4.6	3.8	5.7	5.9	2.6	2.2	3.4
Of which: Nigeria	8.6	9.0	10.0	4.9	4.3	5.4	6.3	2.7	2.3	3.5
Middle-income countries	6.9	3.8	6.5	4.5	4.2	4.6	4.6	2.6	2.5	3.4
Of which: South Africa	4.8	–1.5	3.0	3.2	2.2	2.2	1.5	1.3	0.6	1.2
Low-income countries[1]	7.7	6.3	7.6	7.6	6.2	7.0	7.2	7.2	5.6	6.5
Fragile states	3.5	3.3	5.6	3.1	3.4	7.2	6.1	3.9	4.2	5.2
Memorandum:										
World economic growth	4.9	0.0	5.4	4.2	3.5	3.3	3.4	3.1	3.2	3.5
Sub-Saharan Africa resource-intensive countries[2]	7.0	3.9	6.7	4.9	3.9	5.0	4.7	2.6	2.4	3.4
Sub-Saharan Africa frontier and emerging market economies[3]	7.1	4.4	6.8	5.0	4.5	5.1	5.0	3.5	3.0	3.9

Source: IMF, World Economic Outlook database.

[1] Excluding fragile states.
[2] Includes oil exporters: Angola, Cameroon, Chad, Republic of Congo, Equatorial Guinea, Gabon, Nigeria, South Sudan; and nonrenewable resource exporters: Botswana, Burkina Faso, Central African Republic, Democratic Republic of Congo, Ghana, Guinea, Liberia, Mali, Namibia, Niger, Sierra Leone, South Africa, Tanzania, Zambia, and Zimbabwe.
[3] Includes Angola, Cameroon, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Kenya, Mauritius, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Uganda, and Zambia.

Table 1.2. Sub-Saharan Africa: Other Macroeconomic Indicators

	2004–08	2009	2010	2011	2012	2013	2014	2015	2016	2017
					(Percent change)					
Inflation, average	8.8	9.8	8.2	9.5	9.3	6.6	6.4	7.0	9.0	8.3
					(Percent of GDP)					
Fiscal balance	1.7	–4.6	–3.4	–1.2	–1.8	–3.1	–3.6	–4.1	–4.6	–4.1
Of which: Excluding oil exporters	–0.6	–4.1	–4.3	–3.7	–3.7	–4.0	–4.1	–4.1	–3.9	–3.5
Current account balance	2.1	–2.8	–0.8	–0.6	–1.8	–2.4	–4.1	–5.9	–6.2	–5.5
Of which: Excluding oil exporters	–4.3	–4.8	–3.9	–4.8	–7.1	–7.6	–7.3	–7.6	–7.6	–7.8
					(Months of imports)					
Reserves coverage	5.1	5.2	4.2	4.6	5.3	5.0	5.6	5.1	4.2	3.9

Source: IMF, World Economic Outlook database.

is projected to be 5.2 percent in 2016 (5.4 percent in 2015). More specifically, growth in Kenya is projected to rise to 6 percent, aided by investment in the transport sector, a pickup in electricity production, and a recovery in tourism. Similarly, Senegal's strong growth is expected to remain broadly unchanged at 6.6 percent, supported by improving agricultural productivity and a dynamic private sector. In the same vein, high cocoa prices and good agricultural production, as well as an anticipated boost in investment following the recent presidential election, are expected to fuel strong growth in Côte d'Ivoire, projected at 8.5 percent.

The regional drought threatens to exact a heavy toll on eastern and southern Africa (Box 1.1). Growth in Ethiopia and Malawi is expected to be affected especially severely. In addition, food inflation is on the rise, and the need to import food and electricity is expected to result in a deterioration of the current account, especially in Zambia. The impact of the drought varies across countries, but its severe human costs associated with food insecurity are also likely to increase substantially relative to 2015, with 40–50 million people likely to be food insecure by end-2016. Furthermore, with dry conditions expected to persist in 2016–17, the share of the population vulnerable to the drought could double from its current level.

... with significant downside risks

On the external front, uncertainty remains, particularly concerning the path and implications of the Chinese rebalancing, U.S. monetary tightening, growth in advanced markets, and their mutual interactions.

Additional difficulties in Europe owing to financial or geopolitical developments could further weaken the external demand for African exports and the supply of capital and development aid.

The heightened volatility in global financial markets in the first weeks of 2016 underscores the severity of these concerns because it has significantly affected the region's frontier economies' spreads (Box 1.4.). In addition, energy and other commodity prices could also remain volatile. Commodity prices increased toward the end of the first quarter; such increases could be temporary if China's demand for commodities does not increase, and global oil supply continues to surprise on the upside.

On the domestic and regional side, the key risk is that necessary policy adjustments are not implemented in a timely manner, creating the risk of financing difficulties and an even more abrupt adjustment. This risk could be accentuated where policy uncertainties are intensifying (such as in countries that have key elections scheduled in 2016). A more prolonged or expanded incidence of the drought in eastern and southern Africa would dampen growth in agriculture and expose significant shares of the population to food insecurity, triggering displacement and migration.

In addition, the threat of terrorism is mounting in Central Africa and the Sahel Belt, as exemplified by recent attacks in Burkina Faso, Côte d'Ivoire, and Mali (Box 1.5). Finally, spillovers from economically hit countries to other countries in the region through trade, and to the financial system through cross-border operations, are also a possible risk.

POLICIES GENERALLY NEED TO ADJUST AT A FASTER PACE

The previous sections highlight a number of worrying trends.

- Rising fiscal deficits and more costly external and domestic financing conditions are increasing macroeconomic vulnerabilities and, in some cases, impeding central banks' pursuit of their primary objectives, such as price stability.
- These conditions are adding to exchange rate pressures, and many central banks have responded by raising interest rates. This, in combination with large government borrowing, has increased private sector borrowing costs—thereby undermining growth.
- Countries, having already entered this episode of pressures with lower buffers than at the onset of the global financial crisis (see October 2015 *Regional Economic Outlook: Sub-Saharan Africa*), have drawn substantially on their available buffers to mitigate the shock, severely limiting room for additional countercyclical policy.
- Sovereign risks associated with large commercial bank exposures to government debt and related governments' rollover risks have increased in some cases, posing risks to financial stability.

In view of these trends, governments should consider a set of policy options tailoring the urgency of adjustment to the extent of domestic vulnerabilities. Commodity prices have fallen sharply and, for energy prices, at an unprecedented pace. Oil and other commodity exporters are adjusting, but given the extent of the shock they are facing, policies are currently "behind the curve." Because the shock is likely to persist, and buffers have been depleted, adjustment is unavoidable.

- For countries that are not members of a currency union, exchange rates should adjust as needed to absorb the shock. Interventions by the central bank should be limited to mitigation of disorderly market movements, and more generally, administrative measures on foreign exchange should be avoided. Central banks may need to tighten their monetary policy stance when inflationary pressures are persisting as a result of exchange rate depreciation, when drought-related spikes in food-price inflation are having second-round inflationary effects, or if warranted on macroprudential grounds. Such policies are likely to be needed to preserve macroeconomic stability, notwithstanding the adverse effect of tighter monetary policies on private sector activity through higher borrowing costs.
- Fiscal adjustment is urgently needed to safeguard macroeconomic stability, especially in the region's oil-exporting countries. In the CEMAC, the exchange rate tool is not available, and governments are reaching the limit on direct financial support by the central bank. For these countries, although it is appropriate to use international reserves to smooth the shock, the magnitude of the shock and the expectation that the reduction in resource income will persist, renders significant fiscal consolidation unavoidable (IMF 2015b), even at the cost of short-term output losses. More generally, the speed of fiscal consolidation across the region should be guided by countries' available buffers, domestic vulnerabilities, and financing constraints. In their consolidation efforts, countries should aim at mobilizing revenues and preserving priority expenditures, such as social expenditures, also with a view to not setting back their longer-term development goals.
- Several countries that are not significant nonrenewable commodity exporters are more favorably placed to weather the shocks and have so far coped reasonably well. In some of these countries, however, efforts to meet urgent spending needs, in particular to close infrastructure gaps, have led to widening deficits and increasing debt levels. These countries should use their current strength to build buffers and reduce their vulnerability to a sudden worsening of the economic climate.

- Central banks should limit the use of advances to the government to the mitigation of short-term financing constraints and avoid easing commercial banks' liquidity constraints with a view to facilitating lending to the government. Moreover, central banks should abstain in general from providing structural development financing.
- Governments must remain vigilant to any signs of increasing financial stress and, in this context, step up early warning systems and cross-border cooperation in supervision.
- Beyond immediate policy reactions, the current challenges are also a strong reminder of the need to advance the economic diversification agenda.

Box 1.1. Impact of the Drought in Southern and Eastern Africa

Large parts of southern and eastern Africa are facing a severe drought, potentially threatening food security for about 40–50 million people. The drought, linked to the ongoing El Niño pattern, is affecting countries through two channels: reducing agricultural output and, in some cases, hampering hydroelectric power generation. As a result, growth is projected to slow sharply in Ethiopia, Malawi, and Zambia, and food inflation is accelerating almost everywhere in the subregion. Several countries also face pressures on their budgets and external positions. The drought may intensify during the year, and the macroeconomic situation could deteriorate further.

A severe drought affecting millions of people in southern and eastern Africa is expected to intensify over the year, threatening a regionwide food crisis. Rainfall so far this season has been the lowest in the last 35 years, 40 percent below its long-term average, following an already poor season last year. Ethiopia, Lesotho, Malawi, and Zimbabwe have appealed for humanitarian assistance, and several other countries have declared drought emergencies. Botswana, Namibia, South Africa, and Swaziland are limiting water usage because of low water levels at reservoirs. Low water levels are also affecting power generation in Zambia and Zimbabwe, resulting in extensive power outages. Forecasts suggest a continuation of below-average rainfall and another year with poor crop performance in 2016.

The World Food Program and the United States Agency for International Development predict that about 40–50 million people are at risk of inadequate food supply by end-2016, including 2.5 million already identified to be in an acute food crisis, with varying repercussions across countries.[1] If the abnormally hot and dry conditions persist, a regional food security crisis, including a substantial increase in the size of the extremely vulnerable population, could emerge in 2016 and early 2017. However, even if rainfall normalizes, crop reserves and seed banks are severely depleted, leaving farmers vulnerable for the upcoming planting season. According to the Famine Early Warning Systems Network, a large share of the future harvest will be lost because of poor seeding (particularly maize). The drought will hit particularly hard the most vulnerable people living in rural areas that depend on agricultural production. The urban poor will be affected by higher food prices.

The macroeconomic impact of the drought is expected to be particularly severe in some of the most vulnerable countries in the region:

- *Growth.* IMF staff project that in 2016 GDP growth will be significantly impacted in Ethiopia, and decline by 2.3 percentage points in Malawi mainly because of poor agricultural output. In addition to its impact on agriculture, the drought has severely crippled the supply of water and the production of electricity. A number of reservoirs are almost entirely dried up or at very low levels, and the lack of water is affecting electricity production, in particular in Zambia (lowering growth by 1.2 percentage points) and Zimbabwe, where prolonged power outages have become the norm. In most of the other affected countries in the subregion, the drought is estimated to reduce growth by up to 0.5 percentage point.
- *Inflation.* Food inflation is on the rise in several countries, although the impact on headline inflation has so far been muted by a decline in other items in the consumer price index basket, particularly fuel. For example, notwithstanding low international food prices, wholesale maize prices in South Africa and other neighboring countries are more than 50 percent higher than a year earlier, while retail maize prices have doubled in Malawi and Mozambique.
- *Fiscal*. The drought is exerting pressure on the government budget in Ethiopia, which released a recent supplementary budget; in Swaziland, where the cost of emergency plans amount to 1 percent of GDP;

This box was prepared by Geremia Palomba, Aidar Abdychev, and Monique Newiak.

[1] As classified in Integrated Food Security Phase Classification (IPC) Phase 3. IPC is used to measure the nature and severity of a food security crisis (for example, IPC 4: Humanitarian Emergency and IPC 5: Famine/Humanitarian Catastrophe).

Box 1.1. *(continued)*

and in Zambia, where emergency imports of electricity are estimated at 1½ percent of GDP. Other countries envisage additional drought-related outlays of up to ½ percent of GDP, mainly for drought-relief efforts.

- *External*. Significant pressures on the external position are likely to emerge in the period ahead. Imports of food and, in some countries, electricity are expected to increase and significantly deteriorate the current account, especially in Zambia (1½–2 percent of GDP), while other countries face humanitarian needs, mainly related to food imports, of about ½ percent of GDP.

The response to the crisis has so far been uneven. In Zimbabwe, the funding of the drought response plan is reportedly below 50 percent, compared to more than 90 percent in Malawi. More generally, relief agencies indicate a significant gap in funding, and according to international organizations, such as the World Food Program, most countries in the region are not adequately prepared to deal with the potential humanitarian impact. Moreover, not much progress has been made in building an agricultural infrastructure resilient to changing weather conditions, including introducing drought-resistant seeds, new farming techniques, water harvesting, and conservation farming.

Box 1.2. Private Sector Credit Growth Developments in Sub-Saharan Africa

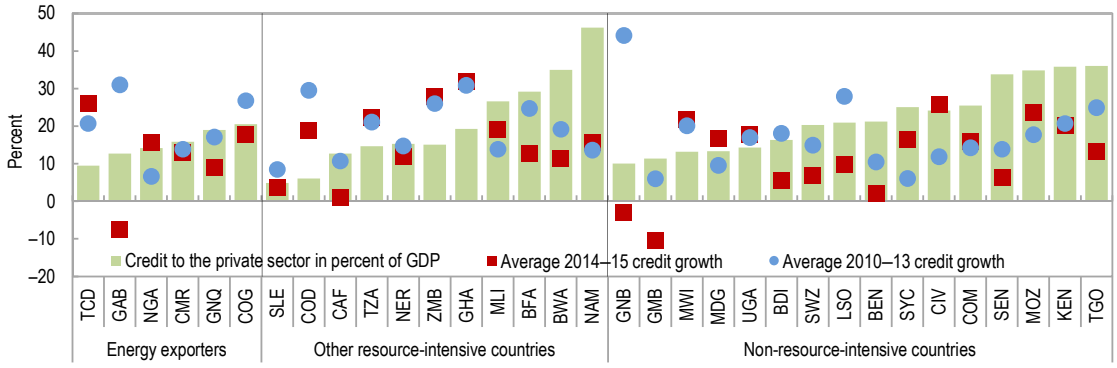
In the majority of sub-Saharan African countries, private credit growth has slowed (Figure 1.2.1). The recent decline is examined against the background of rapid credit growth in 2010–13, when commodity prices were on the rise and financing conditions favorable.

The period of favorable financing conditions and high commodity prices was associated with dynamic public and private credit growth, helping many countries to increase credit depth, often from low levels.[1] With the end of the commodity prices boom, credit growth is now declining, most markedly in energy exporters. Against this background, the following questions arise:

- Did countries in the region, and especially commodity exporters, experience an unusually high increase in credit (a "credit bubble") during the previous commodity prices boom or did countries experience healthy financial deepening?
- In that context, what does this imply in terms of financial stability risks, in particular for nonperforming loans (NPLs)?

To answer these questions, a benchmarking analysis of credit developments is used to evaluate possible risks associated with the recent episode of fast credit growth. Following Marchettini and Maino (2015), we identify countries in which credit to the private sector has expanded (1) faster compared to a longer-term trend ("trend gap"), and (2) beyond a level consistent with countries' structural characteristics ("frontier gap"—Figure 1.2.2). The analysis suggests the following conclusions:[2]

Figure 1.2.1 Sub-Saharan Africa: Growth of Credit to the Private Sector



Sources: Country authorities; IMF, International Financial Statistics; and IMF staff estimates.
Note: See page 82 for country abbreviations.

[1] In the case of resource-intensive countries, levels of credit to the private sector are often low because the exploitation of natural resources is often financed through public resources or foreign direct investment.

[2] The trend gap is the average deviation in 2010–13 of a country's private-credit-to-GDP ratio from a long-term trend using a backward-looking Hodrick-Prescott filter. The frontier gap is the average deviation in 2010–13 of the private-credit-to-GDP ratio from its statistical benchmark, a fitted value from a quantile regression of private-credit-to-GDP ratio on country fundamentals and cyclical factors. Fundamentals include population size and density, GDP per capita and its square, age dependency ratios, and dummies for being a frontier market, an oil exporter, a financial center, or land-locked country (see Feyen, Kibuuka, and Sourrouille 2016).

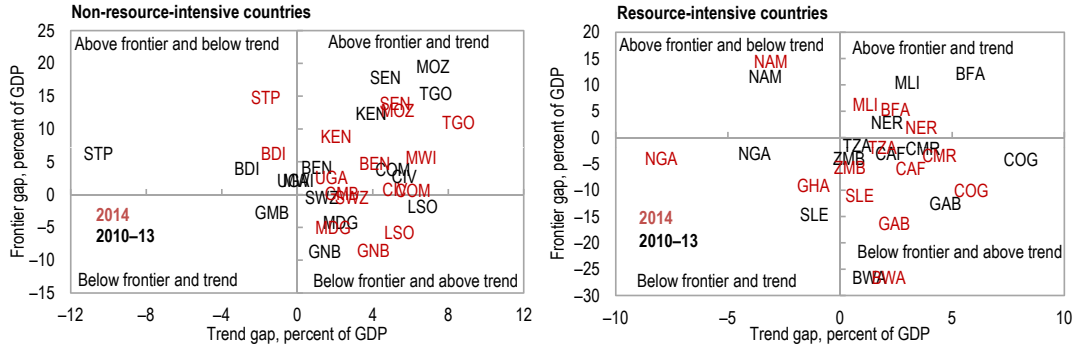
Box 1.2. *(continued)*

- Risks associated with rapid credit growth (beyond what seems warranted by structural considerations) are present in a number of countries that are not resource exporters (Kenya, Mozambique, Senegal, Togo), and could point to financial stability concerns looking ahead.[3]
- By contrast, in most resource-exporting countries rapid credit growth was associated with catching up—with only two countries seeing credit growth beyond what would be warranted by structural conditions (Mali, Niger).
- There are still a number of countries in which the progress toward financial deepening has been lagging. In these countries credit growth is both below the trend and below the level consistent with its structural characteristics (The Gambia, Nigeria, Sierra Leone).

Our analysis indicates that in most countries where financial stability risks may be on the rise because of the unwinding commodity boom, a reversal of excessive credit growth is not likely to add to such risks.

- NPLs related to slowing economies are on the rise in a number of countries of the region. This includes both resource exporters (Angola, Chad, Equatorial Guinea, Sierra Leone) and those that are not resource exporters (Benin, Cabo Verde, The Gambia, Malawi, and São Tomé and Príncipe) (See Figure 1.14).
- Only a few countries with rising NPLs are also countries flagged in our analysis as having experienced credit growth that could be considered excessive, and the prospects for a steeper increase in NPLs in those countries cannot be discounted. Though a deeper analysis would be needed to make a more definitive statement, authorities in these countries should nonetheless remain watchful for signs of rising NPLs.
- In most resource exporters, based on our analysis, credit growth has not been at levels that could be considered excessive. This mitigates the risk of financial instability associated with the unwinding commodity boom being compounded by loans associated with risky lending going bad.
- Furthermore, in the case of resource-intensive countries, rapid credit growth has often been directed to the exploitation of commodities, including state-owned enterprises.[4] In consequence, the likelihood of NPLs emerging (and being recognized) will be closely linked to fiscal developments in those countries.

Figure 1.2.2. Private Sector Credit: Trend Gap versus Frontier Gap, Average 2010–13 and 2014



Sources: World Bank, FinStats 2016; and IMF staff calculations.
Note: See page 82 for country abbreviations.

[3] Credit growth and credit-to-GDP ratios are important measures to assess financial stability. However, higher values on these measures could still be consistent with insufficient access to credit and financial services for large sections of the population. Chapter 3 discusses further these important dimensions of financial development such as inclusion in terms of access to credit and financial services.

[4] Credit to the private sector shown in Figure 1.2.1 includes credit to state-owned enterprises.

Box 1.3. Fiscal Dominance—An Illustrative Exercise

The current environment of large or expanding fiscal deficits under tight market financing conditions in some countries could undermine central banks' pursuit of their monetary objectives, should it lead to monetization of deficits. This situation is known as "fiscal dominance." The following discussion seeks to assess the consistency of fiscal and monetary policy objectives given assumptions of steady-state debt targets. It should be emphasized that this is a purely illustrative exercise. In particular, it does not imply a particular path for inflation in the period ahead (since countries' recourse to debt financing may be different than assumed in this exercise), nor should it be seen as prescriptive of a particular policy for any given country.

To illustrate the trade-offs between fiscal and inflation targets in the region, this box uses the accounting framework developed by Anand and Van Wijnbergen (1989). This framework starts from the observation that a given fiscal deficit can be financed by (1) issuing interest-bearing debt—domestic or foreign, and (2) monetary financing (seignorage). Consequently, the financeable deficit (FD) can be stated as:

FD = feasible domestic borrowing + feasible foreign borrowing + seignorage.

The IMF's low-income country Debt Sustainability Framework (IMF 2013) provides country-specific thresholds for sustainable debt-to-GDP ratios.[1] This box, for its illustrative exercise, constructs target ratios for the region's low-income countries' debt-to-GDP (d_{target}) as follows:

for countries at low risk of debt distress:

$$d_{target} = d_{current} + 0.75 \times (d_{threshold\_low} - d_{current})$$

for countries at moderate risk of debt distress:

$$d_{target} = d_{current} + 0.5 \times (d_{threshold\_moderate} - d_{current})$$

for countries at high risk of debt distress:

$$d_{target} = d_{threshold\_moderate}$$

In these equations, the coefficients 0.5 and 0.75 are assumed for illustrative purposes. Under these assumptions, countries at low and moderate risk of debt distress can increase their debt-to-GDP ratios toward the threshold (countries at low risk of debt distress have more borrowing space than countries at moderate risk of debt distress and therefore can borrow more). Countries at high risk of debt distress (all of which have a current debt-to-GDP ratio that is larger than their threshold level for moderate risk) are assumed to target a reduction in their debt-to-GDP ratios toward the threshold, that is lower their risk of debt distress to moderate. For the region's market access countries, a 70 percent debt-to-GDP ratio is used as the target, consistent with guidance for the IMF's market access debt sustainability analyses.

In our calculations, we derive the level of the fiscal deficit that is consistent with maintaining the debt-to-GDP ratio at its target value in steady state. By implication, in steady state, the difference between this debt-stabilizing level of the fiscal deficit and the financeable deficit must be financed by seignorage, which depends on the economy's nominal rate of growth and the rate of inflation:

$$seignorage = [g + \pi]m,$$

where g is the growth rate of real GDP, π is the rate of inflation, and m is the stock of base money as a fraction of nominal GDP. Adopting an inflation objective (call it π^*) thus limits the amount of money that can be raised through seignorage.

[1] These thresholds, which depend on country capacity (high, medium, or low) associate the level of debt with the risk of debt distress (high, moderate, or low), with higher debt levels generally associated with higher risk of debt distress. The thresholds result from econometric estimations that regress the probability that a country experiences debt distress upon its debt burden and other variables. Subsequently, the thresholds are calibrated in such a way that the probability of debt distress is about 20 percent (IMF 2012c).

Box 1.3. *(continued)*

The analysis also takes into account that real money demand is affected by inflation. In particular, higher inflation rates tend to lower demand for real money balances—thereby reducing the tax base for the inflation tax (which is the amount of base money held by the private sector). Taking this into account, the exercise calculates the amount of seignorage that a country can be expected to raise at its inflation objective π^*. Adding this amount to the debt-stabilizing level of the fiscal deficit gives us the "financeable deficit" at the inflation target.

We then compare the "financeable deficit" with the actual deficit in countries with an inflation objective. On this basis, the exercise suggests that there are tensions between fiscal and monetary objectives in a number of countries in the region. Table 1.3.1 shows the results for nine sub-Saharan African countries and one currency union that have a stated inflation objective.[2] These results suggest that current policies in Kenya, Malawi, and Zambia could be inconsistent with monetary objectives given our assumptions on feasible debt accumulation, as the required fiscal balance improvement (RBI) at their respective inflation objectives exceeds 1½ percent of GDP. These results are based on very schematic assumptions, and hence are illustrative in nature, but they support the argument that, in these countries, fiscal policies would benefit from some adjustment to avoid tensions related to pushing debt above safe levels or not achieving monetary objectives.

Table 1.3.1. Required Fiscal Balance Improvement (RBI) for Countries with a Stated Inflation Objective

	Debt 2015 (percent of GDP)	Government balance 2015 (percent of GDP)	Financeable government balance at inflation objective (percent of GDP)	RBI at inflation objective (percent of GDP)
Zambia	52.9	–8.1	–3.8	4.3
Malawi	83.4	–5.9	–4.0	1.9
Kenya	52.7	–8.4	–6.8	1.6
South Africa	50.1	–4.0	–3.4	0.6
Nigeria	11.5	–4.0	–3.5	0.5
Tanzania	40.5	–3.7	–3.4	0.3
WAEMU	41.2	–4.2	–3.9	0.3
Ghana	73.3	–5.0	–4.8	0.2
Mozambique	74.8	–6.0	–6.2	
Uganda	35.4	–2.9	–4.1	

Sources: IMF, Debt Sustainability Analysis database; IMF, World Economic Outlook database; and IMF staff estimates and calculations.

Note: The calculations producing the financeable government balance use data on local and foreign currency debt from the Debt Sustainability database. WAEMU = West African Economic and Monetary Union.

[2] These countries are likely to have the most credible monetary policy frameworks, making fiscal dominance less likely. Hence, this box only points to possible tensions between monetary and fiscal targets.

Box 1.4. Regional Spillovers Within Sub-Saharan Africa

The April 2012 *Regional Economic Outlook: Sub-Saharan Africa* found that economic developments in Nigeria and South Africa do not tend to spill over to the entire sub-Saharan Africa region. The result has since been confirmed by other studies (Canales-Kriljenko and others 2013; Basdevant and others 2014; and World Bank 2016), and applying the vector autoregression methodology used in the 2012 report to the latest vintage of the data, indeed confirms this result.[1] It also finds that economic developments in Ghana and Zambia do not have a noticeable impact on output and prices in their neighboring countries. Nonetheless, one important caveat might be that such spillovers may exist but that official data fail to capture their effects because they could work through informal trade channels. Moreover, looking ahead, many sub-Saharan African countries may be affected by the slowdown in South Africa, as it has recently been an important source of foreign direct investment (FDI) to the region.

Information on spillovers not picked up in real sector data, as well as the extent to which prospects for lower FDI from South Africa and Nigeria could impact growth in recipient countries, may be captured by the spillovers in U.S.-dollar-denominated bond spreads. Thus, this box uses this alternative approach and considers how changes in spreads on Nigerian and South African bonds affect the spreads of other sub-Saharan African frontier markets.[2]

Using weekly data, we estimate the following equation for each frontier country using ordinary least squares:

$$\ln(s_t) = \alpha + \beta_1 \ln(s_{t-1}) + \beta_2 \ln(s_{ZAF/NGA,t}) + \beta_3 ln(s_{Global,t}) + \beta_4 \ln(tbillrate_t) + \beta_5 \ln(VIX_t) + \beta_6 \Delta\ln(OilPrice_t) + \varepsilon_t.$$

where s_t is the bond spread for a country in week t (with subscripts "ZAF/NGA" and "Global" referring to the South African/Nigerian and EMBIG spreads, respectively). The remaining variables are the three-month rate on U.S. treasuries, the VIX index, and the change in the oil price from week $t-1$ to week t.[3]

Estimation results across the various countries show a consistent pattern: first, there is a lot of persistence in spreads. Second, increases in the global spread, the U.S. Treasury bill rate, as well as in the VIX index, all tend to widen spreads in the region's frontier economies, highlighting the extent to which global developments affect the spreads of sub-Saharan African frontier economies. Finally, for all countries apart from Côte d'Ivoire, oil prices have a statistically significant negative effect on spreads. Interestingly, this holds for both oil exporters (Angola, Gabon, Nigeria) and for oil importers—possibly because oil price developments are a proxy for global economic activity or for aggregate growth in sub-Saharan Africa. These findings are in line with earlier results.[4]

Figure 1.4.1 visualizes the estimates for our main coefficient of interest, β_2—the spillover from an increase in South Africa's spread to each frontier economy. The impact tends to be significant and positive in most cases, suggesting that worries about South Africa's creditworthiness typically increase concerns about the creditworthiness of other frontier economies in the region (especially those in east Africa). A similar analysis finds that spread-developments in Nigeria do not generate significant spillovers to other frontier markets in the region (except for Gabon, where the point estimate is 0.2 with a p-value of 0.0008).

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[1] One possible exception is Benin, which does seem to be affected by spillovers from Nigeria: IMF staff estimates suggest that a 1 percentage point reduction in Nigerian growth is associated with a 0.3 percentage point reduction in Benin's growth rate (IMF 2015f). Some very recent evidence suggests that foreign exchange restrictions in Nigeria are impacting exporters in trading partners such as South Africa

[2] Given that this exercise employs financial data, it is not subject to the aforementioned data-quality concerns.

[3] Bond spreads are taken from JP Morgan's Emerging Market Bond Index—Global (EMBIG) database. We follow the literature by estimating on log-transformed variables, but estimating our core regression equation on levels yields results that are very similar. The global spread is a weighted average of all emerging market spreads present in the EMBIG database. The VIX is the Chicago Board Options Exchange's index of implied volatility (based on S&P 500 index options) and measures the market's expectation of future stock market volatility. It is thought to be a good proxy for uncertainty in markets.

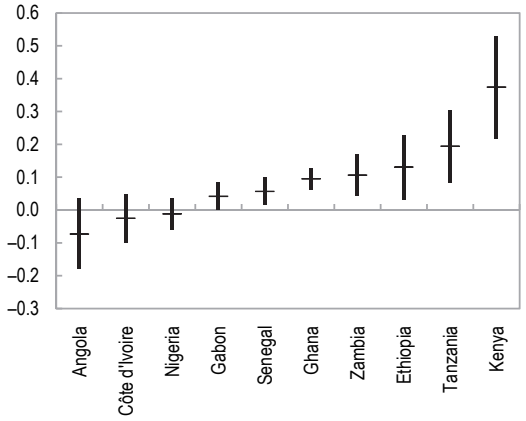
[4] See Box 1.3, April 2015 *Regional Economic Outlook: Sub-Saharan Africa*.

Box 1.4. *(continued)*

There are other possible channels of transmission. Historically, the sharing of revenue within the South African Customs Union (SACU)[5] has always constituted a prominent link between the economy of South Africa and those of Botswana, Lesotho, Namibia, and Swaziland (BLNS), as fiscal revenues in BLNS fall when the region's imports (mainly driven by imports for final consumption in South Africa) are lower. This introduces significant volatility in BLNS government revenues. BLNS try to insulate themselves from these spillovers by building up buffers in good times, but with the exception of Botswana, they have only been partially successful. In particular, Swaziland—the country for which SACU transfers are largest as a share of total government revenue—has faced difficulties in balancing its budget when SACU revenues are reduced.[6]

Lately, the emergence of pan-African banks has established another possible channel through which economic developments can spill over across borders.[7] Recent work indicates that most pan-African banks were well capitalized and mainly reliant on local funding sources. Although the funding model appears to mitigate spillover risks through financial channels, the growing cross-border activity of such banks poses regulatory and supervisory challenges. In particular, given the magnitude of the shocks facing the region, it is important to remain mindful of possible risks from this channel.

Figure 1.4.1. Estimate of β_2 (South Africa) along with the 95 Percent Confidence Interval



Source: IMF staff calculations.

[5] Import tariffs levied on goods entering the Union via South Africa are collected by South African authorities and redistributed among all SACU members.

[6] Their 2010–11 fiscal problems are, for example, attributed to disappointing SACU revenues: in those years, SACU revenues dropped to 7 percent of GDP, compared with a 2005–09 average of more than 19 percent of GDP.

[7] As shown by Popov and Udell (2012) and De Haas and van Lelyveld (2014) cross-border banks transmit shocks from their home to their host country. When the underlying business cycles are imperfectly synchronized (or when a country hosts foreign banks from different countries of origin), this channel actually has a stabilizing effect. Empirical evidence suggests that cross-border banking helps to mitigate the effects of local financial shocks, but that it amplifies global ones (because they increase business cycle correlations across the board; see IMF 2014).

Box 1.5. The Threat of Terrorism

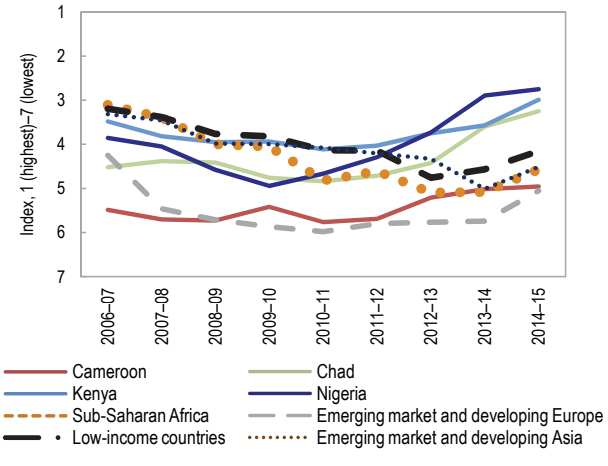
Although the number of armed conflicts has declined over the past decade, terrorism is emerging as a severe and growing threat to several countries in sub-Saharan Africa. Such threats have accelerated sharply in the past couple of years, when civilians and security staff have come under attack by terrorists, and much property has been destroyed. Since 2011, and more acutely in 2014 and 2015, the number and severity of attacks has increased dramatically, with most of the violence occurring in Nigeria, in particular related to attacks from Boko Haram, three of its neighboring countries (Cameroon, Chad, Niger), and Kenya, as well as countries that are currently being, or have recently been, affected by civil wars or other internal conflicts. The recent attacks in Burkina Faso, Côte d'Ivoire, and Mali, related to insurgencies in the Sahel provide a warning that these threats are spreading to more countries in the region.

In Nigeria, the region's largest country, the number and virulence of terrorist attacks has been on the rise since 2011 and has spilled over into its three neighboring countries. According to the Global Terrorism Database, Nigeria accounts for one-third of the victims in all sub-Saharan Africa since 1989, and for almost 70 percent of the people killed since 2011. In 2014, Nigeria accounted for 23 percent of all victims of terrorism in the world and ranked third in the world after Iraq and Afghanistan. Cameroon has also suffered numerous attacks, and, together with Chad and Niger, has suffered the indirect effects of insecurity on its international trade and from large inflows of refugees. The combined military efforts of the participating countries with the African Union has reportedly achieved some success in containing the spread of terrorism and recovering some territory from terrorist control, as well as enabling important operations to rescue captives. The Buhari administration has listed improving security as one of its priorities and reports that security risks have already abated.

Terrorist violence has also been on the rise in Kenya since 2011. Between 2011 and 2014, about 167 people have died on average in Kenya every year as a result of terrorist attacks. The terrorists have targeted highly sensitive areas in the capital and close to tourist areas, which has amplified the economic and political impact of the attacks.

The macroeconomic impact of terrorism is hard to quantify; it depends on the nature of the terrorist attacks and the size and economic diversification of the targeted country, but typically hampers trade and investment. The Global Competitiveness Indicators database points to rising costs of doing business owing to terrorism in affected countries (Figure 1.5.1). The business cost of terrorism has increased particularly in Nigeria and Chad since 2011, and is now higher than the average for both sub-Saharan Africa and low-income countries. It has also increased in Cameroon and Kenya over the past five years. Evidence suggests that terrorism is also adversely affecting revenue, spending, tourism, and foreign direct investment.

Figure 1.5.1. Business Cost of Terrorism Index, 2006–15



Source: World Economic Forum.

Box 1.5. *(continued)*

More specifically, beyond the tragic humanitarian and social toll exacted by terrorism:

- Its impact on the Nigerian economy as a whole seems to have been comparatively modest, except in the regions most directly affected by the problem.
- In Cameroon, the threat of terrorism is also concentrated in rural and poor areas, but terrorism has triggered an increase in security expenditure with a fiscal impact estimated at 1–2 percent of GDP.
- In Chad, the fiscal impact of terrorism is estimated at about 1½ percent of non-oil GDP, half stemming from the loss of revenue (mainly on trade) and half from the increase in security-related spending.
- In Niger, budgetary provisions for security spending have increased from 3.6 to 5.2 percent of GDP between 2012 and 2015.
- In Kenya, the most visible impact on the economy to date has been limited to the decline in tourist arrivals (17 percent lower in the first three quarters of 2015 than in the same period in 2014).

2. Weathering the Commodity Price Slump

The dependence on natural resource exports has made nearly half of sub-Saharan African countries vulnerable, one way or another, to the ongoing decline in commodity prices. But how much and how deeply countries will be affected remains an open debate. To shed light on this issue, this chapter considers three sets of questions:

- How important are extractive (energy and metal) commodities in the region? Which specific countries are affected? For these countries, how important are these commodities compared with commodity exporters elsewhere in the world?
- How have previous episodes of booms and busts in commodity prices affected macroeconomic outcomes in sub-Saharan Africa, and what does it tell us about the impact of the current commodity price slump?
- Which policies can help mitigate the macroeconomic effects of adverse terms-of-trade shocks?

The main findings are as follows:

- About half of sub-Saharan African countries are net commodity exporters and, unlike other regions, the importance of extractive commodities exports has risen since the 1990s, putting the region among the world's most commodity-dependent regions, broadly at par with the Middle East and North Africa region. As a consequence, though higher extractive commodity prices have in part supported the strong growth of the past decade or so, the region's exposure to commodity price volatility has also increased—a trend that is coming to haunt these countries now.
- The most exposed countries by far are the oil exporters. For them, the commodity terms-of-trade shock, which captures the income loss from price fluctuations in terms of GDP, has been particularly marked since mid-2014. On average, the commodity terms-of-trade index fell by 20 percent of GDP in a matter of a few years, after fairly steady gains of about 45 percent during 2000–14. Unsurprisingly, the macroeconomic impact is found to be large. The analysis suggests that a negative terms-of-trade shock of this size typically triggers a slowdown in annual growth of 3 to 3½ percentage points for several years after the shock. This is indeed the order of magnitude observed among sub-Saharan African oil exporters, whose average growth has gone from 5.9 percent in 2014 to a projected 2.4 percent in 2015–16.
- Comparatively, metal exporters in the region have tended to be less affected. This is because they are exposed to a wider range of commodity exports, and commodities play a less prominent role in their economies. Also, many of them are oil importers, so the impact of the commodity price slump has been partly offset for them by the decline in their energy import bill. That is not to say, though, that they will not be affected; there are thresholds for the price of their commodity exports, under which mines close, and jobs are lost, as has already been witnessed in some countries, with substantial detrimental impact on activity.
- The remaining 25 of the 45 sub-Saharan African countries that are not major exporters of oil or metals have tended to be less affected by commodity price swings. Indeed, many of them sustained solid growth during the commodity supercycle of the 2000s despite worsened commodity terms of trade, owing in part to relatively high oil import bills.
- Macroeconomic policies have a critical role to play in supporting the resilience of sub-Saharan African economies to commodity price busts,

This chapter was prepared by a team led by Dalia Hakura, comprised of Francisco Arizala, Wenjie Chen, Jesus Gonzalez-Garcia, Mumtaz Hussain, and Mustafa Yenice. We are grateful to Aqib Aslam, Oya Celasun, Bertrand Gruss, and Zsóka Kóczán for sharing their data and programs to construct the commodity terms-of-trade index.

particularly for the highly exposed oil exporters. Evidence from past downswings highlights the important role of exchange rate flexibility as a shock absorber for countries that are not part of a monetary union. Countercyclical fiscal policy can also be important to smooth the impact of the shock, but this only holds in so far as countries have space to implement that type of stimulus.

- In the last few years, commodity exporters in the region have indeed allowed fiscal deficits to widen in response to declining fiscal revenues from the extractive sector and as they continued implementing public investment projects to meet infrastructure gaps. However, with rising public debt, increasing borrowing costs, and sharply reduced revenues, fiscal space is rapidly diminishing in many of these countries, calling for adjustment as commodity prices are foreseen to remain low for long.
- For commodity exporters that are in a monetary union, the onus of adjustment is squarely on fiscal policy. Enhanced domestic revenue mobilization offers substantial potential to improve the fiscal balance, and expenditure rationalization should also take precedence. In particular, efforts will be required to better prioritize the numerous infrastructure investment projects that these countries were ready to embark on. Contingent on financing, choice should be given to the highest-return ones, in order to minimize the negative impact on medium-term growth prospects.
- Over the medium term, in addition to rebuilding policy space and buffers as commodity prices gradually recover, sub-Saharan African commodity-exporting countries should more actively increase the quality and efficiency of public investment, continue efforts to mobilize domestic revenues, and pursue economic diversification to enhance resilience to commodity price shocks, including by improving the business climate.

COMMODITY TERMS-OF-TRADE CYCLES IN SUB-SAHARAN AFRICA

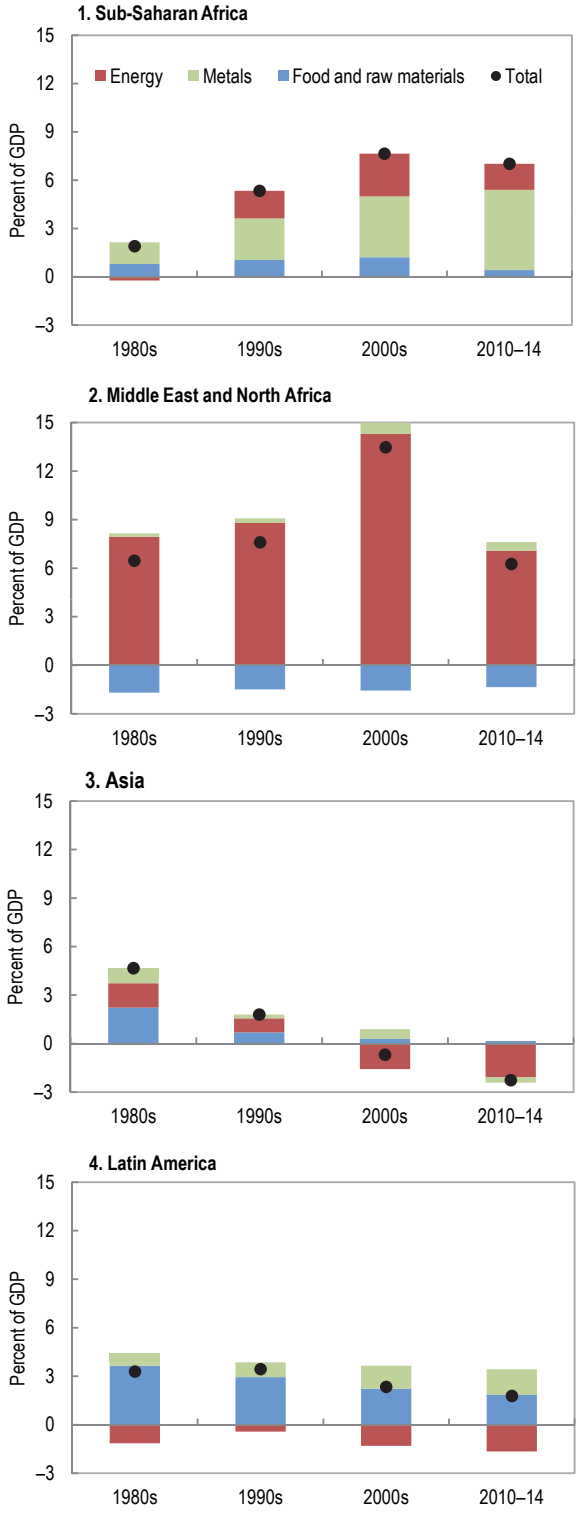
The role of commodities has increased steadily in sub-Saharan Africa over the past 30 years. Unlike in other developing regions such as Latin America and Asia, net commodity exports (the difference between commodity exports and commodity imports) rose for the region as a whole from 2 percent of GDP in the 1980s to 6 percent during 2010–14, reflecting mostly the expansion of extractive commodities—oil and metals (Figure 2.1). Indeed, during 2010–14, commodity exports represented almost half of the region's total exports, up from less than one-fourth in the 1980s. These developments have placed the region among those with the highest dependence on commodity exports, broadly at par with the Middle East and North Africa.

Exports of natural resources are heavily concentrated in about half of the countries in the region, and by far the highest reliance is found among oil-exporting countries.

- We follow the literature and classify a country as an exporter of commodities if exports of commodities (oil, metals, food, and raw materials) comprise more than one-fourth of goods exports, and net commodity exports represent more than 5 percent of goods trade (exports plus imports).[1] On this basis, for the period 2010–14, 22 out of the 45 sub-Saharan African countries are classified as net commodity exporters (Figure 2.2).
- The steady increase in the role of commodities in sub-Saharan Africa has been underpinned by the increase in exports of extractive commodities. As a result, 20 countries are now classified as exporters of extractive commodities, compared with 14 in the 1990s.

[1] The classification of commodity exporters follows earlier publications of the *Regional Economic Outlook: Sub-Saharan Africa* and the October 2015 *World Economic Outlook.* With the exception of Zimbabwe, which would no longer be classified as a commodity exporter in the 1990s, the classification is broadly robust to raising the threshold of commodity exports in total exports to 35 percent (see "Commodity Classification" in Annex 2.1).

Figure 2.1. Selected Regions: Net Commodity Exports to GDP

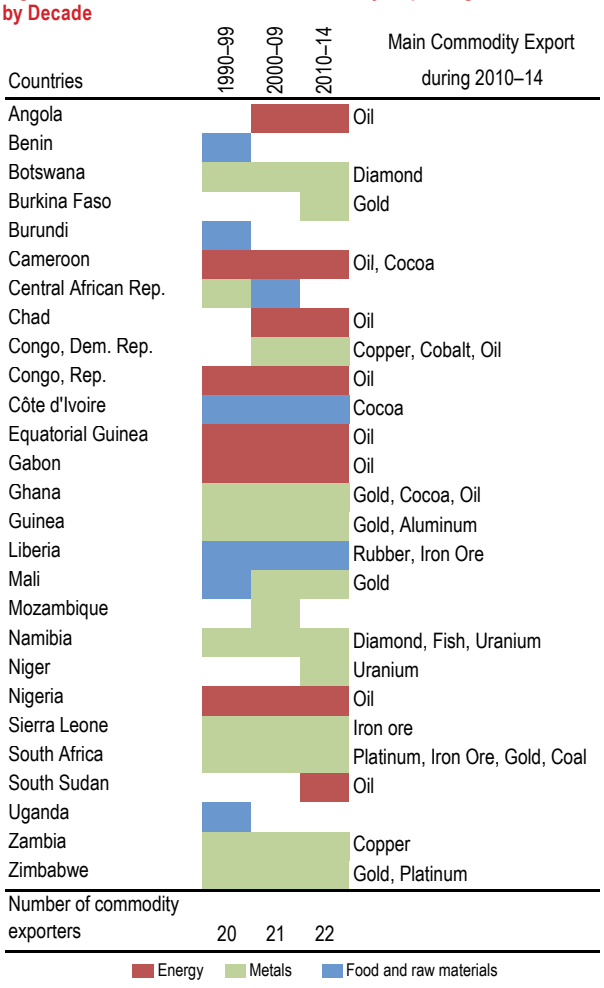


Sources: IMF, World Economic Outlook database; United Nations, COMTRADE database; and IMF staff calculations.

Note: Simple averages across countries in each region.

- The reliance on commodities also varies heavily among commodity exporters. The role of commodities is by far the largest among oil exporters, where net commodity exports ranges between 45 percent and 85 percent of GDP for countries such as Angola, the Republic of Congo, Equatorial Guinea, and Gabon, and is well above the average for energy exporters outside the region. Even in Nigeria, a much more diversified economy, net commodity exports account for 15 percent of GDP. Though still significant, the dependence on commodities

Figure 2.2. Sub-Saharan African Commodity-Exporting Countries by Decade



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

Note: Countries are classified as commodity exporters if commodity exports constitute at least 25 percent of total goods exports and net commodity exports are at least 5 percent of goods trade (goods exports plus goods imports) in each decade. See "Commodity Classification" in Annex 2.1.

is lower for metal exporters: for these countries, net commodity exports range between 5 percent and 30 percent of GDP, both because their commodity exports weigh less in GDP and because they are oil importers. In several countries such as Burkina Faso, Guinea, Niger, South Africa, and Zimbabwe, the dependence is similar to or lower than the average for metal exporters outside the region (Figure 2.3).

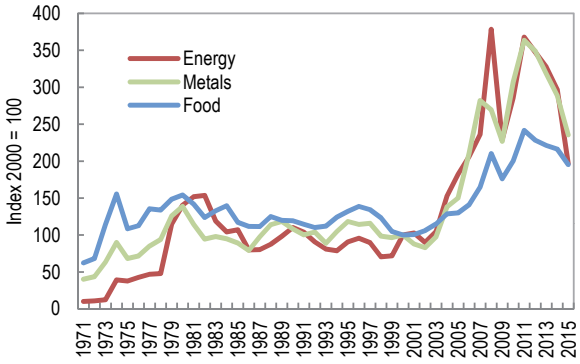
Implications of commodity terms-of-trade fluctuations

Given the strong and rising reliance on commodities of about half of the countries in the region, it is legitimate to ask about the impact of past cycles in commodity prices and of the recent slump. Indeed, after experiencing a sustained rise during the 2000s—one that drove many of the region's countries to start exploiting extractive resources—the prices of energy, metals, and, to a lesser extent, food started declining in 2011, with the decline accelerating from mid-2014 onward (Figure 2.4). Crude oil prices slumped by about 70 percent between June 2014 and February 2016, and the metal commodity price index decreased by 35 percent since early 2011.

To understand the implications of fluctuations in commodity prices for individual countries, and how they compare with other emerging market and developing countries, the analysis relies on country-specific measures of commodity terms of trade that take into consideration the composition of the particular country's commodity export and import baskets as a percent of GDP (Box 2.1). In this formulation, a commodity price increase implies an increase in the terms-of-trade index if the country is a net exporter of this commodity, and a decrease if the country is a net importer. Moreover, as net exports are measured in terms of GDP, variations in the index directly show the income gain or loss from a shock.

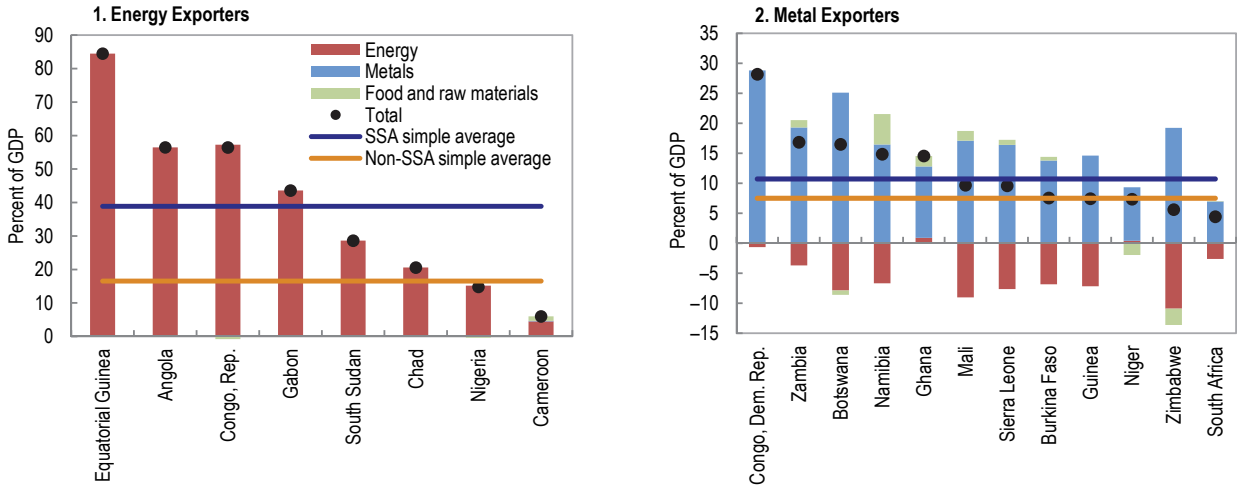
Reflecting their generally much higher reliance on commodities discussed earlier, sub-Saharan African energy exporters experienced exceptional terms-of-trade gains during the 2000s boom, and the downward correction since 2014 has been equally exceptionally large, as illustrated in the following:

Figure 2.4. World Commodity Prices, 1971–2015



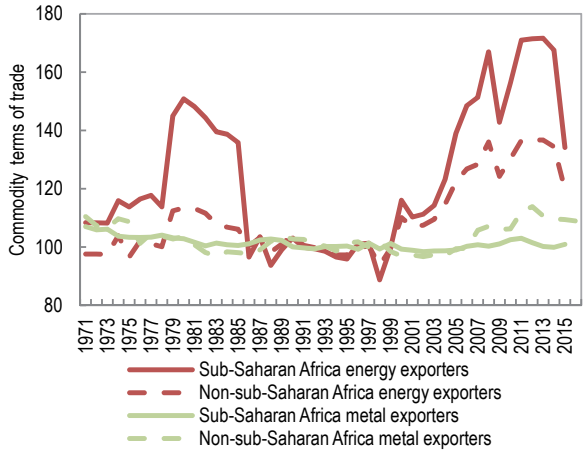
Sources: IMF, Commodity Price System; and IMF staff calculations.

Figure 2.3. Sub-Saharan African Energy and Metal Exporters: Net Commodity Exports to GDP, 2010–14 Average



Sources: IMF, World Economic Outlook database; United Nations, COMTRADE database; and IMF staff calculations.
Note: SSA = sub-Saharan Africa.

Figure 2.5. Sub-Saharan Africa and Comparator Countries: Commodity Terms of Trade
(Index, 100 = 1990–2000 average, median)



Source: IMF staff calculations.

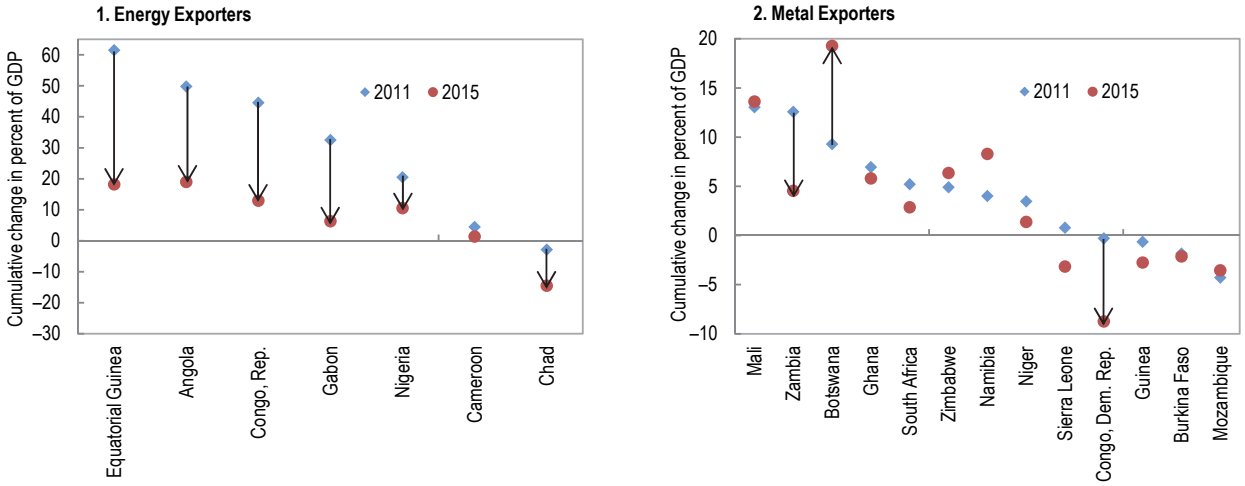
Note: See "Commodity Classification" in Annex 2.1.

- These movements have exceeded in magnitude those witnessed by energy exporters outside the region—further underscoring the extreme sensitivity to oil prices of sub-Saharan African oil exporters (Figure 2.5).
- The terms-of-trade decline has been generalized across oil exporters, but has generally been sharper for the economies that are more highly concentrated around oil production, such as Angola, the Republic of Congo, Equatorial Guinea, and Gabon (Figure 2.6). There, the cumulative decline in commodity terms of trade since 2011, and hence the decline in income, has ranged between 25 and 45 percentage points of GDP.
- For oil exporters, the substantial improvement of the commodity terms of trade in the 2000s was associated with improved growth performance, as strong income flows from rising oil prices and increased oil production allowed the funding of investment and domestic consumption (Figure 2.7 and Box 2.2). This result does not bode well for the outlook in those countries now that these terms of trade have reversed trend in a significant manner.

Terms-of-trade movements for the region's metal exporters have been much more muted, even compared with metal exporters outside the region.

- Two factors underpin this result. First, these countries often depend on a wider range of metals with heterogeneous price developments (for example, copper, iron ore, diamonds, gold, among others), and the dependence on each of these metal exports tends to be lower with respect to the size of the economy. Second, while metal prices were going up in the 2000s, so were oil prices, raising their

Figure 2.6. Sub-Saharan African Extractive Commodity Exporters: Commodity Terms of Trade, 2000–15
(Cumulative change from 2000; percentage points of GDP)



Source: IMF staff calculations.

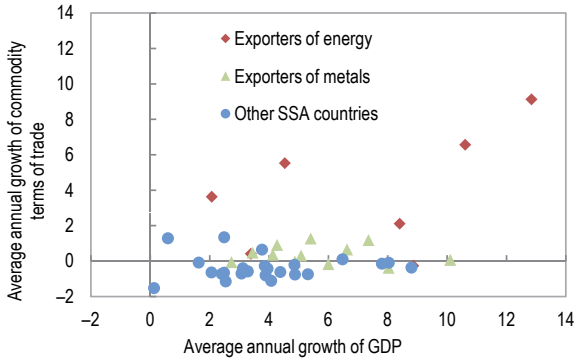
Note: Cumulative change in commodity terms of trade from 2000 through (1) 2011 when commodity prices peaked (blue diamond), and (2) 2015 after commodity prices had fallen (red dot). Thus, differences between the blue and red markers indicate the change in the commodity terms of trade between 2011 and 2015.

energy import bills and muting the net impact on their commodity terms of trade. Now that commodity prices are trending down, the reduced oil import bill is acting as a cushion.

- Nevertheless, metal exporters too have experienced a broad pattern of losses since 2011, although with marked heterogeneity. Among the most affected, the Democratic Republic of Congo, Sierra Leone, and Zambia have seen their commodity terms of trade drop by about 5 to 10 percentage points of GDP since 2011, as the decline in iron ore and copper prices, respectively, more than offset the beneficial impact of the drop in oil prices on their import bill. Movements in metal and oil prices have also been net negatives on the commodity terms of trade of countries such as Guinea, Niger, and South Africa, although to a lesser extent. Two noteworthy outliers are Botswana and Namibia, whose commodity terms of trade increased during 2011–15, benefiting from the increase in diamond prices in play during 2009–14.
- For metal exporters, the 2000–11 period was associated with both high growth performance and modest changes in commodity terms of trade because the increase in the price of their commodity exports went hand in hand with the increases of the price of imported oil—leading to an apparent absence of correlation between growth and terms of trade for them, as shown in Figure 2.7. However, potentially large macroeconomic impacts from relatively smaller declines in commodity terms of trade (or export prices) for metal exporters cannot be discounted. It would be particularly the case where discrete events such as the closure of mines are leading to substantial job layoffs, as already experienced in the Democratic Republic of Congo, Sierra Leone, South Africa, and Zambia.

Among the 25 remaining sub-Saharan African countries (including exporters of food and raw materials), 20 of them experienced cumulative declines in their commodity terms of trade between 2000 and 2014, mainly because of increased oil import bills. However, despite the adverse commodity terms-of-trade developments facing these countries, many sustained solid growth over that period, averaging 4 percent.

Figure 2.7. Sub-Saharan Africa: Commodity Terms of Trade and GDP Growth, 2000–11



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

Note: SSA = sub-Saharan Africa.

COMMODITY PRICE SWINGS AND MACROECONOMIC PERFORMANCE

Sharp swings in commodity prices present a formidable challenge for macroeconomic management. Output, fiscal revenues and external accounts all received strong support during the years of rising commodity prices. This section assesses the macroeconomic effects of the current commodity price shock on sub-Saharan African countries, building on the evidence of past commodity price swings, and discusses the implications for the region's commodity exporters' growth outlook.

Evidence from event studies

A first approach consists in examining the macroeconomic effects of previous episodes of commodity price swings during 1962–2014, both in sub-Saharan Africa and in other emerging market and developing countries, using event studies. More specifically, the analysis compares the behavior of key macroeconomic variables before and after the peaks observed in commodity terms of trade, but without controlling for factors that may also affect output growth and other macroeconomic variables such as global financial conditions, the size and duration of the shock, or domestic factors, including the occurrence of armed conflicts or

Table 2.1. Sub-Saharan Africa Commodity Exporters: Largest Commodity Terms-of-Trade Declines

1. Largest 10 Declines from Peak to Trough of 37 Episodes				2. Largest 10 Declines in First 3 Years of 37 Episodes			
Country	Episode	Duration (Number of Years)	Cumulative Change (Percent of GDP)	Country	Episode	Duration (Number of Years)	Cumulative Change (Percent of GDP)
Gabon	1981–86	6	–44.6	Zambia	1970–72	3	–34.8
Zambia	1970–72	3	–34.8	Côte d'Ivoire	1978–81	4	–16.4
Nigeria	1981–86	6	–29.2	Guinea	1989–93	5	–14.3
Côte d'Ivoire	1978–81	4	–22.0	Liberia	2012–14	3	–12.1
Congo, Rep.	1981–86	6	–20.0	Nigeria	1991–94	4	–9.9
Guinea	1989–93	5	–15.8	Botswana	2006–08	3	–9.6
Liberia	1995–01	7	–14.1	Congo, Rep.	1991–95	5	–9.0
Nigeria	1991–94	4	–13.0	Guinea	1971–74	4	–8.3
Congo, Rep.	1991–95	5	–12.2	Gabon	1981–86	6	–7.8
Liberia	2012–14	3	–12.1	Guinea	2007–09	3	–7.6

Source: IMF staff calculations.

changes in political regimes. As such, the event studies are simply intended to shed light on stylized facts and detect commonalities across episodes and regions.

To maximize the similarity of the events studied with the current bout of commodity price declines, the episodes studied involve at least two years of commodity terms-of-trade upswing followed by at least three consecutive years of decline—so as to capture persistent downward shocks.[2] Also, the cumulative decline in the terms of trade is required to be at least 1 percent of GDP in the first three years of the shock.[3] These criteria identify 201 episodes for 105 countries, of which 75 episodes occurred in sub-Saharan Africa (see Annex 2.1, Figure 2.1.2).

Most sub-Saharan African countries have gone through two or more cycles in the past five decades. Table 2.1 shows the 10 episodes with the largest declines in commodity terms of trade from peak to trough and in the first three years among the 37 episodes identified for sub-Saharan African commodity exporters. Most episodes occurred in the 1980s and 1990s, and on average lasted five years, had large income effects, and affected countries as varied as Côte d'Ivoire, Guinea, Nigeria, and Zambia.[4]

Although growth was only moderately affected on average during these episodes of commodity terms-of-trade declines, energy exporters have tended to suffer a much larger growth slowdown (Figure 2.8), as follows:

- The slowdown averaged about 1 percentage point when all 75 episodes in sub-Saharan Africa were considered. This is broadly the same average deceleration observed for the entire sample of emerging market and developing countries.[5]
- The growth deceleration was, however, much more marked when only episodes among sub-Saharan African oil exporters were examined. On average, growth has tended to slow from about 6 percent prior to the shock

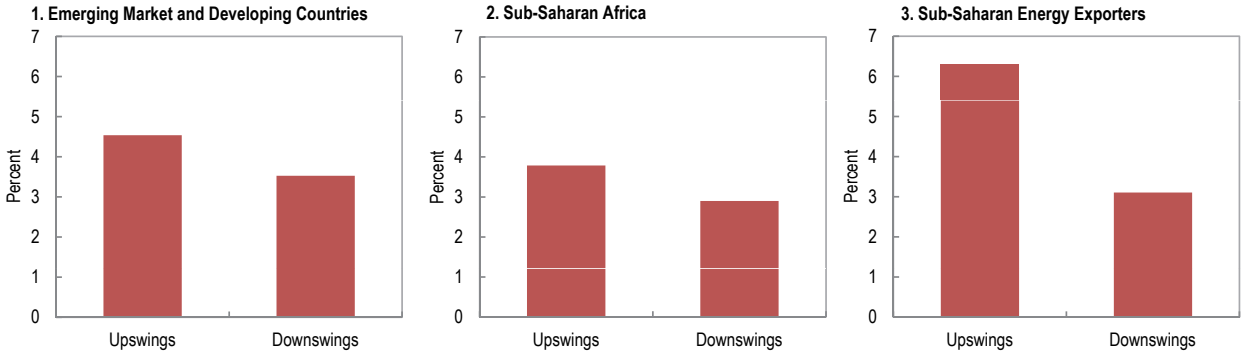
[2] Episodes are constrained to those with a peak before 2012 so that the first three years of a downswing in the commodity terms of trade can be examined.

[3] This is similar to Adler and Sosa (2011). The 1 percent of GDP decline threshold allows the identification of above-average declines in the overall sample of emerging market and developing countries, while retaining a reasonable number of episodes. The findings reported are robust to (1) a more stringent criterion for the cumulative decline of at least 2 percentage points of GDP in the first three years; and (2) at least one year of terms-of-trade upswing that is then followed by at least three consecutive years of decline and a cumulative loss of either 1 percent or 2 percent of GDP over this period (see the discussion of methodology for dating commodity price cycles in Annex 2.1).

[4] Because the criteria used to identify downswing episodes required at least three years of decline in the commodity terms of trade, short-lived events such as the decline in commodity prices associated with the 2008–09 global financial crisis are excluded from the analysis. Similarly, the recent fall in the commodity terms of trade of the region's oil exporters is not captured because it only took place in 2015.

[5] The focus here is on the impact of the shock in the first three years, but where shocks persisted longer, the overall impact might have been even larger.

Figure 2.8. Selected Country Groupings: Real GDP Growth during Commodity Price Upswings and Downswings
(Three-year averages)



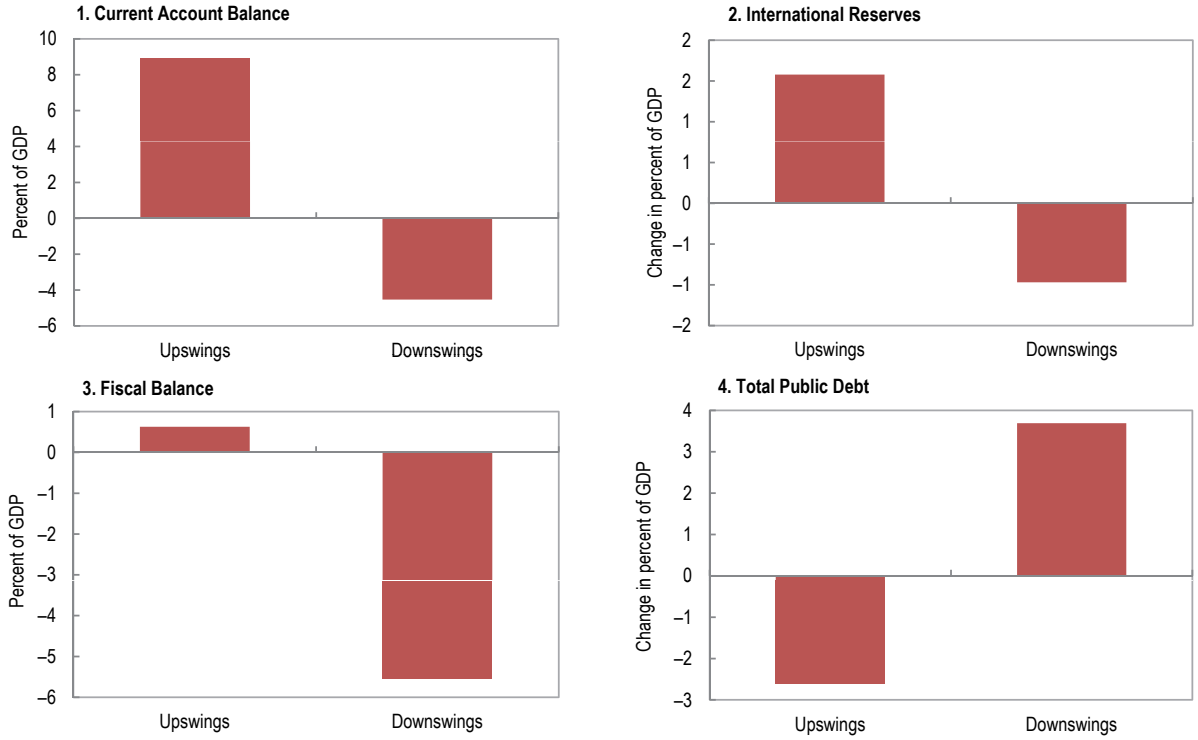
Sources: IMF, World Economic Outlook database; and IMF staff calculations.

Note: Samples consist of cycles with peaks before 2012.The bars show simple average values of the variables in the three years leading to the peak (upswings) and the three years after the peak (downswings).

to about 3 percent in the three years following a fall in oil prices. In fact, the recent episode quite narrowly mirrors this pattern, with growth among oil-exporting countries decelerating from 5.9 percent in 2014 (the peak year for oil prices) to 2.6 percent in 2015 and projected to further weaken to 2.2 percent in 2016. This once more highlights the specific vulnerability of sub-Saharan African oil-exporting countries to commodity price reversals.

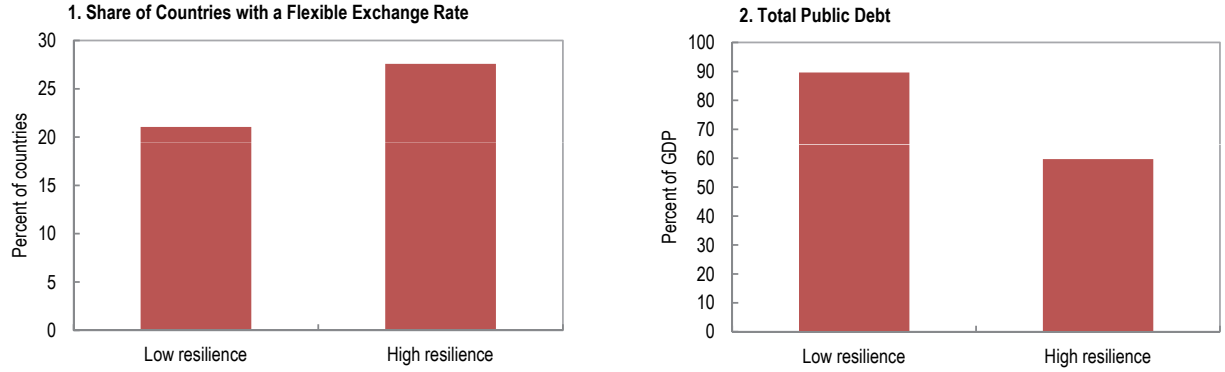
- The more pronounced impact of shocks in sub-Saharan African oil exporters shows in all macroeconomic variables (Figure 2.9). Current account balances tend to swing from large surpluses to large deficits and these swings are

Figure 2.9. Sub-Saharan African Energy Exporters: Key Macroeconomic Variables during Commodity Price Upswings and Downswings
(Three-year averages)



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

Figure 2.10. Sub-Saharan Africa: Exchange Rate Flexibility and Public Debt during Episodes of Low and High Resilience of Output Growth



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

Note: The bars show average values of the policy variables in the three years prior to the shock. The exchange rate regime variable is a dummy variable with a value of 1 for a country with a de facto flexible exchange rate regime in the year before the shock. The exchange rate regime classification is based on Ilzetzki, Reinhart, and Rogoff (2010). An episode is classified as a high-resilience episode when the output growth variation between upswings and downswings is below the sample median.

typically accompanied by declines in international reserves. Also, small fiscal surpluses prior to the shock tend to turn into deficits of more than 5 percent of GDP.

Exchange rate flexibility and low public debt help weather persistent shocks

The event studies also allow a first glimpse at how specific policies influence the resilience of countries affected by commodity price shocks. To that effect, the past episodes of busts in commodity terms of trade that occurred in sub-Saharan Africa are split into two groups of countries according to their performance after a shock—the "high-resilience" group, where output was affected less negatively than for the median country, and the "low-resilience" group where output was more negatively affected.

- High-resilience countries tended to have more systematically flexible exchange rate regimes[6] at the onset of the adverse commodity price shock, allowing the exchange rate to play the role of a shock absorber on real activity (Figure 2.10, panel 1). Countries with flexible exchange rate regimes in place prior to the shock on average had higher inflation than countries with fixed regimes, but they were on average able to contain inflation during the downswings triggered by the pass-through of exchange rate depreciation to domestic prices (Figure 2.11).
- High-resilience countries also had on average a lower debt-to-GDP level prior to the shock (Figure 2.10, panel 2). This would have provided, everything else equal, more fiscal space to increase borrowing and to smooth the impact of the shock once it happened, while still preserving debt sustainability.

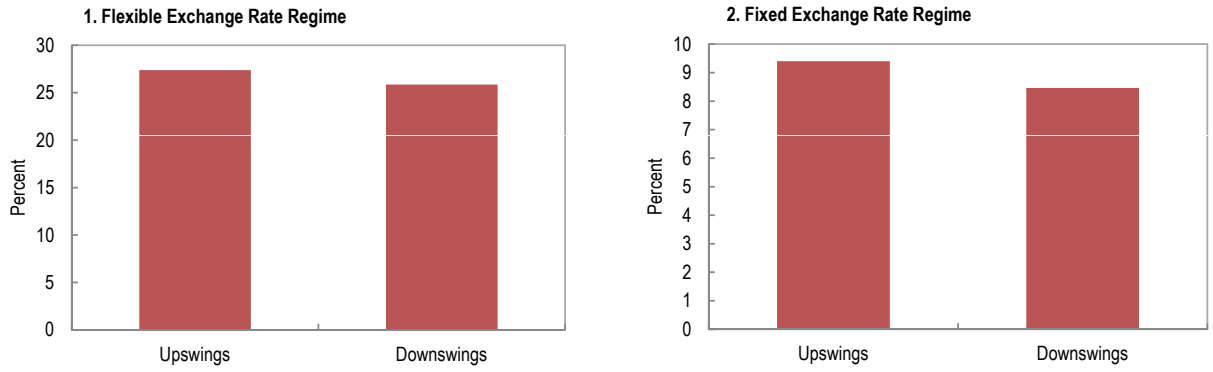
Weak energy prices outlook a tremendous headwind for sub-Saharan African oil exporters

As noted earlier, the event studies do not control for other factors that could also affect economic performance at the time of the commodity price slump. To account for those, the event study analysis is complemented with an econometric study using the local projections method of Jordà (2005). This method allows better isolation of the specific response of macroeconomic variables to commodity price shocks. Annex 2.1 provides a detailed explanation of the model used.

Once these factors are controlled for, the negative effect of commodity price declines on sub-Saharan African net commodity exporters comes out more strongly than in the event studies. Unlike with other countries in the region where the impact of such

[6] Countries are classified as having de facto flexible exchange rate regimes based on Ilzetzki, Reinhart, and Rogoff (2010).

Figure 2.11. Sub-Saharan Africa: Inflation during Commodity Price Upswings and Downswings by Type of Exchange Rate Regime



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

Note: The bars show average inflation in the three years leading to the peak (upswings) and the three years after the peak (downswings) for countries classified as having flexible and fixed exchange rate regimes based on Ilzetzki, Reinhart, and Rogoff (2010).

shocks are not found to be significant,[7] the effect on real GDP of a 1 percent decline in extractive commodity exporters' terms of trade is significant as early as the year of the shock, and cumulates to a reduction in the level of GDP of about 0.7 percentage point after four years (Figure 2.12, panels 1 and 2). The impact is also found to be larger than for other developing and emerging market countries that export the same commodities. For sub-Saharan African oil exporters, which on average have experienced a decline in their commodity terms of trade since mid-2014 of about 20 percent, this corresponds to a cumulated reduction in GDP of roughly 13 percent over the course of four years, or, put differently, lower growth by about 3½ percentage points for four straight years—a substantial effect. The recent slowdown in growth among sub-Saharan African oil exporters from about 6 percent in 2014 to a projection of below 2½ percent in 2015–16 is indeed of that order of magnitude.

The effects on the trade balance are also immediate and large (Figure 2.12, panel 3). A 1 percent deterioration in the commodity terms of trade results in a worsening of the trade balance of about 0.6 percentage point of GDP in the year of the shock. The effect of the shock, however, tends to dissipate after two years, possibly reflecting rapid external adjustment through exchange rate depreciation and import compression.[8]

Conversely, the impact on fiscal revenues is found to be much more persistent (Figure 2.12, panel 5). A 1 percent decline in the commodity terms of trade is estimated to lead to a decline in fiscal revenues by about 0.2 percentage point of GDP in the year following the shock, and as much as 0.4 percentage point of GDP five years later. This effect is not found in other sub-Saharan African countries, highlighting the heavy reliance on extractive sectors for fiscal revenues among energy and metal commodity exports.[9]

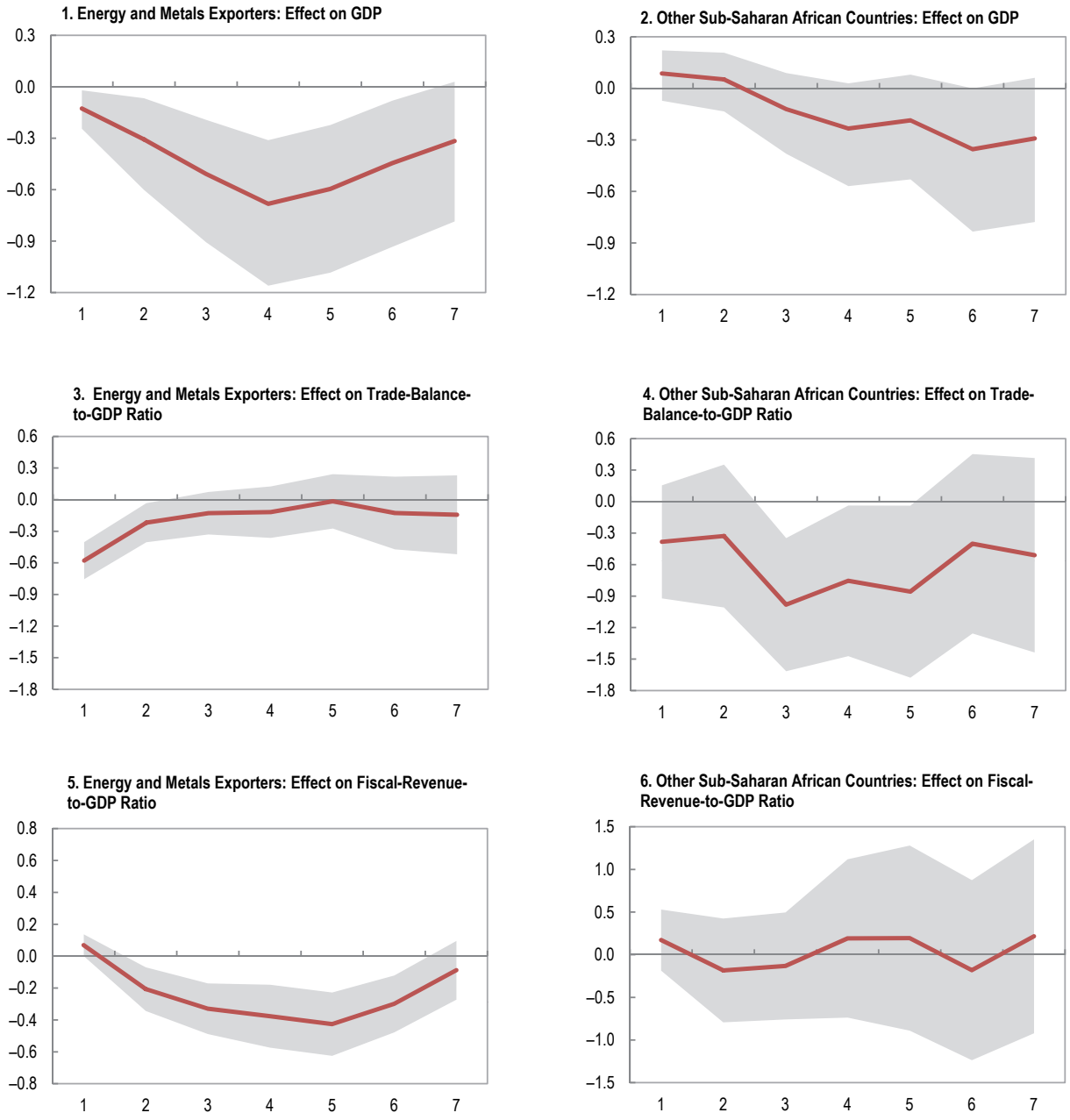
These results highlight that persistent commodity terms-of-trade shocks can have large and long-lasting growth effects. At the same time, terms-of-trade shocks have implications for macroeconomic stability: both fiscal revenues and trade balances of extractive commodity exporters are considerably affected. Taken together, these findings suggest that the immediate focus of macroeconomic policies may need to be on eliminating macroeconomic imbalances rather than on minimizing output losses.

[7] This is consistent with the finding in Aslam and others (2016) for a larger sample of emerging market and developing countries that are not exporters of extractive commodities.

[8] A similar phenomenon is also documented for a group of Latin American countries in Chapter 3, April 2015 *Regional Economic Outlook: Western Hemisphere* (IMF 2015a), and Caceres and Gruss (forthcoming).

[9] The estimations are conducted for sub-Saharan African oil and metal exporters together so as to have a large enough number of countries. It is likely, however, that the impact on oil exporters is much larger than for metal exporters, given their much higher reliance on extractive activities for fiscal revenues.

Figure 2.12. Sub-Saharan Africa: Effects of Commodity Terms-of-Trade Shocks
(Percentage points)



Source: IMF staff calculations.

Note: The *t* = 1 is the year of the shock; grey shadows denote 90 percent confidence bands. The red lines represent the response of the variable to an exogenous 1 percent decrease in the commodity terms of trade. See "Local Projections Method" in Annex 2.1. The energy and metals exporters sample comprises Angola, Cameroon, Democratic Republic of Congo, Ghana, Mali, Niger, Nigeria, Uganda, and Zambia. Other sub-Saharan African countries comprise Guinea-Bissau, Kenya, Madagascar, Mauritius, Rwanda,Tanzania, and Togo.

POLICIES TO ENHANCE RESILIENCE TO SHOCKS

Policy responses to shocks matter for output resilience

The event studies illustrate the moderating effects on output from exchange rate flexibility and low debt related to commodity price slumps, but a more comprehensive approach is still needed to examine how best countries can prepare for such shocks and react when they are hit by them—as has now happened to many commodity exporters in the region, especially oil-exporting countries.[10] Such an analysis is conducted in this section, based on a regression relating the relative growth performance in the aftermath of a terms-of-trade shock—the difference in real GDP growth in the three years before and after the shock—to countries' policy space and policy responses.

Policy space and policy conditions consist of fiscal and external buffers existing at the time of the shock (used to implement countercyclical policies to mitigate the impact of the shocks), exchange rate policies (as flexibility can also act as a shock absorber), and the extent of fiscal and monetary policies implemented after the shock. In exploring the role of these factors, the econometric estimations also control for: (1) the magnitude of the commodity shock, especially when shocks are driven by lower export prices (to allow for asymmetric effects from changes in export prices and import prices), and (2) the prevailing global economic environment (that is, the strength of trading partners' growth, and global interest rates). The regression analysis builds on the episodes identified above for the sample of emerging market and developing countries, and on existing empirical research (Adler and Sosa 2011; Céspedes and Velasco 2012; see Annex 2.1 for more details).

The main results are reported in Table 2.2. The explained variable is the gap between growth prior to the shock and subsequent to the shock, thus a positive coefficient on an explanatory variable indicates that the variable mitigates the adverse impact of the commodity shock on economic growth. The main results are as follows.

The size of the terms-of-trade shocks matters, and its impact is stronger when export prices slump. On average, a 1 percent decline in the commodity terms of trade is associated with about a ¼ percentage point decline in growth in each of the three years following the shock.[11] This estimate captures the direct effects of commodity shocks on the commodity-related sectors, as well as indirect effects on other sectors, for example, from lower oil prices. Though commodity terms-of-trade shocks occur for both commodity exporters and importers (for example, the shock to food and fuel prices in 2007–09), the shocks driven by declines in export prices for commodity exporters have a larger adverse impact on growth, reflecting an asymmetric impact on domestic production and private sector activity—as investment suffers, mines or oil fields can be shut down when prices are too low, and jobs are lost.

A reserve buffer helps mitigate the impact of shocks. Having a reserve level of 1 percentage point of GDP above the average level of reserves before the shock is found to help reduce the impact of the shock on growth by ⅓ percentage point. Drawing from these reserves can temporarily smooth the severity of the pressures from the shock on the external position and the exchange rate. Other indicators of policy space, such as low external debt and low initial inflation were not found to systematically mitigate the impact of shocks.[12]

[10] The focus of the analysis is on the impact of commodity shocks on actual output and understanding the role of macroeconomic policies to smooth the adjustment to the shocks and bring actual output closer to potential. It is also possible that commodity price shocks affect potential output through lower investment and capital accumulation (as shown in Aslam and others 2016), in which case the slack in aggregate demand would be smaller, and there may be less scope for macroeconomic policies to stimulate the economy. The latter would put more emphasis on structural reforms to diversify the economy and raise potential output.

[11] A cumulative decline of ¾ percent in the three years following the shock is within the 90 percent confidence interval of the response to a similar shock estimated in the previous section (Figure 2.13, panel 1).

[12] The finding of a weak relationship between low inflation and resilience of growth is broadly in line with existing research; for example, Abiad and others (2015) report that, although single-digit inflation helps extend growth expansions, it is not a significant factor for growth recovery after a shock.

Table 2.2. Impact of Commodity Shocks on Real GDP Growth: Regression Results

Dependent variable: Difference in real GDP growth (average) between the three years after the terms-of-trade shock and the three years prior to the shock.	(1)	(2)
Shock size and types		
Size of terms-of-trade shock: three years (cumulative)	–0.270***	–0.228***
	(0.073)	(0.070)
Shocks caused by decline in export prices (dummy)	–2.994**	–4.096***
	(1.269)	(1.191)
Initial Conditions		
International reserves above median at time t_0 (% of GDP)	0.335***	0.367***
	(0.121)	(0.138)
High external debt before shock (40% of GDP or more)	1.150	0.381
	(1.289)	(1.442)
Flexible exchange rate regime (de facto) at time t_0	3.215**	
	(1.253)	
Policy Reactions		
Growth of real government consumption during shock (average)	0.356***	0.279**
	(0.133)	(0.135)
Growth of real government consumption x high external debt at time t_0	–0.283*	–0.245
	(0.164)	(0.183)
Broad money growth during shock	0.057*	0.006
	(0.033)	(0.030)
Depreciation of nominal exchange rate		0.138***
		(0.042)
Exchange rate collapse: 45% or more depreciation	–0.097***	–0.161***
	(0.035)	(0.040)
Observations (terms-of-trade shock events)	119	119
Countries	76	76
R-squared	0.50	0.51

Source: IMF staff calculations.

Note: The methodology for identifying events is described in Annex 2.1. All regressions control for country fixed effects, as well as changes in growth in trading partners of a country (as a proxy for the global economic conditions).
Robust standard errors in parentheses; significance levels: ***p<0.01, **p<0.05, *p<0.10.

The exchange rate is found to be a powerful shock absorber, provided its use is not postponed too much after the shock, when macroeconomic imbalances have built up.

- A higher degree of exchange rate flexibility beforehand helps mitigate growth losses after a shock. Countries with a de facto flexible exchange rate regime tend to experience growth losses that are significantly smaller compared with countries with less flexible regimes, everything else equal (Model 1 in Table 2.2).
- Nominal exchange rate depreciation in the first two years after a shock also has a strong mitigating effect on the growth loss—a 10 percent depreciation is associated with a lower growth loss of more than 1¼ percentage points during the shock period (Model 2 in Table 2.2), consistent with the findings of Edwards and Levy-Yeyati (2005), Céspedes and Velasco (2012), and Adler and Sosa (2011).[13]
- However, very large exchange rate depreciations in the aftermath of the commodity busts (labeled as a "collapse") adversely affect growth. In three-quarters of the episodes concerned, these large depreciations, in excess of 45 percent within two years of the commodity shock, came as fixed or pegged regimes could not be sustained (based on llzetzki, Reinhart, and Rogoff's 2010 classification). In these circumstances, the adverse impact on growth from the exchange rate collapse is estimated to reach 4 percentage points, as the collapse pushes inflation up and causes severe import contractions. This suggests that if the exchange

[13] It is possible that exchange rate depreciation may not always help mitigate growth losses if price elasticities of exports and imports are relatively low, for example, because of the lack of diversification of economies or if there are large dollar exposures.

rate tool is not used early enough to alleviate the macroeconomic implications of the terms-of-trade shock, it cannot play the shock-absorber role once severe imbalances have built up in the economy.

- This is not to say that fixed exchange rate regimes cannot be beneficial for sub-Saharan African countries, but that other macroeconomic policies need to be consistent with the sustainability of the peg over commodity price cycles. Hence, for commodity-exporter countries that are members of a monetary union—such as most countries in the Central African Economic and Monetary Community (CEMAC)—to maximize the benefits of a stable, credible policy environment that comes with the monetary anchor, special attention needs to be paid to other macroeconomic policies, in particular fiscal policy, in the adjustment to commodity terms-of-trade shocks.

Supporting fiscal and monetary policies can help but only if sufficient policy space has been built up. Increases in real public current spending in the years immediately after a shock are strongly associated with lower output losses—but only when the external-debt-to-GDP ratio is below 40 percent.[14] In situations of high debt, a fiscal stimulus has, on average, little effect on mitigating growth losses during the shock years, as more resources likely need to be diverted to repay larger debt and private investment may be deterred from expectations of higher future taxes (see also Pattillo, Poirson, and Ricci 2002, which identifies a similar threshold). An easing of monetary policy—proxied by the growth of broad money—is also found to mitigate output losses, but because postshock periods are often associated with capital outflows and depreciation pressures, central banks may have limited room to engage in easing monetary policy in response to shocks, and therefore this empirical result should be interpreted carefully.

[14] The external-debt-to-GDP ratio is used to proxy fiscal space because of the paucity of long time series data for public debt. The findings are robust to alternative thresholds (above 40 percent) for external debt beyond which fiscal policy's effectiveness as a countercyclical tool is eroded.

Implications for sub-Saharan Africa's commodity exporters

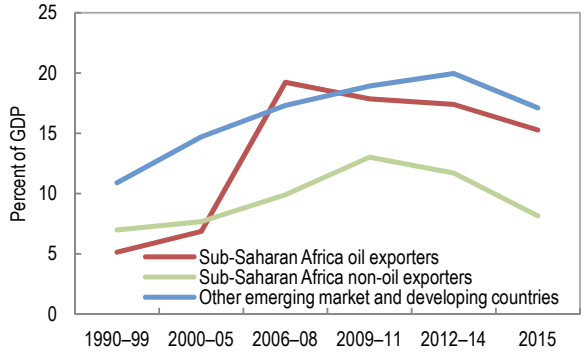
What are the policy implications for the sub-Saharan African net commodity exporters that have been affected to varying degrees by the bust in the commodity supercycle? Especially in light of the persistence of the shock, what should be the best course of action? As always, policy advice needs to be country- and context-specific, but informed by the analysis above, a set of general principles that apply includes:

- For countries that are not part of currency unions, increased exchange rate flexibility with supportive monetary and fiscal policies should be the first line of defense to minimize output losses, though the effect of exchange rate depreciations on bank and public sector balance sheets, and on inflation, would also need to be closely monitored (as elaborated in Chapter 1). In addition, recourse to flexibility should not be delayed particularly if shocks are likely to be persistent, as a buildup of balance of payments pressures has to be counteracted either through sales of scarce external reserves or exchange rate restrictions that take a toll on activity. Reserves are finite and a cushion should be preserved to deal with other shocks. Restrictions on current account transactions are suboptimal because they affect economic activity, give rise to different distortions, and could lead to a disorderly adjustment of the external sector. In that respect, the emergence of large parallel exchange rate premiums, such as in Angola and Nigeria, points to large imbalances in the foreign exchange markets and hence to the urgent need for the adoption of more sustainable macroeconomic policies.
- External reserves have provided buffers to face the shock, but the extent of that support is getting increasingly limited. International reserves were already lower than for commodity exporters in other emerging market and developing economies, partly as a result of countries' efforts to expand infrastructure investment to address longer-term development needs. Sub-Saharan African oil exporters, however, entered the period of lower oil prices with relatively

higher reserves than others in the region and higher than at the onset of previous shocks. This allowed cushioning of the hit from the oil price slump, but care should be taken to limit the drawdown, particularly in view of the expected persistence of the oil price shock (Figure 2.13).

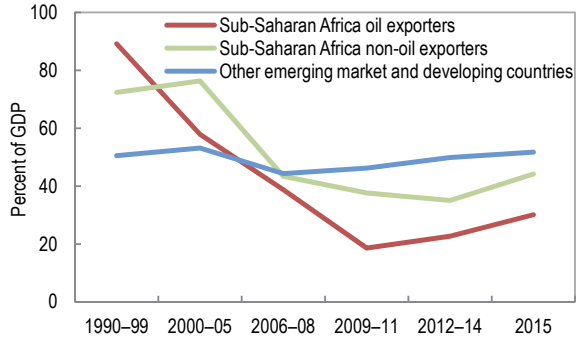
- Although in principle fiscal policy can provide support, fiscal adjustment is increasingly called for among the region's commodity exporters, particularly given the expected persistence of the commodity price shocks. Oil exporters in particular have allowed their deficit to widen as fiscal revenues dwindled, to a projected 5.5 percent of GDP deficit in 2016, from about 3 percent in 2014. But with public debt rising and borrowing costs also increasing, fiscal space is rapidly disappearing, as extensively elaborated in Chapter 1. This is especially true for countries that entered this period of declining commodity prices with already weak fiscal positions, such as Ghana and Zambia. More broadly, given the projected persistence of low commodity prices, the near-term focus will be on fiscal adjustment to preserve macroeconomic stability in an increasing number of these countries. This will become increasingly important as countries' external debt levels rise above the threshold beyond which fiscal stimulus is found to no longer support output resilience (Figure 2.14).
- In the case of countries in a monetary union, such as the CEMAC, where five out of the six members are oil exporters, fiscal policy is the main policy tool to bring about the needed adjustment. There too, as buffers have been drawn on, the effort should squarely be on fiscal adjustment:
  - Better domestic revenue mobilization, especially where revenue from non-oil activities is particularly low, offers substantial potential to close the financing gap that has opened with the decline in oil fiscal revenue (for example, see Chapter 1, October 2015 *Regional Economic Outlook: Sub-Saharan Africa*).
  - Substantial savings need to be achieved from streamlining government spending, in particular by reforming across-the-board subsidies and improving the selection and execution of public investment projects.
- Inflation had fallen to single-digit levels in most commodity exporters in sub-Saharan Africa—averaging about 6 percent during 2010–14 (Figure 2.15). However, inflation trended up in 2015 as exchange rate depreciations—associated

Figure 2.13. Sub-Saharan Africa and Other Countries: Total International Reserves



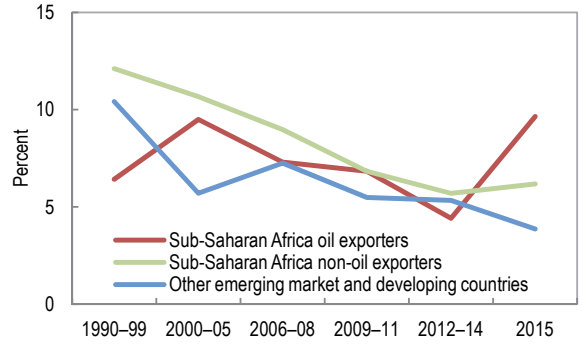
Source: IMF, International Financial Statistics.

Figure 2.14. Sub-Saharan Africa and Other Countries: External Debt



Source: IMF, World Economic Outlook database.

Figure 2.15. Sub-Saharan Africa and Other Countries: Inflation



Source: IMF, International Financial Statistics.

with the commodity price declines and increased global risk aversion—passed through to inflation, although weather-related increases in food prices may have also played a role. Monetary and fiscal policy should seek to avoid spillover to more generalized inflation, including to achieve the real depreciation needed to help minimize output losses from the ongoing terms-of-trade shocks.

Beyond short-term policy actions, the focus of the policy agenda should also be turned back squarely to economic diversification. Even if somewhat slowed by financing constraints, the ongoing efforts to upgrade the region's infrastructure and education skills should be pursued to support the emergence of new sources of growth and hence create natural buffers against the dependence on natural resources. Stronger efforts to enhance the business climate, improve the efficiency of public spending, and mobilize domestic revenues will also help unleash the private sector's potential outside the extractive sector.

CONCLUSIONS

Many sub-Saharan African countries' dependence on extractive commodity exports has increased in recent decades, with about half of the region's countries now considered net commodity exporters. So long as commodity prices continued rising from the turn of the century onward, this proved a boon in terms of higher foreign exchange earnings, fiscal revenues, and foreign direct investment inflows—helping support the very strong growth momentum at the time. However, the generalized decline in commodities prices, first with metal prices starting in 2011, and oil prices since mid-2014, has triggered sizable deteriorations in the terms of trade for many of these commodity exporters. Oil exporters have been by far the most affected.

The analysis presented here shows that persistent slumps in extractive commodity prices do have a significant macroeconomic impact, but more so for oil exporters than other extractive commodity exporters. The current period should not be an exception to that pattern, with sub-Saharan African oil exporters' outlook particularly clouded. Although to a lesser extent, metal exporters' growth will likely be affected as well, especially where lower prices are also triggering a decline in extractive production, as mines are closed and jobs lost.

But policies have a strong role to play to help those countries weather the commodity price slump taking into account the expected persistence of the shock. For countries that are not part of a monetary union, exchange rate flexibility coupled with supportive policies should be the first line of defense. In the face of a large permanent commodity terms-of-trade shock implying durably reduced fiscal revenue from the extractive sector, countries have no choice but to undertake fiscal adjustment to close macroeconomic imbalances. Fiscal and external buffers can and are being used where available to smooth the pace of the adjustment, but as these diminish, fiscal deficits can become unsustainably large and balance of payments pressures can force disorderly adjustments. Fiscal adjustment efforts should mobilize revenues outside extractive sectors, as well as focus on streamlining recurrent spending to preserve growth-friendly capital investments.

In addition to gradually rebuilding policy buffers and persevering with efforts to strengthen policies as commodity prices recover, efforts should focus on structural reforms to support the diversification of the economies away from commodities. This puts the onus on better mobilizing domestic revenues, increasing the quality of public investment, and improving the business climate to promote the development of the private sector and diversify the export base beyond commodities.

Box 2.1. Commodity Terms of Trade

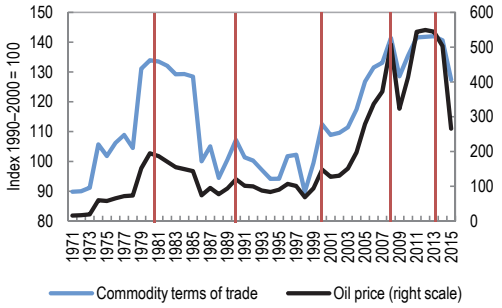
The commodity terms-of-trade index weighs the changes in international prices of individual commodities according to country-specific net commodity exports as a share of GDP. The calculation of the country-specific index follows the approach used in Gruss (2014), the October 2015 *World Economic Outlook*, and Spatafora and Tytell (2009); see Annex 2.1. The construction of the index addresses some shortcomings of other commonly used terms-of-trade indices. For instance, standard aggregate terms-of-trade indicators have been found to poorly capture the behavior of commodity prices (Deaton and Laroque 1992; Cashin, Céspedes, and Sahay 2004). At the same time, analyzing the movements in one or two commodity prices would not provide a holistic examination of the impact of shocks affecting a country that is a net exporter of more than one commodity. Among advantages of the index used in this chapter are the following:

- The variation of the index shows the size of the income shock from price effects in terms of GDP.
- The effects of variations of commodity prices depend on the size of net exports of commodities of each country. This is important when countries are net importers of one commodity, for instance oil, but also net exporters of other commodities such as metals, food, or raw materials. This is the case for 11 of the 12 non-oil extractive-resource exporters in the region that are also oil importers.
- The weights used to calculate the terms-of-trade indicator are updated annually based on trade patterns in the preceeding three-year period using COMTRADE and IMF data. This is important to capture the evolving role of commodities in a country's exports. For instance, energy exports accounted for 2 percent of Angola's exports in the 1990s, but they now exceed 95 percent of total exports. Therefore, changes in energy prices have a much larger impact today than in the past.
- The index includes a wider range of metals (including precious stones) such as gold, platinum, and diamonds than in previous studies. This is important to capture the specificities of commodity terms-of-trade developments in several commodity exporters in sub-Saharan Africa such as Botswana, Burkina Faso, Mali, Namibia, or South Africa.

Box. 2.2. Commodity Price Slumps Hold Back Economic Activity: The Cases of Nigeria and the Republic of Congo

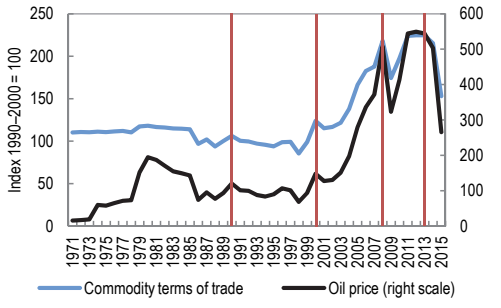
Nigeria and the Republic of Congo, the largest and the fourth largest oil exporters in sub-Saharan Africa, respectively, have experienced highly volatile terms of trade. This box explores the impact of the oil price cycles on these two economies over the period 1980–2015. Macroeconomic management in both countries faces challenges stemming from the high dependence on volatile oil revenue. In both countries, revenues from oil and gas accounted for more than 70 percent of total government revenues during 2011–13. Figures 2.2.1 and 2.2.2 show how the evolution of commodity terms of trade for the two countries closely follows global oil price developments and highlight two previous episodes of prolonged downswings.[1]

Figure 2.2.1. Nigeria: Commodity Terms-of-Trade and Oil Price Indices



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

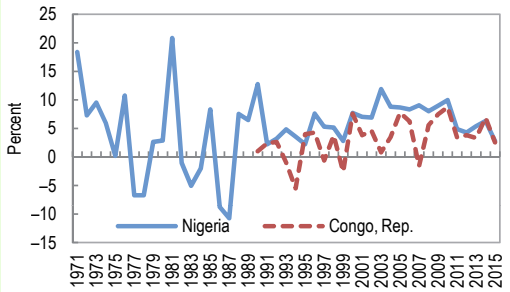
Figure 2.2.2. The Republic of Congo: Commodity Terms-of-Trade and Oil Price Indices



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

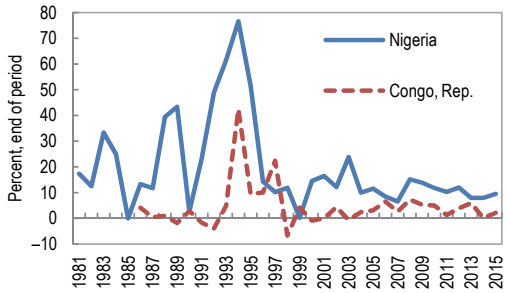
The oil price swings before the 2000s had serious macroeconomic effects for Nigeria. GDP growth decelerated markedly during terms-of-trade downswings (Figure 2.2.3), with the economy contracting by as much as 10 percent during the oil price slump in the early- to mid-1980s. Inflation was high and volatile owing to substantial currency depreciation (Figure 2.2.4). The naira depreciated by an average of 28 percent a year during the prolonged oil price downswing of 1980–87. However, growth and inflation became considerably less volatile from the early 2000s onward, partly the result of improved policy frameworks and a more supportive external environment.

Figure 2.2.3. Real GDP Growth



Source: IMF, World Economic Outlook database.

Figure 2.2.4. Inflation



Source: IMF, World Economic Outlook database.

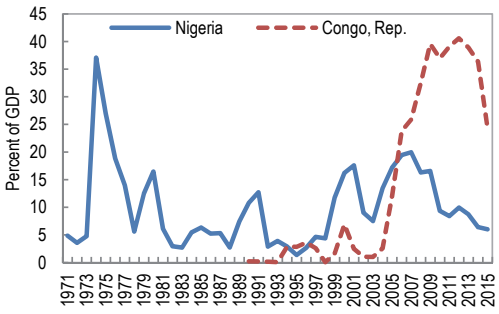
[1] For the Republic of Congo, our analysis covers the period starting in 1990 and onward, mainly because of issues pertaining to data availability and quality prior to 1990.

Box 2.2. *(continued)*

In contrast, the Republic of Congo has continued to experience more volatile GDP growth. Oil price downswings (for example, in 1990 and 2008) had a more significant adverse impact on growth in the Republic of Congo than in Nigeria. Also, civil conflict contributed to growth volatility in Congo in the 1990s, which remained high even after stability was restored in the early 2000s. As regards price stability, however, the Republic of Congo generally experienced lower and more stable inflation than Nigeria, in part because of its exchange rate regime (the Republic of Congo is part of the Central African Economic and Monetary Community—CEMAC), even in the immediate aftermath of the 1994 CFA franc devaluation (Figure 2.2.4).

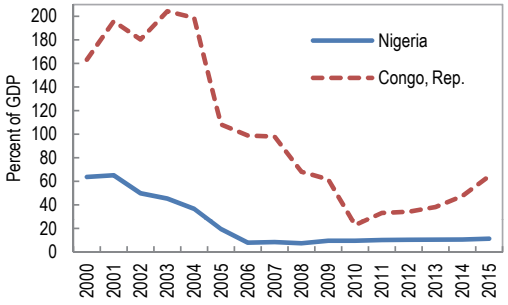
Between 2004 and 2008, the Nigerian authorities sought to improve the management of oil and gas revenues. In 2004, they established an oil-price-based rule for the budget along with the Excess Crude Account (ECA)—a stabilization fund—designed to delink spending from oil revenues. Meanwhile, the central bank showed some flexibility in its management of the exchange rate and accumulated substantial international reserves (Figure 2.2.5). Together, these steps helped to smooth the impact of oil revenue shocks in 2008. In addition, debt buyback operations, partly funded by the ECA, and debt relief resulted in significantly reducing Nigeria's external debt (Figure 2.2.6). During 2003–08, macroeconomic stability was restored, and the procyclicality of spending in response to changes in oil prices was reduced (Figure 2.2.7). Significant fiscal surpluses were generated, contributing to the accumulation of sizable assets in the ECA. The countercyclical fiscal policy was complemented by a strong anti-inflationary monetary policy which brought inflation down to single digits.

Figure 2.2.5. International Reserves



Source: IMF, International Financial Statistics.

Figure 2.2.6. Total Public Debt



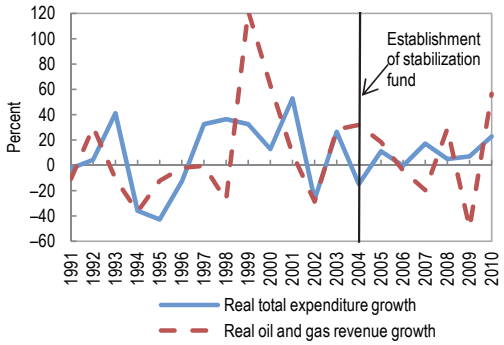
Source: IMF, World Economic Outlook database.

However, procyclical fiscal policy resumed after the global financial crisis: a substantial increase in government spending accompanied the high oil prices during 2010–14. Combined with a sharp drawdown from the ECA savings—which reached a low of $3.1 billion in 2014, down from $11 billion in 2012—this has left Nigeria with minimal fiscal buffers to smooth the recent decline in oil prices. Against this background, the central bank of Nigeria has imposed restrictions on access to foreign exchange during the current oil price downswing in an attempt to preserve international reserves and contain pressures on the currency. This has introduced significant distortions in the economy, led to the emergence of a significant spread between the official interbank exchange rate and other markets for foreign exchange, and adversely affected economic activity.

The Republic of Congo, meanwhile, has yet to establish a robust fiscal framework for dealing with oil price shocks. Public spending has displayed considerable procyclicality throughout 1990–2014. Expenditure doubled in absolute terms in recent years, to reach 50 percent of GDP in 2014 (Figure 2.2.8). Past efforts to adopt a fiscal rule, most recently in 2013, have been ineffective. The current oil price slump could provide the impetus to establish effective fiscal rules for smoothing the expenditure path during oil booms and busts.

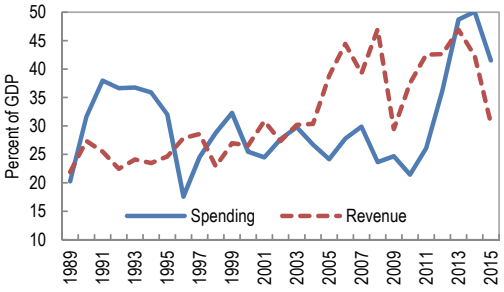
Box 2.2 *(continued)*

Figure 2.2.7. Nigeria: Revenue and Expenditure Volatility Before and After the Stabilization Fund



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

Figure 2.2.8 The Republic of Congo: Government Revenue and Expenditure



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

As in the case of Nigeria, the steep fall in oil prices since mid-2014 has resulted in pronounced declines in fiscal and external buffers in the Republic of Congo and caused economic growth to slow. When peace was restored in the early 2000s, the accumulation of reserves and fiscal buffers was a clear policy focus of the government of the Republic of Congo. This was supported by a series of IMF-supported programs, culminating in debt relief in 2010 under the Heavily Indebted Poor Countries Initiative. As a result, by mid-2014, the Republic of Congo had the largest reserves among CEMAC countries along with additional government deposits abroad and fiscal savings at the central bank. In the face of the current oil price slump, both reserves and government deposits declined sharply in 2015 as the scaling up of public investment was maintained in the face of declining oil revenues. International reserves fell to about 5.5 months of imports in 2015, the lowest level since 2007. At the same time, the Republic of Congo's debt has increased significantly to 64 percent of GDP in 2015—almost three times the level immediately following debt relief in 2010—and is limiting the fiscal space available to pursue countercyclical policies.

Annex 2.1. Commodity Terms of Trade: Variable Construction and Methods

This annex provides further details on the classification of commodity exporters, the construction of the commodity terms-of-trade index, the methodology to date commodity price shock episodes, and the other econometric methods and data used in the chapter.

Commodity Classification

A country is classified as a commodity exporter in a given decade if it meets the following two conditions (decades: 1962–79, 1980–89, 1990–99, 2000–09, and 2010-14):

1. Commodities constitute at least 25 percent the country's total goods exports, on average, in a given decade; and
2. Net commodity exports accounted for at least 5 percent of its gross trade (exports plus imports) in goods on average.

Commodity Terms-of-Trade Index

For each country, the change in the commodity terms-of-trade index (CTOT) corresponds to the weighted sum of annual variations in global prices of commodities, weighted by the country's net exports of each commoditiy as a share of GDP, following the approach used in Gruss (2014). The change in the commodity terms-of-trade for a given country i in year t is obtained as:

$$\Delta \text{Log}(\text{CTOT})_{i,t} = \sum_{j=1}^{\text{J}} \Delta P_{j,t} \cdot \omega_{\text{i,j,t}}, \quad \text{with } \omega_{\text{i,j,t}} = \frac{1}{3}\sum_{s=1}^{3} \frac{x_{i,j,\text{t}-s} - m_{i,j,\text{t}-s}}{\text{GDP}_{i,\text{t}-s}}$$

- where $P_{j,t}$ is the logarithm of the price of commodity j in period t (in U.S. dollars and divided by the IMF's price deflator for exports of manufactures in advanced economies);
- Δ denotes first differences;
- $x_{i,j,t}$ $(m_{i,j,t})$ denotes the exports (imports) value of commodity j by country i (in U.S. dollars, from UN COMTRADE and IMF data) at time t;
- $GDP_{i,t}$ denotes country i's nominal GDP in U.S. dollars at time t; and
- the weights $\omega_{i,j,t}$ are predetermined vis-à-vis the price change in each period, but are allowed to vary over time reflecting changes in the basket of commodities actually traded. This implies that at any point in time, changes in CTOT reflect changes in prices only and not in the volumes traded. When a weight is not available for a country in a given year, we use the previous available weight.

We use prices for commodities starting in 1960, and commodities are sorted into four broad categories:

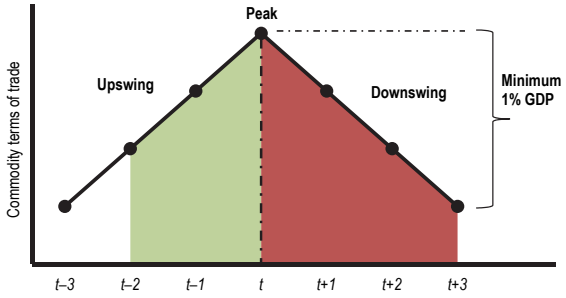
- *Energy*—Coal, crude oil, and natural gas.
- *Metals*—Aluminum, cobalt, copper, diamond, gold, iron ore, lead, nickel, platinum, tin, titanium, uranium, and zinc.
- *Food*—Bananas, barley, beef, cocoa, coconut oil, coffee, corn, fish, fish meal, groundnuts, lamb, olive oil, oranges, palm oil, poultry, rapeseed oil, rice, shrimp, soybean meal, soybean, soybeans oil, sugar, sunflower oil, swine, tea, and wheat.
- *Raw materials*—Cotton, hard logs, sawn hardwood, hides, rubber, soft logs, sawn softwood, and wool.

Methodology for Dating Commodity Price Cycles and Identifying Episodes

Cycles in country-specific CTOT indices are identified using the Bry-Boschan algorithm, a standard in the business cycle literature (Harding and Pagan 2002). Cycles are defined as episodes in which the CTOT increased for at least two consecutive years, with a subsequent decline of at least three consecutive years, and with a cumulated decline of at least 1

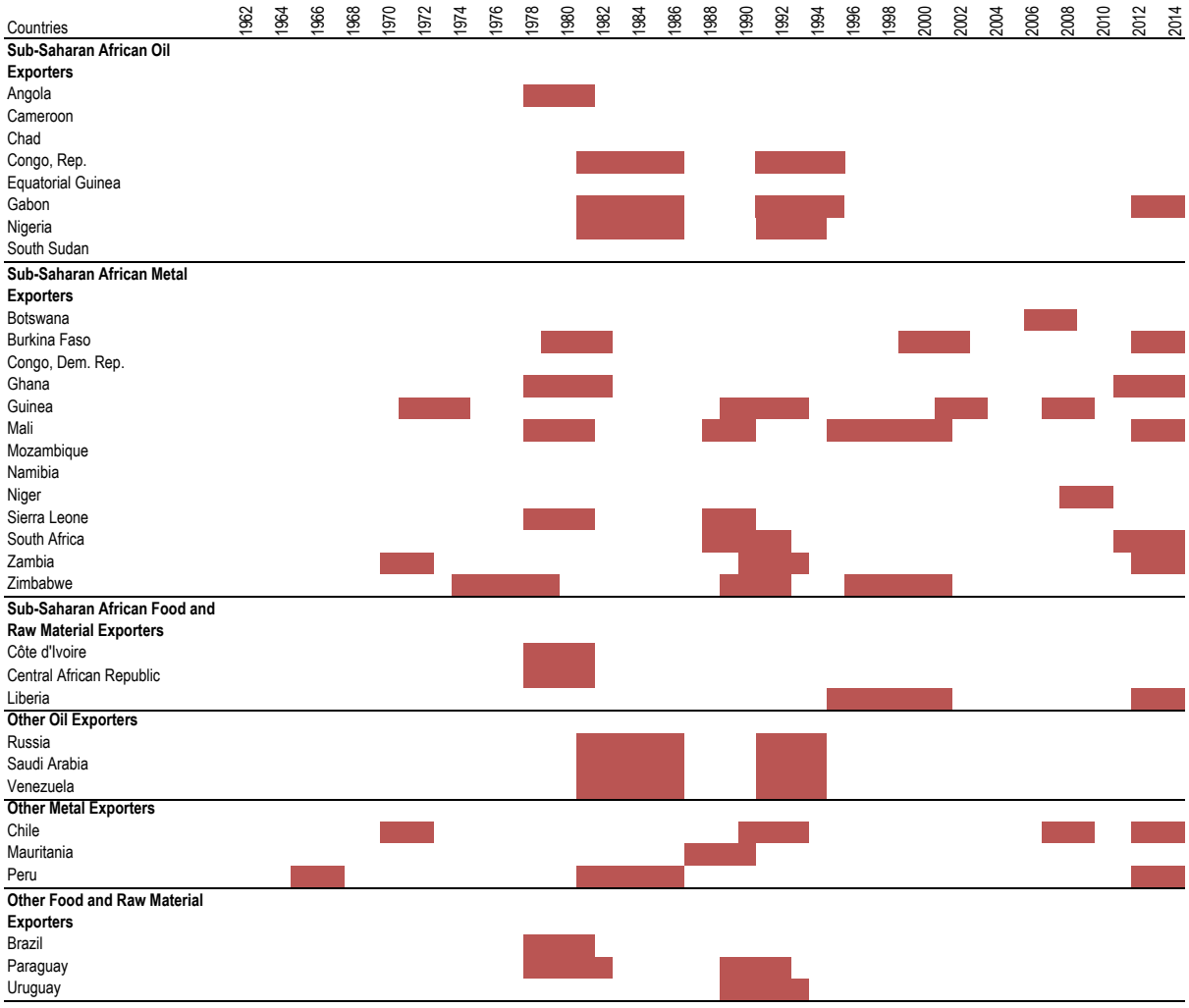
percent (Annex Figure 2.1.1). Upswings are defined trough to peak (excluding the trough year, but including the peak year); downswings are defined peak to trough (excluding the peak year, but including the trough year). The analysis of the event studies further restricts the episodes to downswings that are driven by declines in the prices of commodity exports. Thus, episodes in which import price developments drive the declines in commodity terms of trade and which may have a different economic impact are excluded.

Annex Figure 2.1.1. Upswing and Downswing in Terms-of-Trade Cycles



Based on this methodology, 201 episodes for 105 countries are identified, of which 75 episodes are in sub-Saharan Africa. Figure 2.1.2 shows the episodes identified for sub-Saharan African commodity exporters and selected others.

Annex Figure 2.1.2. Sub-Saharan African Commodity Exporters and Other Countries: Episodes of Commodity Terms-of-Trade Busts
(Time span of each episode)



Source: IMF staff calculations.

Note: A country is classified as a commodity exporter if commodity exports constitute at least 25 percent of total goods exports, on average during the respective decade, and net commodity exports accounted for at least 5 percent of goods trade (goods exports plus goods imports), on average during the respective decade. Episodes of negative commodity terms-of-trade shocks are identified on the basis of at least three years of consecutive decline in the commodity terms-of-trade index and a cumulative drop in the index of at least 1 percentage point of GDP within three years of the peak.

Local Projections Method

The effects of commodity terms-of-trade shocks on macroeconomic aggregates are evaluated using the local projections method of Jordà (2005), which was later refined by Teulings and Zubanov (2014). This method allows the estimation of the dynamic effects of a shock in commodity terms of trade using impulse-response functions that are obtained from ordinary least squares regressions. Unlike impulse-responses obtained from vector autoregression (VAR), the impulse-responses obtained with local projections do not require assumptions about the structure through which shocks are transmitted in the system, which is a common issue in VAR models.

For the estimation of the effects of a contemporary shock of CTOT on the variable of interest (output, trade balance, and fiscal revenues), the models used control for other determinants of economic performance such as trading partners' GDP growth, an indicator of global financial conditions, and country-specific indicators of war or armed conflicts and changes in political regimes.

The equation used to estimate the effect of CTOT shocks is shown below. In this expression, the first two terms represent country and time effects. The third term contains the shock variable, represented by $\Delta s_{i,t}$, which is the change in the natural log of the country-specific CTOT at time *t*. The cumulative effect on the variable of interest is represented by the estimate β^h, where *h* denotes the time horizon. The other terms are control variables. The fourth and fifth terms control for shocks in CTOT and other determinants that occur before time *t* but still may have an effect on the outcome of the dependent variable. The sixth term controls for effects on the dependent variable coming from its own lagged variations. The last two terms, introduced by Teulings and Zubanov (2014), control for the effects of shocks in CTOT and other determinants occurring between *t* and *t+h* that can influence the outcome of the dependent variable at time *t+h*. For each horizon *h* for which the effect of CTOT is estimated, it is necessary to estimate a different equation. The cumulative responses are obtained from the *h* different β. The equations are estimated using balanced panels for the period 1962–2015 and robust standard errors (White 1982).

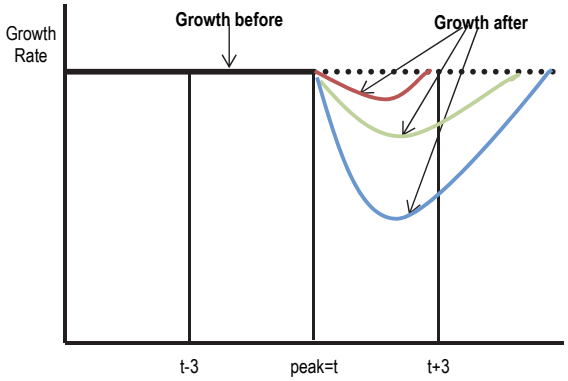
$$y_{i,t+h} - y_{i,t-1} = \alpha_i^h + \gamma_t^h + \beta^h \Delta s_{i,t} + \sum_{j=1}^{p} \beta_{1,j}^h \Delta s_{i,t-j} + \sum_{j=0}^{p} \theta_{1,j}^h x_{i,t-j} + \sum_{j=1}^{p} \theta_{2,j}^h \Delta y_{i,t-j} + \sum_{j=0}^{h-1} \beta_{2,j}^h \Delta s_{i,t+h-j} + \sum_{j=0}^{h-1} \theta_{3,j}^h x_{i,t+h-j} + \varepsilon_{i,t}^h$$

Methodology for Evaluating the Effect of Policies on Countries' Resilience in the Aftermath of a Negative Commodity Price Shock

A multivariate ordinary least squares regression analysis is undertaken that relates the relative real GDP growth performance in the aftermath of a terms-of-trade shock to variables capturing countries' policy space and policy responses. The regression analysis builds on the previously identified episodes for the sample of emerging market and developing countries and existing empirical research (Adler and Sosa 2011; Céspedes and Velasco 2012).

Although terms-of-trade shocks can be of varying lengths, the focus of the analyses is on the first three years after a shock hits an economy. To assess the role of policy space and policy reactions in mitigating the impact of a shock on real economic growth, we need to construct appropriate measures of the impact. A growth difference measure is used to capture the gap between the real economic growth rate in the first three years of a shock versus the average growth rate observed during the three years before the shock (as a proxy of what growth could have been in the absence of the shock). In the aftermath of shocks, countries' growth paths will vary depending on a number of factors—some countries show more resilience than others to shocks, as displayed in Annex Figure 2.1.3. The variables used in the regression analysis are detailed in Annex Table 2.1.

Annex Figure 2.1.3. Stylized Growth Response to a Commodity Terms-of-Trade Decline



Source: IMF staff calculations.

Annex Table 2.1.1. Descriptions of Variables

Variable	Description	Source
Real GDP growth and growth differential	Annual real GDP growth, growth differential measured as average growth of real GDP in first three years of a shock minus average growth of real GDP in previous three years.	Penn World Tables and IMF, World Economic Outlook database.
Private consumption	Real terms, national currency, percent growth.	IMF, World Economic Outlook database.
Current account balance	Percent of GDP.	IMF, World Economic Outlook database.
International reserves	Gross, in percent of GDP.	IMF, International Financial Statistics and IMF, World Economic Outlook database.
Fiscal balance	General government, national currency, in percent of GDP.	IMF, World Economic Outlook database.
Total public debt	General government gross debt, national currency, in percent of GDP.	IMF, World Economic Outlook database.
Consumer price index	Annual percent growth.	IMF, International Financial Statistics.
Size CTOT shock	Cumulative percent change in the CTOT over the first three years after a shock.	IMF staff calculations.
Shocks caused by decline in export prices	Dummy variable equal to 1 if a CTOT shock is related to a decline in export prices.	IMF staff calculations.
International reserves above median at time t_0	Above-average reserve buffers calculated as actual reserves (in percent of GDP) minus regime-specific (fixed or flexible exchange rate) median levels of reserves for all emerging market and developing countries, in the year immediately before a shock.	IMF staff calculations based on data from IMF, International Financial Statistics.
High external debt before shock	Dummy variable with value 1 if external-debt-to-GDP ratio is 40 percent or more.	IMF, World Economic Outlook database.
Flexible exchange rate regime at time t_0	Dummy variable with value 1 when the de facto exchange rate regime is flexible in the year immediately before the CTOT shock.	Ilzetzki, Reinhart, and Rogoff (2010) database.
Depreciation of nominal exchange rate (percent)	Cumulative depreciation in the nominal exchange rate (U.S. dollars per national currency) over the first two years of a shock—used as a proxy for exchange rate flexibility.	IMF staff calculations based on data from IMF, International Financial Statistics.
Exchange rate collapse: 45% or more depreciation	Cumulative depreciation (in percent) during currency collapses, where such events are defined as declines of 45 percent or more in the value of the domestic currency during the first two years of a shock.	IMF staff calculations based on data from IMF, International Financial Statistics.
Growth of real government consumption	Average annual percent change in real government consumption over first three years of the shock.	Penn World Tables and IMF, World Economic Outlook database.
Growth of real government consumption interacted with high external debt	Interaction term between average percent change in real government consumption and a dummy variable for external-debt-to-GDP ratio at 40 percent of GDP or more the year before the shock.	Penn World Tables and IMF, World Economic Outlook database.
M2 growth during shock	Average annual percent change in broad money (M2) over the first three years after the shock.	IMF, International Financial Statistics.
War or armed conflict	Dummy variable equal to 1 if the number of deaths in battle-related conflicts is at least 1,000.	World Bank, World Development Indicators.
Change in political regime	Dummy variable equal to 1 and the following four years in case of a change in political regime.	Center for Systemic Peace, Polity IV dataset.
Financial conditions	Slope of the yield curve of U.S. bonds. Difference between rates of 10-year and 3-year bonds.	Federal Reserve.
External demand	Indicator of external demand. Chained index based on weighted sum of GDP growth rates of trading partners, weighted by share of exports to each partner.	IMF, World Economic Outlook database.

Note: CTOT = commodity terms-of-trade index.

Country Coverage

Depending on the data availability, the event studies and regression analyses in the chapter included the following countries:

Sub-Saharan African countries: Angola, Benin, Botswana, Burkina Faso, Central African Republic, Comoros, Republic of Congo, Côte d'Ivoire, Ethiopia, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Madagascar, Malawi, Mali, Mauritius, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, South Africa, Swaziland, Tanzania, Togo, Uganda, Zambia, and Zimbabwe.

Non-sub-Saharan African countries: Albania, Algeria, Argentina, Armenia, Azerbaijan, Bahrain, Bangladesh, Belize, Bhutan, Bolivia, Bosnia and Herzegovina, Brazil, Brunei Darussalam, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Fiji, FYR Macedonia, Georgia, Grenada, Guatemala, Guyana, Haiti, Honduras, India, Indonesia, Iran, Iraq, Kazakhstan, Kiribati, Kuwait, Kyrgyz Republic, Libya, Malaysia, Maldives, Mauritania, Mexico, Moldova, Mongolia, Myanmar, Nicaragua, Oman, Papua New Guinea, Paraguay, Peru, Philippines, Qatar, Russia, Samoa, Saudi Arabia, Solomon Islands, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sudan, Suriname, Syria, Tajikistan, Thailand, Trinidad and Tobago, Turkmenistan, United Arab Emirates, Uruguay, Vanuatu, Venezuela, and Vietnam.

3. Financial Development and Sustainable Growth

Financial development is important for promoting strong and stable economic growth in sub-Saharan Africa. It entails the wider use of existing financial instruments as well as the creation and adoption of new ones for intermediating funds and managing risk (Chami, Fullenkamp, and Sharma 2010). With external demand and financing conditions significantly worsening, and a much less favorable growth outlook for sub-Saharan Africa, identifying untapped or underutilized sources of growth and reducing its volatility have become even more urgent. It is well established in both the theoretical and empirical literature that financial development is generally good for growth. Although debates have revolved around whether financial development is an engine for growth or just a lubricant, whatever factor can significantly ameliorate growth prospects for the region is worth examining in detail.

Theoretically, financial development positively affects growth through several channels that are important for sub-Saharan Africa. First, it helps catalyze savings into more usable forms, and supports efficient allocation of capital and enhancement of total factor productivity (TFP). Second, it supports diversification and management of risk. Third, it reduces information asymmetries and transaction and monitoring costs. Fourth, it can reduce volatility of the economy by providing a variety of instruments and information to households and firms to cope with adverse shocks through consumption and investment smoothing. Levine (2005), in a comprehensive review of the literature, finds a robust linkage between financial development and growth.

This chapter considers three questions to gauge the role of financial development in sub-Saharan Africa's sustainable growth:

- How has sub-Saharan Africa's financial sector developed in the past few decades, compared with other regions?
- With the changes over the past decades, is the financial sector now able to make a more positive contribution to growth and reduce its volatility?
- What will it take to draw further benefits from the financial sector, and what role can policies play in the process?

Our main findings are as follows:

- Sub-Saharan African countries have made substantial progress in financial development over the past decade, but there is still considerable scope for further development, especially compared with other regions. Indeed, until a decade or so ago, a large number of countries had seen the level of financial development actually regress relative to the early 1980s. With the exception of the region's middle-income countries, both financial market depth and institutional development are lower than in other developing regions.
- The region has led the world in innovative financial services based on mobile telephony, but there remains scope to increase financial inclusion further. The development of mobile telephone-based systems has helped to incorporate a large share of the population into the financial system, especially in east Africa. Nonetheless, there is a large untapped potential in this area in other countries, and this can compensate for some of the infrastructure and other shortcomings that most countries face. Microfinance has also grown rapidly, providing services to customers at the lower end of the income distribution. However, all new and rapidly growing financial developments also pose potential financial stability risks.
- Pan-African banks (PABs) have been a driver of home-grown financial development, but

This chapter was prepared by a team led by Montfort Mlachila, comprised of Larry Qiang Cui, Ahmat Jidoud, Monique Newiak, Bozena Radzewicz-Bak, Misa Takebe, Yanmin Ye, and Jiayi Zhang, under the guidance of Anne-Marie Gulde Wolf.

they also bring a number of challenges. Their expansion has promoted greater economic integration, and has contributed to improving competition and financial inclusion. The banks have increasingly filled the gap left by European and U.S. banks, which traditionally had dominated the financial landscape in Africa before the global financial crisis. However, their rapid growth also poses risks, the most important of which is related to the lack of adequate supervisory oversight on a consolidated basis and relatively weak internal governance frameworks. These vulnerabilities need to be addressed to mitigate systemic risks that could endanger financial development.

- Empirical estimates suggest that financial development has supported growth and reduced its volatility in sub-Saharan Africa, although the level of financial development in the region is below its benchmark level. Financial development has helped mobilize and allocate financial resources, and facilitated other economic policies in enhancing growth and stabilizing the economy. Though the literature has suggested that there is a threshold beyond which financial development can have an adverse impact on growth and its volatility (Sahay and others 2015b), the large majority of the region's countries are well below this threshold. Given that the region's level of financial development is below the benchmark level, raising the median financial development index to this level could be associated with an increase in growth by about 1½ percentage points. The results confirm the salutary effect on reducing the volatility of growth and other macroeconomic variables. However, countries need to be vigilant about the emerging macro-financial risks to effectively manage the risks associated with financial development.
- The region's improving financial development has been largely driven by better macroeconomic fundamentals, but hindered by weak institutional quality. Countries can reap the potential benefits of financial development notably by improving legal frameworks and corporate governance.

HOW HAS THE REGION'S FINANCIAL SECTOR DEVELOPED IN THE PAST FEW DECADES?

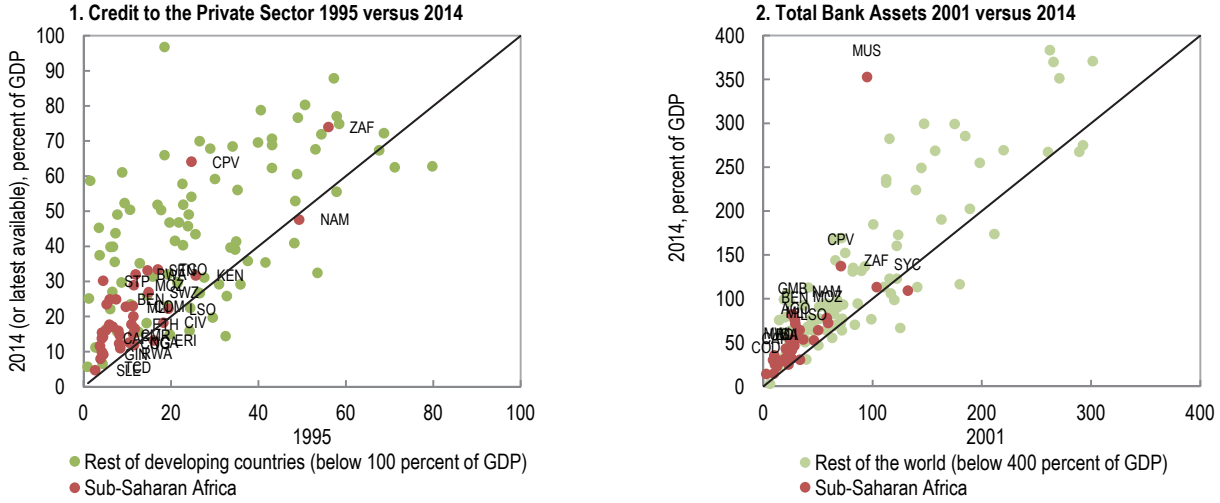
In most sub-Saharan African countries, financial development has progressed over the past four decades. However, with the exception of the region's middle-income countries, both financial markets and financial institutions are less developed than in other developing regions. Innovative financial services, such as mobile payment systems, have helped increase access for the broader population in several countries, but there is scope to increase financial inclusion further, particularly in low-income and fragile countries.

Financial development has progressed in the region but major gaps remain...

Financial depth has increased in sub-Saharan Africa but has not caught up with other developing regions, reflecting lower average income levels (Figure 3.1). The region's median ratio of private sector credit to GDP has increased by almost 10 percentage points since 1995, to about 21 percent in 2014. However, it remains only about half the size of that in the Middle East and North Africa, East Asia, and Latin America and the Caribbean, driven by sub-Saharan Africa's relatively high number of low-income countries in which the median level of credit to the private sector is comparable with other low-income countries. Trends in the depth of the banking sector paint a similar picture as banking sector assets at an average of 57 percent of GDP in 2014 are half the size of those in other regions.

The banking system dominates the financial landscape in most countries (Figure 3.2). The banking sector accounts for the biggest share of assets in most countries, with the exception of middle-income countries. For instance, nonbank assets account for more than 50 percent of financial sector assets only in Lesotho, Namibia, South Africa, and Swaziland. Within the banking system, foreign-owned subsidiaries account for the major share of assets across all country groups, particularly in some fragile states (Guinea, Guinea-Bissau, Madagascar), while foreign branches' contribution is minor. In several countries, state-owned banks' assets are sizable (Ethiopia, Rwanda, Seychelles,

Figure 3.1. Sub-Saharan Africa: Standard Measures of Financial Depth



Sources: IMF, International Financial Statistics; IMF World Economic Outlook database; and World Bank, FinStats 2016.
Note: See page 82 for country abbreviations.

Sierra Leone). Within the nonbank financial sector, pension funds contribute most significantly to the systems' assets, while stock exchanges are underdeveloped and illiquid (present in less than 60 percent of the region's countries).

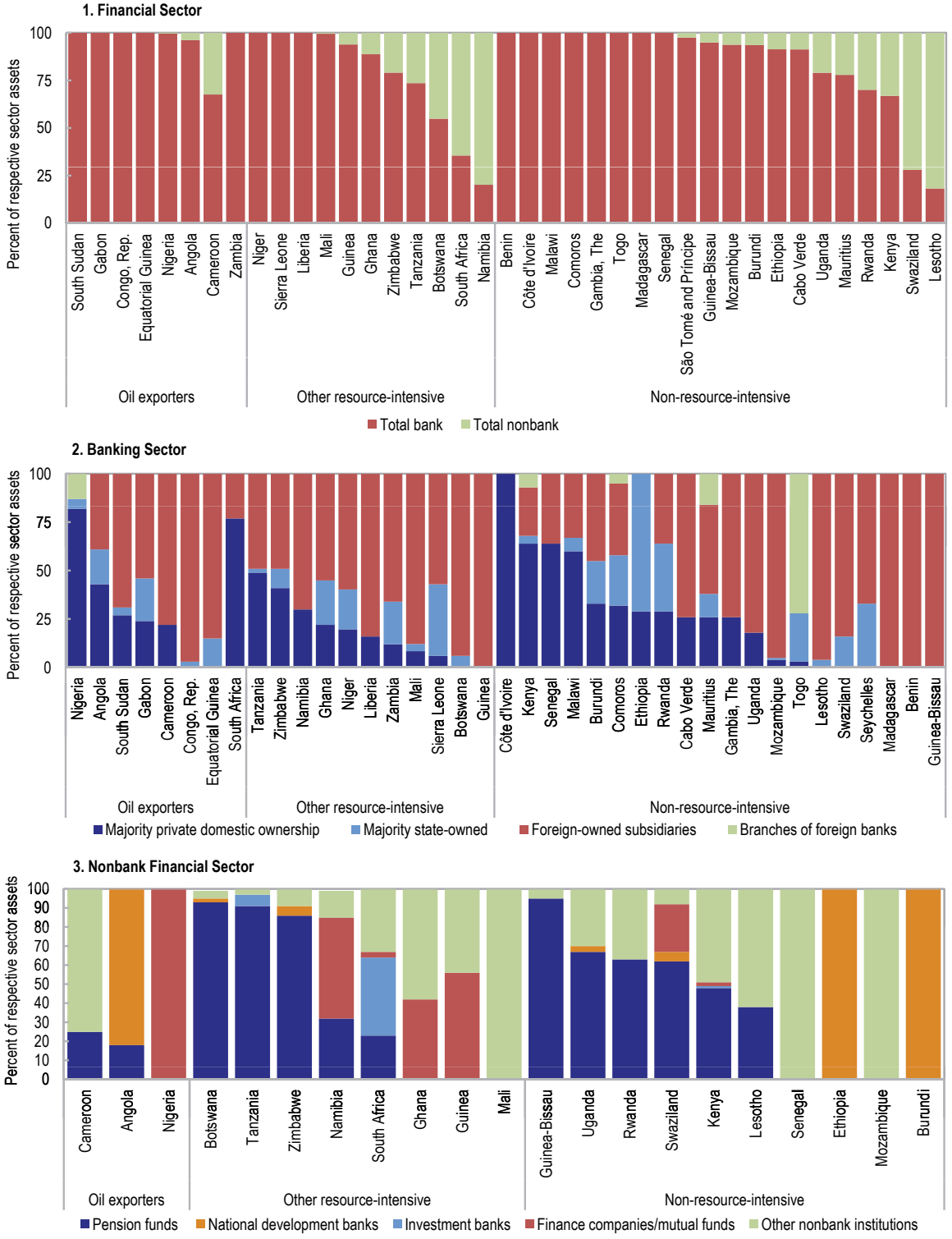
The rapid rise of PABs is an important driver for financial development. The overall scale of PABs' operations in Africa is larger than that of traditional European and American banks. There are now seven PABs that have a presence in at least 10 countries. In many cases, they frequently rank among the three largest banks in the country. They also constitute the majority of foreign capital in a number of countries such as Benin, Guinea-Bissau, Niger, and Togo. Their expansion took place mainly by establishing subsidiaries in host countries, which operate under the host countries' regulations and supervision. Some PABs, however, entered other activities that go beyond traditional bank intermediation. These include operations in capital markets, insurance, pensions, money transfers, microfinance, leasing, and even nonfinancial transactions.

The scale of PABs' operations is growing rapidly in the region, and has contributed to stronger competition for loans and deposits. The banks' clients include not only well-established large domestic and multinational entities, but also, increasingly, underserved small and medium-sized enterprises and individuals. Many banks are committed to deploying mobile banking services and Web-based technologies. They have become increasingly involved in arranging syndicated loans for infrastructure projects, where needs for such financing are increasing in the region (Enoch, Mathieu, and Mecagni 2015; Mecagni, Marchettini, and Maino 2015). This has required the expansion of funding sources by including longer-term financing through bond issuance, capital augmentations, and, in some cases, financing from international financial institutions. As a result, the PABs have reported higher profitability and improved cost-to-income ratios (Stijns 2015).

... with large scope to increase financial inclusion.

Notwithstanding these positive developments, access to traditional financial services in sub-Saharan African countries remains low, particularly for certain demographic groups (Figure 3.3). The share of the population having an account at, or borrowing from, a financial institution is low compared with other regions, with only the region's middle-income countries coming close to benchmark levels. Insufficient information on borrowers (such as credit history and credit risk), the lack of collateral registries, and difficult contract enforcement constrain bank lending to the private sector in many cases. In fragile states, access to

Figure 3.2. Sub-Saharan Africa: Sector Assets, 2012



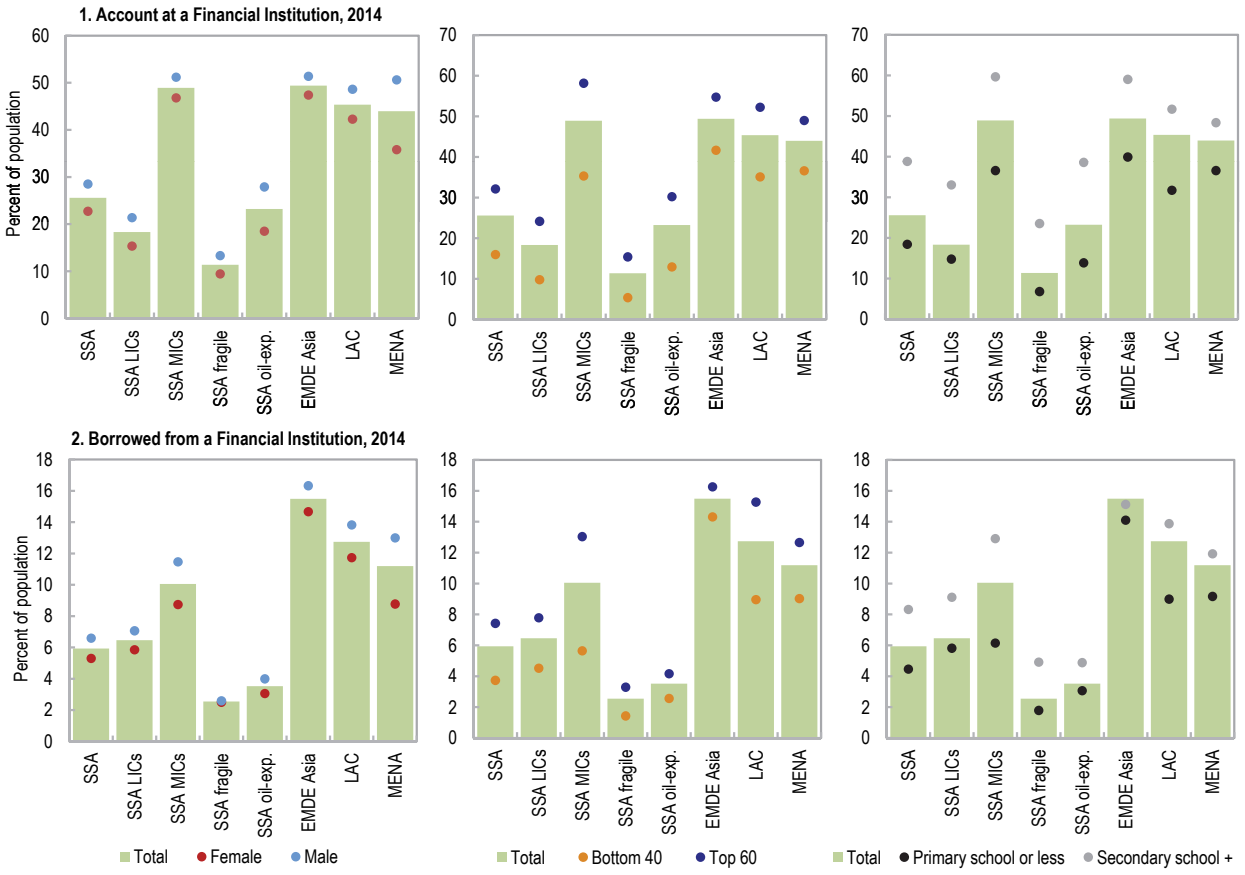
Source: IMF, African Department Financial Sector Profiles.

financial services is particularly limited because of the scarce provision of financial infrastructure—fewer than seven ATMs and fewer than three financial branches per 100,000 persons (Central African Republic, Comoros, Guinea-Bissau). In all of the region's country groups, access to financial services is higher by large margins for the more educated, the top 60 percent earners, and men. Access is particularly low in rural areas because branches are mostly concentrated in urban centers (Mlachila, Park, and Yabara 2013).

The region also suffers from considerable gender inequality in various aspects of financial inclusion, which is associated with higher income inequality. Box 3.1 shows that greater financial inclusion for women is associated with lower income inequality (see also Sahay and others 2015a), especially by increasing labor force participation rates. However, the empirical results should be interpreted with caution: the associations among different gender gaps, and between gender gaps and economic outcomes, are complex, and further work, as well as more data on financial inclusion over time, is needed to make more definitive statements about the direction of causality at the macroeconomic level.

Innovative financial services have started compensating for some of these shortcomings in a number of countries. The development of mobile payment systems has helped to incorporate large shares of the population into the financial system, especially in East Africa (Figure 3.4). The fast spread of systems such as M-Pesa, M-Shwari, and M-Kesho in Kenya has helped reduce transaction

Figure 3.3. Sub-Saharan Africa: Indicators of Financial Inclusion



Source: World Bank Global Findex 2014.

Note: EMDE Asia = emerging market and developing Asia; LAC = Latin America and the Caribbean; LIC = low-income countries; MENA = Middle East and North Africa region; SSA = sub-Saharan Africa.

costs and facilitate personal transactions, and has contributed to the use of financial intermediation services (IMF 2012b). The successful experience in east Africa provides a useful model that could be adapted by other countries in the region (Box 3.2). An important lesson from east Africa is the need to have a flexible enabling regulatory environment while taking into account supervisory challenges.

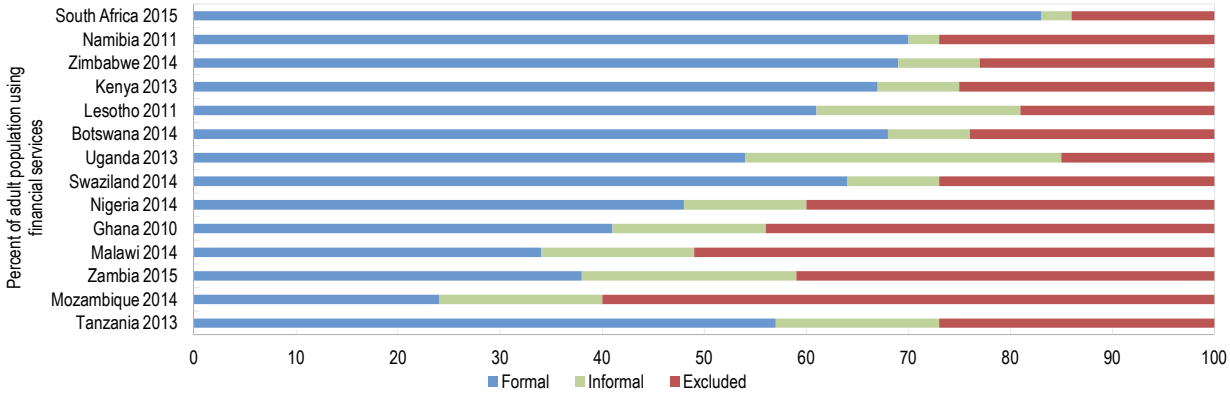
Microfinance offers an important avenue that can complement mobile banking to foster financial inclusion. Microfinance has grown rapidly, providing services to customers at the lower end of the income distribution (Box 3.3). It is particularly well suited for use by the poor with little or no collateral, including in rural areas, thereby significantly enhancing financial inclusion through savings mobilization and, to a lesser extent, the provision of credit. Although individual services in mobile payments and microfinance are expanding, both types of financial services so far have been complementary, with mobile payment systems facilitating mainly payment transactions, while microfinance has been relaxing financial constraints for poorer households.

Putting together the dimensions of financial development

A recently developed financial development index helps paint a more comprehensive picture of financial development (Box 3.4). To measure sub-Saharan Africa's performance in financial development over time, this chapter draws on the financial development index by Sahay and others (2015b).

- The index combines an assessment of countries' financial institutions (banks, insurance companies, mutual funds, and pension funds) and financial markets (stock and bond markets). It therefore captures the fact that financial services are provided by a multitude of financial institutions, and that markets have developed in a way that allows individuals and firms to diversify their savings and enterprises to raise capital beyond bank loans. Financial markets are relatively underdeveloped and institutions dominated by banks in many countries of the region; the index therefore captures the gap in financial services better than a one-dimensional measure such as private credit to GDP.
- Both financial institutions and markets are assessed based on depth (size and liquidity of markets), access (ability of individuals and companies to access financial services), and efficiency (ability of financial institutions to provide financial services at low cost and with sustainable revenues, and the level of activity of capital markets). By including indicators of profitability, the efficiency dimension of the index captures the fact that, despite strong growth in assets, financial systems in sub-Saharan Africa still lag behind other regions in terms of competition (World Bank 2012).

Figure 3.4. Sub-Saharan African Countries: Financial Inclusion



Sources: Finmark Trust, Finscope Survey.

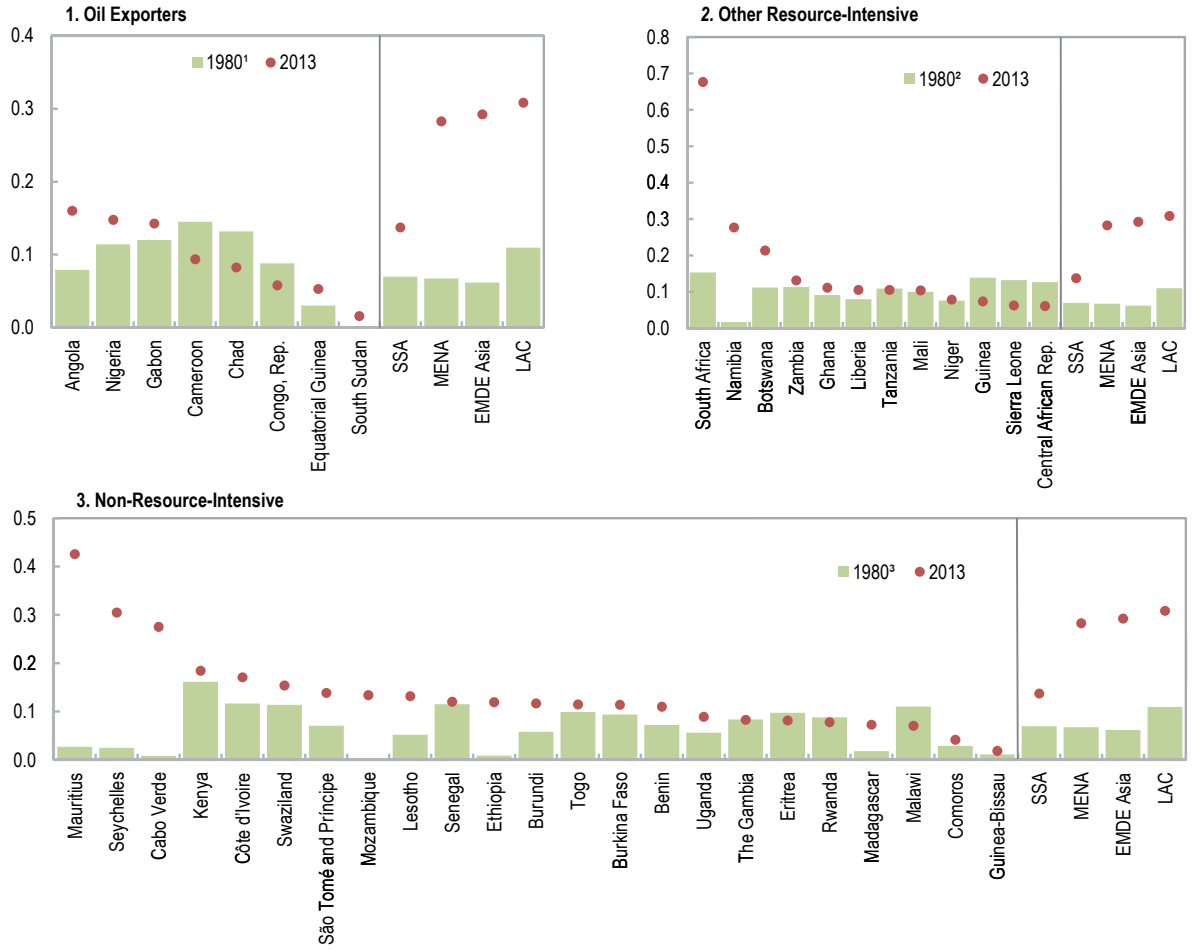
Note: Formal = formally financially included: Individuals 16 years or older who have/use financial products/services provided by a financial service provider that is regulated or officially supervised; Informal = informally included: Individuals 16 years or older who use financial mechanisms not provided by a regulated or supervised financial institution; Excluded = financially excluded: Individuals 16 years or older who have no financial mechanisms and rely on themselves/family/friends for saving, borrowing, and remitting; their transactions are cash-based or in-kind.

This dimension, along with the aspect of access, therefore gives an indication of the quality of the financial sector.

This composite index suggests that financial development in sub-Saharan Africa has been lackluster over the past three decades, although there has been some modest acceleration over the past 15 years. Figure 3.5 depicts the level of financial development for different country groups. While some middle-income countries (Mauritius, Namibia, Seychelles, and South Africa) have seen rapid financial development since the 1980s, progress has been slower in other groups of the region. In some cases (Cameroon, Central African Republic, Chad, and Sierra Leone), the current development levels are actually lower than in the 1980s, partly reflecting civil wars and conflicts. In most sub-Saharan African countries, the level of financial development is significantly lower than in other developing regions.

Where financial development has been rapid, it typically took place through both financial institutions and financial markets (Figure 3.6). This development has been supported by both the banking and nonbank financial sectors. For instance, in Botswana, a multitude of financial

Figure 3.5. Sub-Saharan Africa: Financial Development Index, 1980–2013
(1 = most developed; 0 = least developed)



Sources: Sahay and others (2015b); and IMF staff calculations.

Note: EMDE Asia = emerging market and developing Asia; LAC = Latin America and the Caribbean; LIC = low-income countries; MENA = Middle East and North Africa region; SSA = sub-Saharan Africa.

[1] 2000 for Angola; and 1990 for Equatorial Guinea.
[2] 1990 for Guinea and Namibia.
[3] 2000 for Eritrea; 1990 for Mozambique and São Tomé and Príncipe.

institutions exist, and the Botswana Stock Exchange and institutional investors' share in the financial system have grown rapidly in the first decade of the millennium (World Bank and IMF 2008). In Namibia, similarly, both banking sector and nonfinancial institutions have grown significantly within the past two years, with pension funds and insurance companies combined exceeding the share of commercial banks in total financial assets (Marchettini 2015; IMF 2007). Moreover, as the previous section elaborated, the rise of PABs has affected the financial sector landscape in the region significantly.

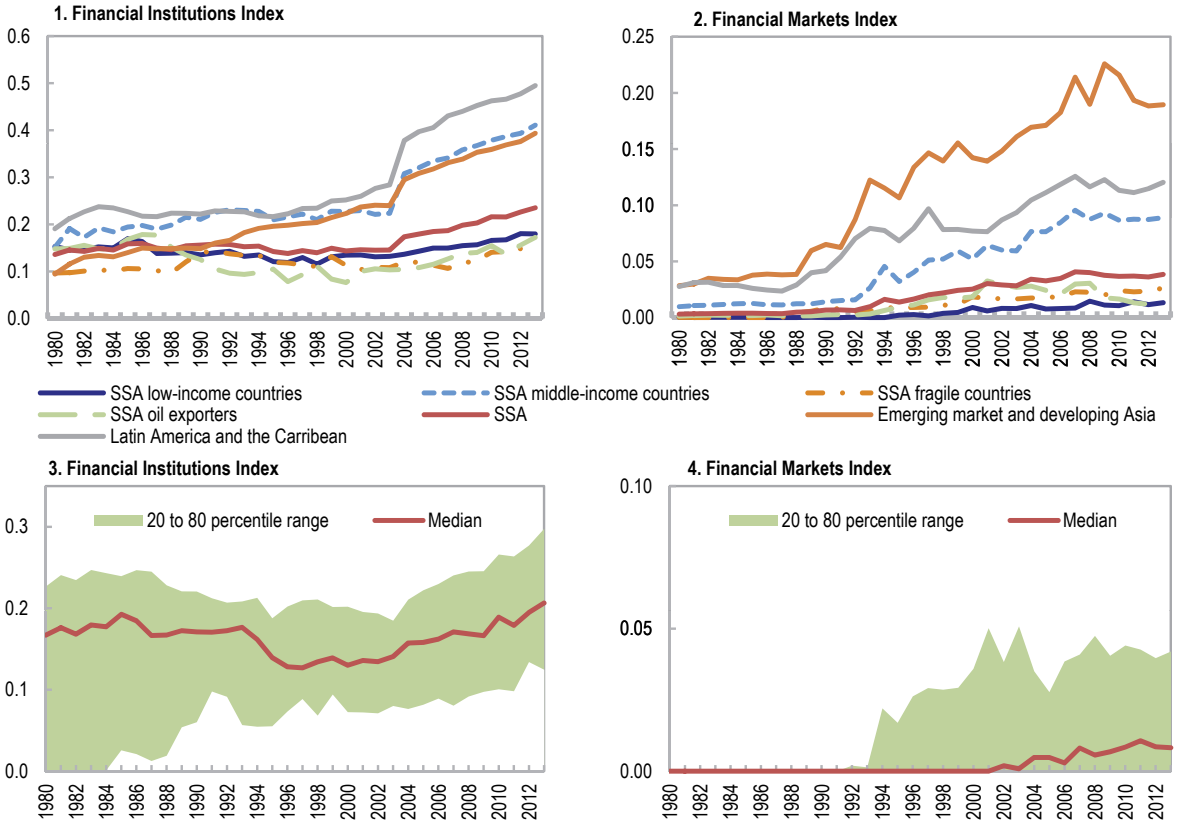
In sum, financial development in the region has made good progress, but underperformed against those of other developing regions. Financial inclusion also improved with the help of innovative financial services, such as mobile payment systems, but there remains scope for further improvement.

Further financial development is predicated on maintaining financial stability, especially avoiding financial crises. To that effect, the next section examines trends in financial stability and the regulatory environment.

FINANCIAL STABILITY AND REGULATORY REFORMS

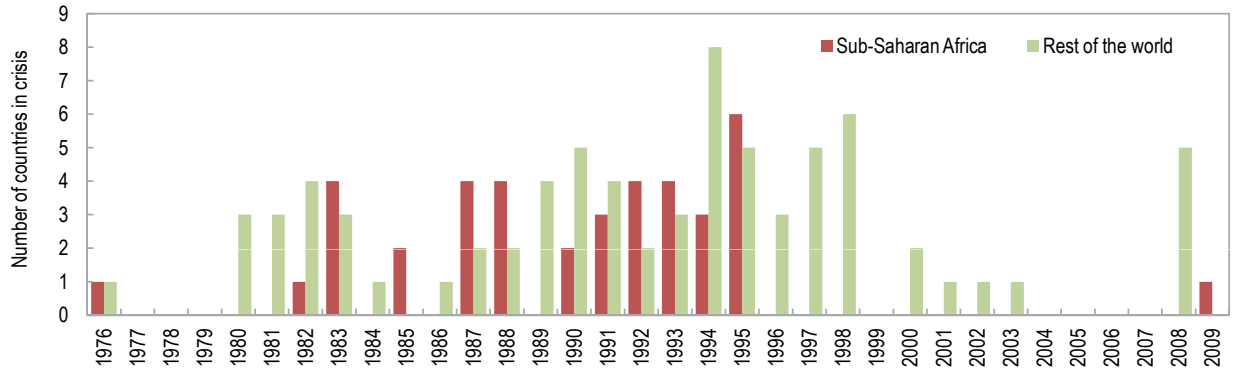
Key financial stability indicators—though stronger than in the past—have weakened more recently. This could presage a slower pace of financial development in the future. Progress in supervisory standards varies substantially across countries, and challenges to implementation remain. Pan-African banks bring new opportunities and are an important driver of financial development, but also pose oversight challenges, and may increase systemic risk.

Figure 3.6. Sub-Saharan Africa: Dimensions of Financial Development
(1 = highest development)



Sources: Sahay and others (2015b); and IMF staff calculations.
Note: SSA = sub-Saharan Africa.

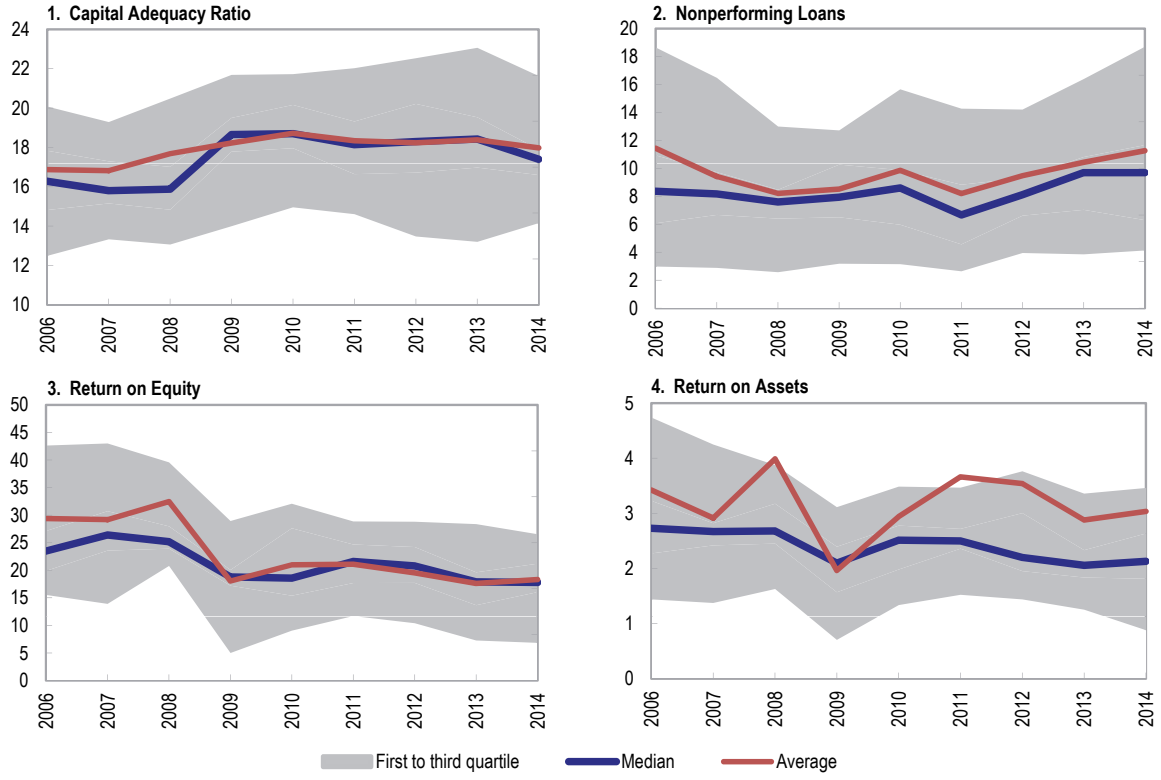
Figure 3.7. Systemic Banking Crises, 1976–2010



Source: Laeven and Valencia (2012).

Banking crises in the region have become significantly rarer, and financial soundness indicators have improved over recent decades but have weakened somewhat more recently (Figures 3.7 and 3.8). The reduced frequency of banking crises—a trend evolving in parallel with favorable macroeconomic conditions and improvements in supervisory framework—from the early 2000s has undoubtedly contributed to financial development. At the same time, the impact of the global financial crisis on financial sector stability has been moderate in most sub-Saharan African countries (Mlachila, Park, and Yabara 2013), possibly also reflecting the region's relatively low financial integration. In fact, the main financial soundness indicators have improved compared with a decade ago (Mecagni,

Figure 3.8. Sub-Saharan Africa: Financial Soundness Indicators, 2006–14
(Percent)



Sources: Country authorities; and IMF staff estimates.

Marchettini, and Maino 2015). However, in the last five years, financial soundness indicators deteriorated somewhat, with capital adequacy ratios staying flat at best and nonperforming loans continuously rising. More recently, the decline in commodity prices, tighter external financing conditions, and exchange rate depreciations have exerted further pressures on various dimensions of financial soundness, in particular in commodity-exporting countries (Chapter 1). This could be a harbinger of a slower pace of financial development in the medium term.

Progress in supervisory standards and implementation of deposit insurance schemes varies substantially across the region (Enoch, Mathieu, and Mecagni 2015; Mecagni, Marchettini, and Maino 2015; Table 3.1). Most countries have already moved to international reporting standards or plan to move toward them in the short term, while only six countries still rely on national

Table 3.1. Sub-Saharan Africa: Financial Sector Supervisory Standards

	Accounting Standard	Capital Adequacy Standard[1]	Deposit Insurance	Asset Classification[2]
Angola	National	No Basel II yet	No	< 90 days
Botswana	IFRS	Basel II in progress	No	90 days
Burundi	IFRS Plan	Basel II in progress	No	> 90 days
Cabo Verde	IFRS	Basel II in progress	No	< 90 days
CEMAC	IFRS Plan	No Basel II yet	Implemented	> 90 days
Comoros	National	Basel II in progress	No	N/A
Congo, Dem. Rep.	National	No Basel II yet	No	90 days
Eritrea	N/A	N/A	No	N/A
Ethiopia	IFRS Plan	No Basel II yet	No	90 days
Gambia	IFRS Plan	No Basel II yet	No	90 days
Ghana	IFRS	No Basel II yet	No	90 days
Guinea	National	No Basel II yet	No	N/A
Kenya	IFRS	Parts of Basel II/III	Implemented	90 days
Lesotho	IFRS	No Basel II yet	No	90 days
Liberia	IFRS	Basel II in progress	No	90 days
Madagascar	National	No Basel II yet	No	90 days
Malawi	IFRS	Basel II	No	90 days
Mauritius	IFRS	Basel II	No	90 days
Mozambique	IFRS	Basel II	No	> 90 days
Namibia	IFRS	Parts of Basel II	No	90 days
Nigeria	IFRS	Basel II in progress	Implemented	90 days
Rwanda	IFRS	Basel II in progress	No	90 days
São Tomé and Príncipe	IFRS Plan	Basel II in progress	No	N/A
Seychelles	IFRS Plan	No Basel II yet	No	90 days
Sierra Leone	IFRS	No Basel II yet	No	90 days
South Africa	IFRS	Basel III	No	90 days
South Sudan	National	No Basel II yet	No	N/A
Swaziland	IFRS	No Basel II yet	No	90 days
Uganda	IFRS	No Basel II yet	Implemented	90 days
Tanzania	IFRS	No Basel II yet	Implemented	90 days
WAEMU	IFRS Plan	No Basel II yet	No	> 90 days
Zambia	IFRS	No Basel II yet	No	90 days
Zimbabwe	IFRS	Basel II in progress	Implemented	91 days

Sources: Enoch, Mathieu, and Mecagni (2015); Mecagni, Marchettini, and Maino (2015).

Note: CEMAC = Economic and Monetary Community of Central Africa; IFRS = internatinal financial reporting standards; N/A = not available.; WAEMU = West African Economic and Monetary Union.

[1] The Financial Stability Institute conducts a survey on the current status report on implementation of Basel II, Basel 2.5, and Basel III for non-Basel Committee on Banking Supervision/non-European Union jurisdictions and publishes unedited responses. The column is based for Basel II on answers to Pillar 1 (standardized approach of credit risk, basic indicator approach, and standardized approach for operational risk), Pillar 2, and Pillar 3.

[2] This category indicates the threshold of "number of days in arrears" after which loans are classified as nonperforming loans.

standards (including Angola, Guinea, and South Sudan). However, only a few countries and one monetary union have thus far implemented deposit insurance schemes (in the Economic and Monetary Community of Central African States, CEMAC, as well as Kenya, Nigeria, Tanzania, Uganda, and Zimbabwe). Basel II standards have been implemented only in Malawi, Mauritius, Mozambique, and South Africa.

Likewise, enforcement of prudential standards is quite weak in some cases, and the adoption of stricter financial standards in the future is likely to face implementation hurdles. Prudential standards are insufficiently enforced in many of the region's countries. For example, though the West African Economic and Monetary Union's (WAEMU's) Banking Commission has put considerable effort into building operational capacity and enhancing banking supervision in the past few years, half of the WAEMU's member countries do not comply with the regionally required regulatory (Basel I) capital adequacy ratio of 8 percent (IMF 2015f). This highlights that more ambitious standards in the future may face the risk of weak implementation capacity.

The rapid expansion of PABs brings new opportunities, but it also poses more risks. The role of PABs in enhancing financial intermediation, promoting greater economic integration, and fostering innovation is critical. However, there are also risks related to their systemic importance and interconnectedness. The most important risk is related to the lack of adequate supervisory oversight on a consolidated basis. At the same time, some banks have weak internal governance frameworks. These problems need to be addressed to mitigate systemic risks that could endanger financial development.

The next section examines what the region's potential for further improvement with respect to financial development implies in terms of growth and growth volatility.

TO WHAT EXTENT HAS FINANCIAL DEVELOPMENT BOOSTED GROWTH AND LOWERED ITS VOLATILITY?

Empirical estimates suggest that financial development has supported growth and reduced its volatility in sub-Saharan Africa. It has facilitated other economic policies in enhancing growth and stabilizing the economy. However, the region's financial development still performs below the benchmark level. Raising the median financial development index to its benchmark value could lead to an increase in growth by about 1½ percentage points. The results confirm the salutary effect on reducing the volatility of growth and other macroeconomic variables. However, countries need to be vigilant about the emerging macro-financial risks to effectively manage the risks associated with financial development.

Catching up with the structural financial development benchmark

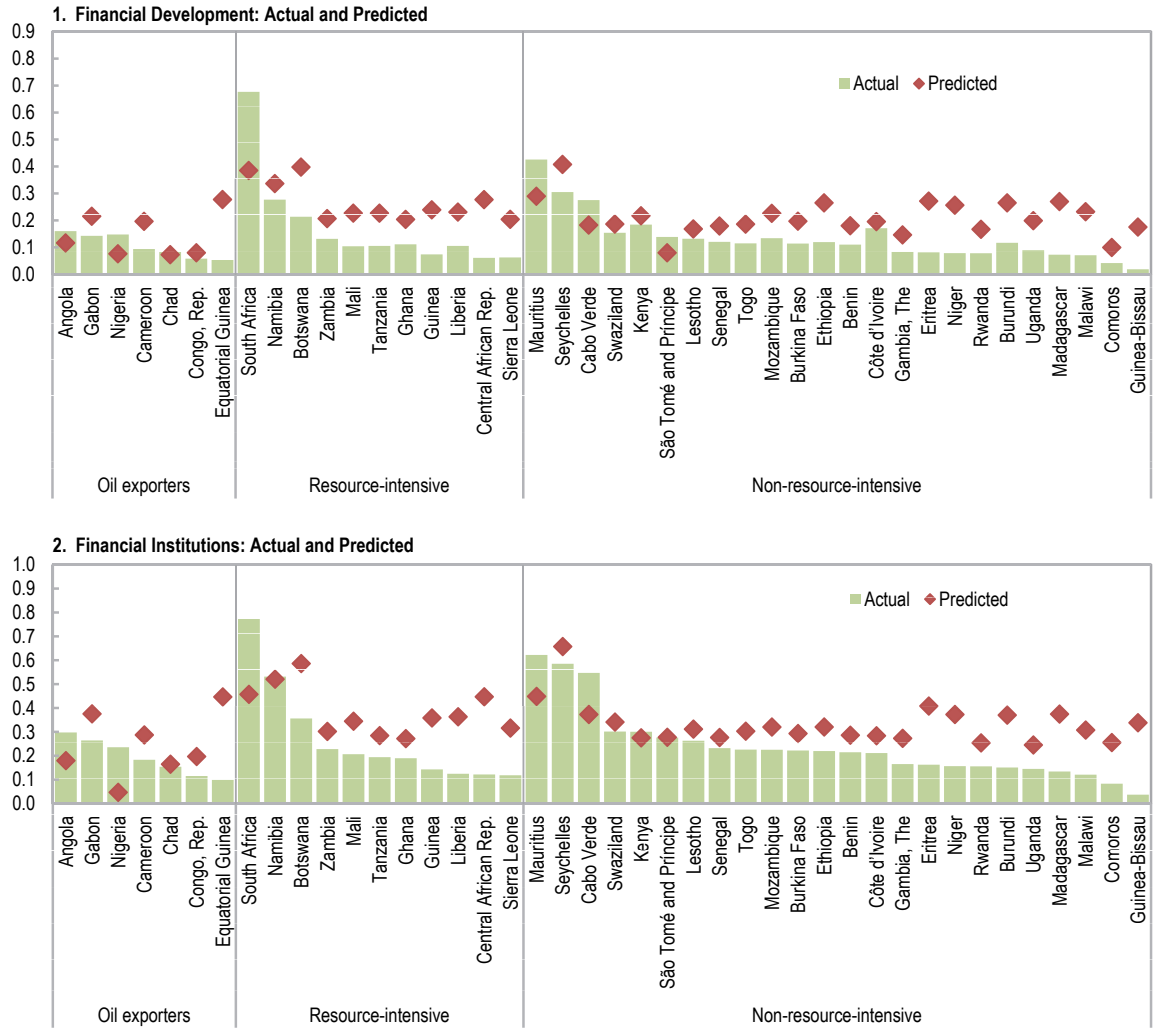
The level of financial development in many sub-Saharan African countries is below the statistical benchmark (Figure 3.9).

- An empirical analysis of 152 countries from 1980 to 2013 helps obtain benchmark levels of financial development consistent with individual countries' structural characteristics.[1] These fundamentals abstract from countries' institutional capacity or policies, and could therefore be interpreted as a potential level that countries with similar characteristics have accomplished. The next section explores the factors that could be driving the differences between the gaps.

[1] An index of financial development is taken as the dependent variable. Structural characteristics include log of real GDP per capita and its square to account for nonlinearities, population, population density, the age-dependency ratio to account for different saving behaviors across income groups, dummies for oil exporters and legal origin, and time dummies to capture the global macroeconomic environment. IMF (2015a) follows a similar approach with a different financial development index. Barajas and others (2013) used a similarly structured regression to benchmark countries' private-sector-credit-to-GDP ratio. Such statistical benchmarking has been applied to specific country groups in various cases (for example, Alter and Yontcheva 2015; Newiak and Awad 2015). Similar results were obtained when financial institutions and financial markets were examined separately.

- The results suggest that financial development in the region is generally below the benchmark level. Relatively fast financial development over the past decade has led to a catch-up or even surpassing the benchmark only in middle-income countries that expanded financial institutions beyond the banking sector (Cabo Verde, Mauritius, South Africa), Côte d'Ivoire, and large oil exporters (Angola, Nigeria). For the latter group, benchmark levels are typically comparatively low because oil production is often self-financed and/or from offshore sources. As a result, the sector contributes less to financial sector development, than other sectors. Among others, Angola has seen particularly rapid development, with bank deposits increasing from 21 percent to 49 percent of GDP, and bank loans rising from 5 percent to 24 percent of GDP between 2005 and 2013, and has consequently surpassed the benchmark level (Takebe 2015). A similar exercise that creates a benchmark for the financial institutions component of the index yields very similar results.

Figure 3.9. Sub-Saharan Africa: Actual and Predicted Financial Development, 2013
(1 = most developed; 0 = least developed)



Sources: Sahay and others (2015b); and IMF staff estimates.

Financial development has supported growth and reduced its volatility...

Empirical evidence suggests that financial development supports growth in the region, especially at lower levels of financial development, although the effect on volatility is less robust. Many studies find a positive impact, but suggest the existence of a threshold beyond which financial development is detrimental to growth (Arcand, Berkes, and Panizza 2012; Ceccheti and Kharoubi 2015; Sahay and others 2015b). However, most countries in the region are well below the threshold to exhibit adverse growth effects.[2] The literature has also shown that financial development helps dampen the impact of adverse shocks by alleviating firms' and households' borrowing constraints (Caballero and Krishnamurty 2001), and promoting diversification and management of risk (Acemoglu and Zilibotti 1997). However, the financial accelerator mechanism may propagate and amplify the impact of real shocks in an environment with credit market imperfections (Bernanke, Gertler, and Gilchrist 1999).

Deeper financial development is associated with higher growth in sub-Saharan African countries, with the size of the effect varying across countries. This section assesses the impact of financial development on growth[3] in sub-Saharan Africa following Sahay and others (2015b), and includes factors specific to the region, such as the effect of aid flows and of the share of the agricultural sector as a proxy for the primary and informal sectors. The results show a positive impact of financial development on growth (Table 3.2), and thus there is further scope for financial deepening in the region to better support growth, given that most sub-Saharan African countries are well below the inflection point for potential adverse effects. In particular, raising the median financial development index to its benchmark value is associated with an increase in growth by about 1½ percentage points.

Table 3.2. Sub-Saharan Africa: GMM Estimation Results of Impact of Financial Development on Growth

	Model 1	Model 2
Financial development index	27.00 **	
	(11.6)	
Financial development index (squared)	–33.83 *	
	(19.9)	
Financial institution index		9.956 ***
		(3.51)
Financial market index		0.794
		(19.19)
Financial institution index * financial market index		–19.590
		(24.82)
Observations	216	216
Number of countries	39	39

Source: IMF staff estimates.

Note: The dependent variable is real GDP growth, averaged over nonoverlapping five-year periods. Data cover more than 43 sub-Saharan African countries (SSA), but availability varies by variables. Following Sahay and others (2015b), additional control variables include initial per capita GDP, education enrollment, and share of government consumption in GDP. The share of agriculture in GDP is added to better reflect its significance in SSA. Given the weak coefficient on the square terms, and that most SSA countries are at the relatively low level of financial development below the threshold to exhibit negative growth impact as discussed in the text, the model on the component index is run in level only in favor of parsimony. Model 1 represents the overall effect of financial development; model 2 represents the effect of dimensions of financial development. GMM = generalized method of moments.

Robust standard errors in parentheses; *** p<0.01, ** p<0.05,* p<0.1.

The impact on growth tends to be stronger for countries at lower levels of financial development. For low-income countries, with larger estimated gaps to the benchmark, the potential increase in growth is almost 2 percentage points, while the growth boost for oil producers is at about ½ percentage point. In other words, raising the index of Niger (0.08) to the level of Kenya (0.18) generates a positive growth impact of 2 percentage points, while a further increase to the level of Namibia (0.28) adds 1 percentage point.[4] The

[2]Arcand, Berkes, and Panizza (2012) find evidence of an adverse impact of finance on growth above a threshold of private credit to GDP of 100 percent, far above the actual level of sub-Saharan African countries.

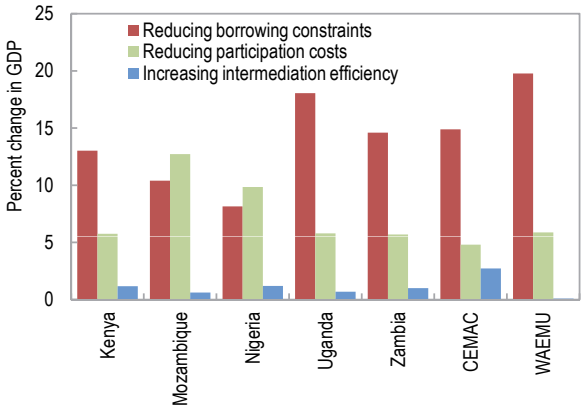
[3] As identified in the literature on finance and growth (for example, Levine 2005 and Beck 2008), the empirical analysis encounters significant endogeneity issues. Following the literature, our analysis uses the panel generalized method of moments estimator, which uses lagged variables as instruments to minimize the problem.

[4] To obtain the growth impact arising from a baseline financial development level to a higher one while holding other conditions equal, a new growth rate is calculated using the new index and coefficients in Table 3.2, while the baseline growth rate is calculated using the existing index. Thus the difference between the two growth rates can be considered as a one-off impact owing to the improvement of the financial development index. The estimates for country groups are based on the median index for the corresponding group.

results also show that for a median sub-Saharan African country, most of the growth effect is from the support of financial institutions, while that from financial markets is positive but not significant, likely undermined by the lack of financial infrastructure and competition. The results are illustrative and should be taken with caution given the short history of financial market development outside of the banking sector among most of these countries.

The findings of recent microfounded studies corroborate the salutary growth impact of relaxing structural financial constraints. The October 2015 *Regional Economic Outlook: Sub-Saharan Africa* summarizes the benefits of removing the most binding constraints to financial inclusion on GDP, TFP, and inequality in a set of countries (Kenya, Mozambique, Nigeria, Uganda, and Zambia) and two monetary unions using the general equilibrium framework of Dabla-Norris and others (2015). The study identified borrowing constraints—limited enforcement of contracts and asymmetric information that results in high collateral and smaller leverage ratios—as the most relevant hurdles to firms' access to finance. Relaxing these borrowing constraints could increase GDP levels by 8 percent to 20 percent through a substantial improvement in TFP over the long term (Figure 3.10). Lowering participation costs—factors limiting access to credit such as distance to banks or ATMs and documentation to apply for a loan—also modestly contribute to growth.

Figure 3.10. Long-Term Impact on GDP of Relaxing Financial Constraints

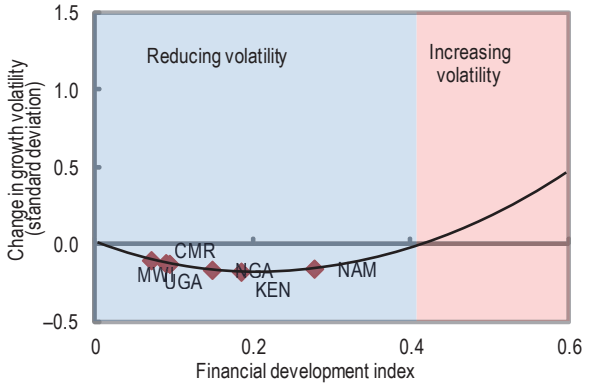


Sources: Dabla-Norris and others (2015); IMF country staff reports; and IMF staff calculations.

Note: CEMAC = Economic and Monetary Community of Central Africa; WAEMU = West African Economic and Monetary Union.

The relationship between financial development and growth volatility appears to be nonlinear in the vast majority of countries in the region. Following Sahay and others (2015b) and including region-specific control variables, we find that the relationship between financial development and volatility is nonlinear in sub-Saharan African countries (Table 3.3), similar to findings in other regions. Financial development initially smoothes growth volatility by relaxing credit constraints on firms and households, and providing them with a variety of instruments to withstand adverse shocks. However, as the financial sector deepens, its contribution to reducing volatility declines because a deeper financial sector increases the propagation and amplification of shocks. However, the majority of countries in the region are below the threshold (estimated around 0.4, Figure 3.11) beyond which financial development starts increasing growth volatility. The empirical analysis suggests that—under the current institutional setting and structural characteristics—this threshold is lower

Figure 3.11. Sub-Saharan Africa: Impact of Financial Development on Growth Volatility



Source: IMF staff calculations.

Note: See page 82 for country abbreviations. Based on the regression coefficients, this chart illustrates the simulated marginal impact on the standard deviation of real GDP growth rate (five-year rolling standard deviation) of a 10 percent increase in a country's financial development index. The U-shaped trend line shows that the reduction on volatility is stronger for countries with lower index level and still favorable but less strong for countries with already comparatively higher level of financial development (blue-shaded area). Beyond a certain financial development threshold, further increase in the index would increase growth volatility (red-shaded area). The chart also reports pilot countries under intensive macrofinancial surveillance at the IMF (Namibia, Malawi, Uganda) and with more advanced financial sectors, including Kenya, and Nigeria.

for sub-Saharan Africa compared to that of other countries. This presumably reflects the insufficiency of the region's legal and institutional frameworks required to fully reap the benefits of deeper financial systems. Moreover, the region is subject to more frequent and larger shocks than others, specially those related to international commodity prices (see Chapter 2).

The analysis has also been extended to investment volatility and to different components of financial development. The results suggest that financial development reduces investment growth volatility but only up to a certain point for sub-Saharan African countries, although it increases investment fluctuations in other regions of the world (Table 3.3). The pronounced reduction of investment volatility may be attributed to the greater access to credit for large firms, which account for the bulk of investment in sub-Saharan African countries. Both financial institutions and financial markets are also found to dampen growth volatility but financial institutions are found to play a prominent role, consistent with their level of development in sub-Saharan African countries, as elaborated ealier. This relationship holds also for investment growth though in a linear fashion.

...but requires more vigilance against macrofinancial risks

Recent country studies in the region highlight a number of emerging macrofinancial risks. For example, in the WAEMU, a combination of widening fiscal imbalances and accommodative monetary policy by the regional central bank

Table 3.3. Sub-Saharan Africa: Estimation Results of Impact of Financial Development on Growth Volatility

Dependent variable: volatility of	GDP growth		Investment-to-GDP growth	
Financial development index	–7.589 ***		157.1 ***	
	(1.118)		(2.741)	
Financial development index (squared term)	3.739 ***		–280.1 ***	
	(1.318)		(3.519)	
Financial institution index		–5.236 ***		–24.67 ***
		(0.664)		(0.768)
Financial institution index (squared term)		5.03 ***		
		(0.910)		
Financial market index		–2.967 *		–38.80 ***
		(1.529)		(1.024)
Financial market index (squared term)		–0.106		
		(1.688)		
SSA* financial development index	–9.706 ***		–246.3 ***	
	(1.963)		(10.06)	
SSA* financial development index (squared term)	16.31 ***		404.6 ***	
	(2.679)		(51.59)	
SSA* financial institution index		–4.592 ***		–9.052 ***
		(1.265)		(3.253)
SSA* financial institution index (squared term)		7.187 ***		
		(1.970)		
SSA* financial market index		–2.290		32.65 ***
		(4.228)		(8.731)
SSA* financial market index (squared term)		2.373		
		(7.077)		
Observations	1,173	1,173	1,083	1,083
Number of countries	95	95	89	89

Sources: Sahay and others (2015b); and IMF staff estimates.

Note: Dependent variable: five-year rolling standard deviation of real GDP growth and growth of investment-to-GDP ratio. Additional control variables: five-year lags of GDP per capita, trade and financial openness, energy exports (percent of GDP), volatility of foreign growth, gross capital inflows in the region excluding country in question, terms-of-trade changes, polity index, growth in GDP per capita, government balance, and aid to GDP growth volatility for 1995–2013. The high magnitude of financial development variables' coefficients on investment volatility could be explained by the substantial volatility of investment across countries and over time. In addition, although the aggregate coefficient is positive for the global sample, the financial development coefficient for sub-Saharan African countries (FD + FDxSSA) is statistically significant and negative while the coefficient on the square term is statistically significant and positive at the 5 percent level.

Robust standard errors in parentheses; *** p<0.01, ** p<0.05,* p<0.1.

(BCEAO) has allowed banks to significantly increase holdings of government securities to take advantage of the interest rate margin of government bonds over the low BCEAO refinancing rate, raising the sovereign-financial risk (IMF 2015f; and see Chapter 1).[5] In Malawi, inadequate fiscal adjustment led to the accumulation of domestic payment arrears and increased recourse to domestic financing, resulting in higher nonperforming loans and higher financial sector exposure to the government, and heightened economic uncertainty (IMF 2015c). In Namibia, a booming housing market has been posing a great risk to banks and could potentially lead to a fiscal risk. In the CEMAC, Namibia, and Uganda, banks' credit growth has been accompanied by significant concentration risks (IMF 2015b, 2015d, 2015e). Moreover, in Uganda, high dollarization in loans and deposits poses potential credit risks because of possible currency mismatches in borrowers' balance sheets. These developments could initiate bank and sovereign risk feedback loops. If such a risk were to materialize, it could be easily exacerbated given the lack of enforcement of prudential rules and a weak judiciary system, and weak crisis resolution frameworks in the region.

In summary, financial development has supported growth and reduced its volatility in sub-Saharan Africa. However, the region's level of financial development generally stayed below the benchmark level. If the region can raise the median financial development index to the benchmark level, its growth could be increased. The next section investigates how the region can approach the benchmark level of financial development.

[5] Government debt has increased from 18 percent to 22 percent of banks' total assets between 2011 and 2014 in the WAEMU region.

WHAT DRIVES OR INHIBITS FINANCIAL DEVELOPMENT IN SUB-SAHARAN AFRICA?

This section finds that sound macroeconomic fundamentals have been driving financial development in sub-Saharan African countries, while weak institutional quality has been hindering it in many countries in the region. Improvements in legal frameworks and corporate governance seem to be the most promising avenues to boost financial development in the region.

Macroeconomic fundamentals have been driving financial development in the region…

Macroeconomic fundamentals are the main drivers of financial development in the region. Drawing on the existing literature, this section analyzes the drivers of financial development in developing economies, with a special focus on sub-Saharan African countries. In particular, following the literature (for example, Kose, Prasad, and Terrones 2006), we investigate the effects from two key aspects of globalization—trade and financial integration.[6] The following are the key findings (Table 3.4):

- *Macroeconomic fundamentals* positively affect financial development in developing economies in general and for the region in particular. High inflation, as a proxy for macroeconomic instability, negatively affects financial development.[7] Also, the income effect is significant, indicating more scope for financial development as the middle class starts to emerge in sub-Saharan African countries.
- *International trade integration*, measured by the share of total exports and imports of goods and services in GDP, positively affects financial development in developing economies, but

[6] A generalized method of moments estimation was employed to mitigate the problems caused by the endogeneity. Nevertheless, the lack of consensus on the theory or the factors driving financial development suggests some uncertainty in model specification, and thus the results from this exploratory analysis should be interpreted with caution.

[7] There are many other candidates for a proxy for macroeconomic stability, but inflation is the most widely used measure of macroeconomic stability.

the effects almost disappear in the region (in contrast with the theory of financial development by Rajan and Zingales 2003).[8] However, it is noteworthy that the effect from trade integration is much stronger than that from financial integration overall in developing economies, pointing to a large potential opportunity sub-Saharan African countries might have missed.

- Similarly, international financial integration, measured by the share of international assets and liabilities as a share of GDP—reflecting a country's de facto degree of capital account openness—positively affects financial development in developing economies and even more strongly affects financial development in sub-Saharan African countries.
- Lower country risk appears to be conducive to financial development in developing economies, but the positive effects diminish in the region. It might suggest that financial market participants demand a higher risk premium in sub-Saharan African countries, even for the same risk rating. Thus further institutional reform to address the country-specific bottlenecks in financial market information infrastructure to support market participants can further stimulate financial development.

To sum up, sub-Saharan Africa's financial developments relatively weak, and does not sufficiently benefit from international trade integration as in other regions. We therefore examine below the reasons for the underperformance of sub-Saharan African countries, and try to identify systematic patterns among them.

[8] Rajan and Zingales (2003) argued that incumbent interest groups oppose financial development because the greater competition erodes their rents. They claimed that opening of trade and finance weakens the incumbent power and reduces opposition to financial reform. Meanwhile, Svaleryd and Vlachos (2002) claimed that international financial integration might increase liquidity and reduce the cost of capital, and consequently foster financial development. Baltagi, Demetriades, and Law (2009) and Klein and Olivei (2008) empirically confirmed this theory in advanced and developing economies.

...but weak institutional quality has been inhibiting financial development in many of the region's countries

Recent evidence suggests that sub-Saharan African countries might be able to approach the benchmark level of financial development by improving institutional quality. Previous studies have generally shown that institutional quality is one of the leading explanations for financial underdevelopment in the region's countries. We therefore examine the relationship between institutional quality

Table 3.4. Sub-Saharan Africa: Drivers of Financial Development

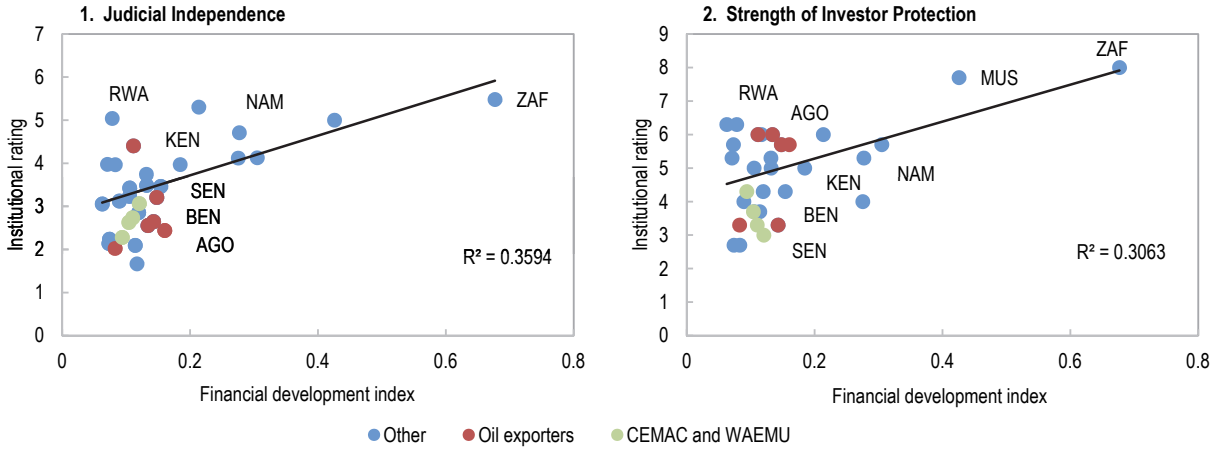
	GMM
Financial development index ($t-1$)	0.549 ***
	[0.017]
Capital account openness (de facto index, $t-1$)	0.005 **
	[0.002]
Trade openness index (total trade/GDP, $t-1$)	0.044 ***
	[0.006]
Real GDP per capita ($t-1$)	0.087 ***
	[0.007]
Inflation rate ($t-1$)	–0.021 ***
	[0.003]
ICRG county risk rating	0.123 ***
	[0.016]
SSA * capital account openness ($t-1$)	0.009 ***
	[0.003]
SSA * trade openness ($t-1$)	–0.042 ***
	[0.009]
SSA * inflation rate ($t-1$)	–0.017
	[0.014]
SSA * ICRG country risk rating	–0.105 ***
	[0.033]
Constant	–0.714 ***
	[0.046]
Observations	1,809
Number of countries	82

Source: IMF staff estimates.

Note: Based on panel regressions of data for 1980–2013 for about 90 developing countries (excluding oil exporters), although the number of observations vary depending on the variable. Interaction terms with sub-Saharan Africa (SSA) only show the incremental impact for the region's countries. In other words, the overall impact on sub-Saharan African countries should be evaluated by the sum of the coefficients for all developing countries and the coefficients on interaction terms. Including oil exporters does not qualitatively change the core results. ICRG = International Country Risk Guide; GMM = generalized method of moments.

Robust standard errors in brackets; *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Figure 3.12. Sub-Saharan Africa: Financial Development and Institutional Quality in 2013



Source: IMF staff estimates.
Note: See page 82 for country abbreviations. CEMAC = Economic and Monetary Community of Central Africa; WAEMU = West African Economic and Monetary Union.

and financial development using recent data.[9] Figure 3.12 shows that some types of institutional indicators are associated with the financial development index. It could suggest that improving institutional quality could help countries catch up in financial development. However, other factors also play a role. For example, some of the oil exporters (Angola, Nigeria) outperform the benchmarks because the availability of oil revenues is likely to have induced financial development despite their relatively weak institutional quality.

Some institutions seem to matter more than others

Sub-Saharan African countries could reap the benefits of financial development by focusing on improving legal frameworks and corporate governance. To derive more specific policy implications, we analyze empirically the effect of different institutional indicators in more detail.[10] The results reveal that many indicators of institutional quality can help reduce the negative gap to the financial development benchmark (Table 3.5). In particular, protecting minority shareholders' interests, strengthening judicial independence, and strengthening investor protection are important for achieving a country's benchmark level of financial development in the area of legal frameworks. In the area of corporate governance, strengthening of auditing and reporting standards appears essential. In a similar vein, country studies (for example, Alter and Yontcheva 2015; Cui, Dieterich, and Maino 2016; Newiak and Awad 2015) find specific constraints in financial market infrastructure, such as high collateral requirements and the lack of credit information and property registry, and have impeded financial deepening and inclusion in central and west Africa. Drawing on the above findings, the next section presents selected policy recommendations.

POLICY RECOMMENDATIONS

Although financial development has contributed to economic growth and its reduced volatility in sub-Saharan Africa, it is well below its benchmark. To reap the full benefits of financial development, in addition to maintaining overall macroeconomic stability, appropriate financial sector policies should be formulated and implemented, focusing on building institutions, promoting sound legal and regulatory frameworks, and broadening financial inclusion. That said, policymakers should be aware that this process takes time. They also need to recognize that

[9] The institutional quality index was obtained from the Global Competitiveness Index's Pillar 1 (Institution) by the World Economic Forum. Using alternative institutional indicators, such as the World Bank's Country Policy and Institutional Assessment produces similar results.

[10] The same exercise was conducted with the World Bank's Doing Business indicators, and the institutional indices of Polity IV. The results are similar but less robust than the results using the Global Competitiveness Index.

Table 3.5. Sub-Saharan Africa: Top Ranking of Coefficients between the Distance to the Benchmark and Detailed Institutional Quality

Detailed institutional quality	Coefficient with the distance to the benchmark	*R*-squared	Ranking of coefficient [1]
Protection of minority shareholders' interests	0.0614 **	0.153	1
Strength of auditing and reporting standards	0.0468 **	0.158	2
Efficiency of legal framework in challenging regulations	0.0424	0.073	3
Efficiency of legal framework in settling disputes	0.0400	0.079	4
Transparency of government policymaking	0.0385	0.044	5
Efficacy of corporate boards	0.0379	0.040	6
Property rights	0.0346	0.072	7
Judicial independence	0.0343 **	0.119	8
Intellectual property protection	0.0326	0.064	9
Irregular payments and bribes	0.0326	0.079	9
Ethical behavior of firms	0.0309	0.032	11
Strength of investor protection	0.0251 *	0.118	12

Source: IMF staff estimates.

[1] Coefficients are ranked from high to low as higher coefficients help to improve financial development in a more efficient way.

*** $p<0.01$, ** $p<0.05$, * $p<0.1$.

promoting financial development requires agility and careful management, particularly in periods of financial liberalization, regional integration, and when adopting technological innovations (such as mobile banking). As financial systems evolve, existing rules and regulations need to be adjusted to address emerging risks.

The policies—appropriately calibrated for sub-Saharan Africa—could include:

- *Providing strong legal and institutional frameworks and promoting sound corporate governance* (Gulde and others 2006). Strengthening legal and institutional frameworks, including protecting the interests of minority shareholders, fostering contract enforcement, and judicial independence, are critical for creating a conducive environment in which the financial sector can develop and thrive. Enhancing credit information systems and reducing costs related to prohibitively high collateral requirements would address constraints to credit growth and facilitate financial inclusion. Improving corporate governance and information disclosure, especially by aligning standards in accounting, auditing, and financial reporting with international best practices, would help to reduce the negative gap to the financial development benchmark.
- Strengthening supervision, including cross-border oversight and on a consolidated basis. Because enforcement of prudential standards remains weak in some countries, providing supervisors with more enforcement power and strengthening the capacity of the supervisory agencies should come to the fore of the agenda. The rapid expansion of pan-African banks calls for enhancing cross-border oversight, and on a consolidated basis, which should be done by improving cross-country collaboration among home and host supervisors, and inter-institutional cooperation within countries. Expediting harmonization of regulations and supervisory procedures and closing gaps in crisis management should also be addressed in a timely manner. Establishing an appropriate mechanism for resolving nonviable institutions (for example, through a special resolution regime) and ensuring adequate functioning of deposit insurance schemes is critical for mitigating potential risks of spillovers.
- *Introducing an enabling regulatory environment to broaden financial inclusion*. As indicated by recent evidence, particularly in mobile banking, low transaction costs and technological innovations played a particularly important role in bringing a large share of the population into the financial system net, particularly in east Africa. At the same time, the risks related to

rapid growth of mobile money transactions and the increasing complexity of these transactions should be monitored carefully by the regulators. As the mobile money transactions become increasingly popular in the low-income segment of the population, it is important to strengthen protection of householders' scarce funds.

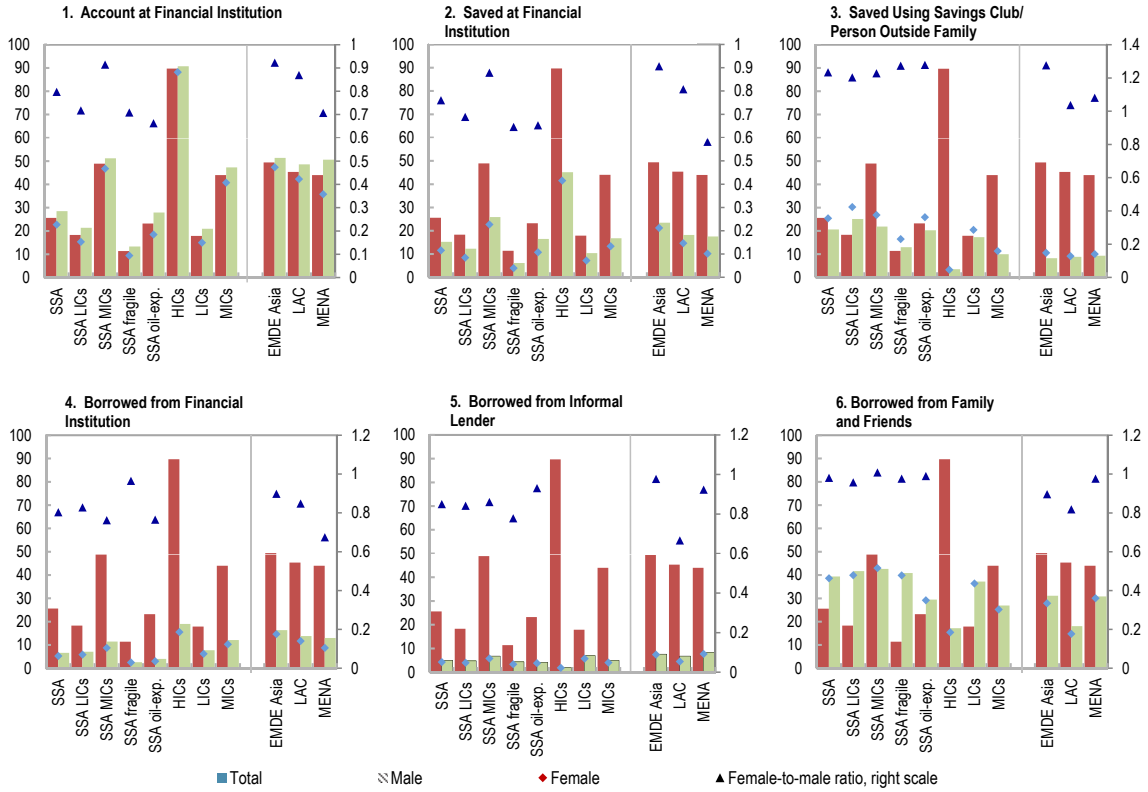
- *Supporting bank competition is also essential for making financial services more affordable and positively contributes to financial inclusion and higher efficiency of the financial system*.

The main drivers of competition are entry (regulations on licensing) and exit policies (resolution regimes); therefore, introducing policies that allow the entry of well-capitalized institutions and the timely exit of insolvent ones is an important precondition for creating a competitive environment in the sector (World Bank 2012). As indicated by empirical studies, fostering competition may in fact require more regulation, particularly at the early stages of financial development (Chami, Fullenkamp, and Sharma 2010).

Box 3.1. Gender Inequality in Financial Access and Macroeconomic Outcomes

*Sub-Saharan Africa lags behind other developing regions in terms of overall financial access as well as gender aspects of financial inclusion (*Figure 3.1.1). Access to financial services is generally lower in sub-Saharan Africa compared with other developing regions, in particular in the region's fragile states and low-income countries. In addition, access is particularly low for women, with gender gaps of most of the region's country groups being higher than in emerging and developing Asia or Latin America and the Caribbean. The region's fragile states are an exception but only because access levels are (equally) low for both genders. The gender gap is lower for informal activities, with more women than men saving in a savings club or with a person outside the family, and men and women appear to borrow equally from their family and friends.

Figure 3.1.1. Sub-Saharan Africa: Indicators of Financial Inclusion, 2014



Source: World Bank, Global Findex 2014.

Note: EMDE Asia = emerging market and developing Asia; HIC = high-income country; LIC = low-income country; MIC = middle-income country; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = sub-Saharan Africa.

Narrower gender gaps in financial inclusion are associated with both higher development and more equitable outcomes (Figure 3.1.2).

- More equal access for women and men to financial services, defined here as having an account at a formal financial institution, is correlated with higher economic development, as measured by higher GDP per capita or lower poverty rates.

Prepared by Corinne Delechat, Monique Newiak, and Fan Yang.

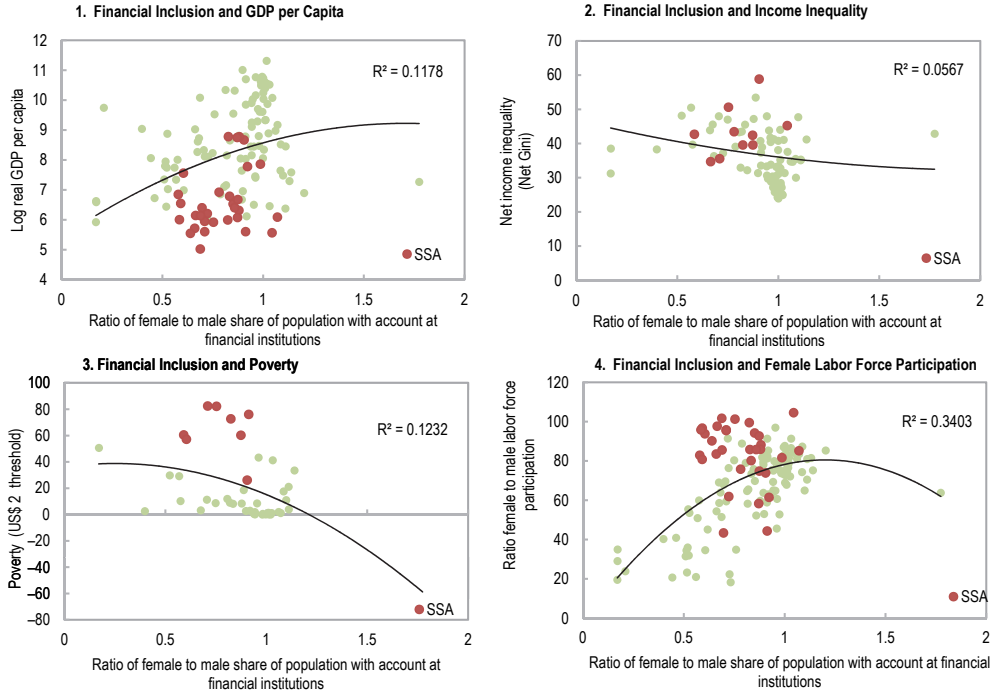
Box 3.1. *(continued)*

- It implies more equal opportunities for men and women, and is therefore associated with a more equal income distribution (lower net Gini coefficient).
- Finally, it is also associated with more equal labor force participation (LFP) rates between men and women. More equal LFP rates, in turn, have been previously associated with higher growth (Cuberes and Teignier forthcoming) and a more equal income distribution (Gonzales and others 2015b).

More equality in financial inclusion for men and women is significantly associated with lower income inequality (Table 3.1.1). Lower financial access among different groups of the population distorts the allocation of resources because it restricts investment in human and physical capital to the wealthier parts of the population (Galor and Zeira 1993). Using a broader index of formal financial inclusion in a cross-section of countries, we find that higher gender equality in financial inclusion is associated with lower income inequality. This effect comes on top of standard drivers of income inequality such as the structure of the economy, government expenditure, financial depth, and the level of development.

Gender equality in financial inclusion may be influencing income inequality through its effect on female LFP. Theoretically, financial inclusion can empower women economically and therefore contribute to higher female LFP. An account at a financial institution provides women with a place outside the home to store money safely (CGAP 2015), and access to borrowing can allow women to start a business, thus contributing to increases in entrepreneurship and self-employment. These channels are particularly important in sub-Saharan Africa where women are overrepresented in the informal sector, with a large part of the population in nonwage employment.

Figure 3.1.2. Gender Equality in Financial Inclusion and Macroeconomic Outcomes



Sources: Solt (2014); World Bank, Global Findex 2014; and World Bank, World Development Indicators.
Note: SSA = sub-Saharan Africa.

Box 3.1. *(continued)*

Indeed, the results from an empirical cross-country analysis suggest that greater gender equality in financial inclusion is significantly and positively associated with equality in LFP rates (Table 3.1.2). This finding holds when controlling previously identified determinants of female LFP such as the level of development (Duflo 2011; Tsani and others 2012), the gender gap in education (Eckstein and Lifshitz 2011; Steinberg and Nakane 2012), fertility rate (Mishra and Smyth 2010), the male-female age differential at the time of the first marriage, and an index of women's rights (Gonzales and others 2015a). The finding is particularly strong for sub-Saharan Africa, where a 10 percent reduction in the gender gap in financial inclusion is associated with a decline in the LFP gap by more than 4 percentage points.

Table 3.1.1. Determinants of Income Inequality

Variables	(1)	(2)	(3)	(4)	(5)
Financial inclusion gap	–16.038 ***	–15.874 ***	–12.577 **	–12.628 **	–9.828 **
	(5.52)	(5.56)	(5.02)	(4.96)	(4.81)
GDP per capita	–4.065 ***	–5.043 ***	–3.801 ***	–6.923 ***	–7.994 ***
	(0.75)	(1.18)	(1.1)	(2.22)	(2.14)
Financial depth		4.449	15.149 ***	14.029 ***	14.461 ***
		(4.77)	(4.96)	(4.95)	(4.7)
Financial depth * advanced economies			–13.615 ***	–11.488 ***	–7.248 **
			(3.24)	(3.46)	(3.62)
Agriculture share of GDP				–0.359	–0.529 **
				(0.22)	(0.22)
Government consumption expenditure					–0.524 ***
					(0.19)
Constant	89.459 ***	96.596 ***	80.421 ***	113.097 ***	129.694 ***
	(7.58)	(10.04)	(9.75)	(22.45)	(22.12)
Observations	70	69	69	69	69
R-squared	0.42	0.43	0.55	0.57	0.62

Source: IMF staff estimates.

Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

Table 3.1.2. Determinants of Female Labor Force Participation

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Financial inclusion gap	0.491 ***	0.399 ***	0.319 ***	0.220 ***	0.235 ***	0.241 ***	0.260 ***	0.211 ***
	(0.068)	(0.075)	(0.078)	(0.077)	(0.078)	(0.078)	(0.070)	(0.075)
GDP per capita	–0.483 ***	–0.67 ***	–0.489 ***	–0.708 ***	–0.736 ***	–0.678 ***	–0.468 ***	–0.529 ***
	(0.15)	(0.159)	(0.157)	(0.166)	(0.171)	(0.191)	(0.177)	(0.188)
GDP per capita squared	0.025 ***	0.034 ***	0.023 ***	0.036 ***	0.037 ***	0.034 ***	0.023 **	0.026 ***
	(0.008)	(0.009)	(0.009)	(0.009)	(0.009)	(0.01)	(0.01)	(0.01)
Education gap		0.324 ***	0.168	0.219 **	0.202 *	0.206 **	0.013	0.087
		(0.1)	(0.104)	(0.101)	(0.102)	(0.103)	(0.101)	(0.105)
Marriage age differential			–0.044 ***	–0.022	–0.031 **	–0.033 **	–0.042 ***	–0.04 ***
			(0.013)	(0.014)	(0.014)	(0.015)	(0.013)	(0.014)
Equal rights to get a job (dummy)				0.177 ***				
				(0.047)				
Female legal rights index					0.045 ***	0.049 ***	0.033 **	0.039 **
					(0.013)	(0.014)	(0.013)	(0.014)
Fertility rate						0.014	–0.05 **	–0.029 **
						(0.02)	(0.022)	(0.023)
SSA (dummy)							0.266 ***	
							(0.055)	
SSA * Financial inclusion gap								0.223 ***
								(0.071)
Constant	2.564 ***	3.339 ***	3.003 ***	3.719 ***	3.663 ***	3.292 ***	2.765 ***	2.936 ***
	(0.662)	(0.7)	(0.692)	(0.713)	(0.72)	(0.902)	(0.816)	(0.868)
Observations	137	122	107	99	99	99	99	99
R-squared	0.34	0.40	0.40	0.44	0.43	0.43	0.54	0.49

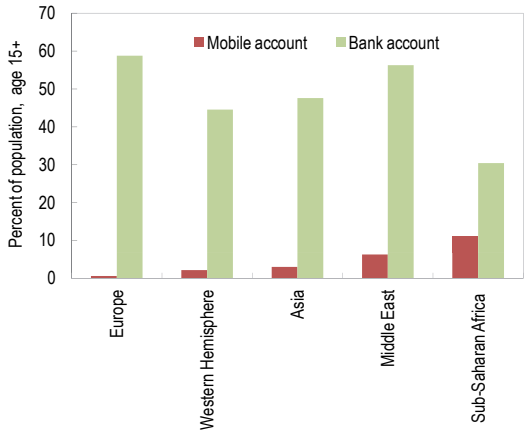
Source: IMF staff estimates.

Note: SSA = sub-Saharan Africa. Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

Box 3.2. Supporting Financial Development and Inclusion Through Mobile Payments and Banking Services

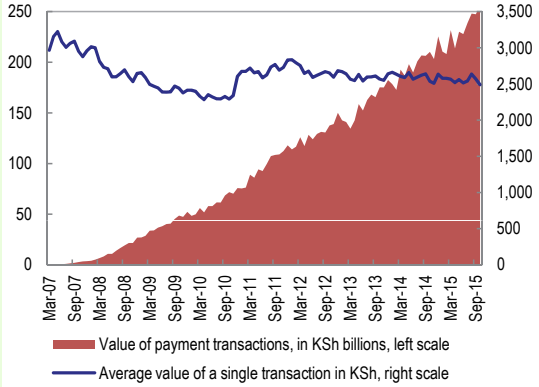
Sub-Saharan Africa leads in the adoption of mobile banking. In predominantly rural populations, traditional bank intermediaries do not reach sparsely populated areas, and costs of their services are frequently prohibitive for low-income households and small businesses. The recent surge in mobile money observed in many sub-Saharan African countries has been facilitated by low transaction costs, growing innovations, and a strong increase in mobile phone subscriptions. In 2014, the share of the population holding mobile bank accounts reached 11 percent in sub-Saharan Africa, almost twice as many as in any other regions (Figure 3.2.1).

Figure 3.2.1. Mobile Phone Subscriptions in 1999–2004



Source: World Bank, World Development Indicators.

Figure 3.2.2. Kenya: Development in Mobile Payments, 2007–15



Source: World Bank, Global Findex.

The successful experience of mobile operators in Kenya provides insights on how to leverage mobile technology to foster financial inclusion (Mbiti and Weil 2011; IMF 2012a). M-Pesa launched its first mobile phone application to facilitate microcredit repayments in 2007. While the company was experimenting with the microfinancing, it developed a framework for payments and savings. The number of mobile transactions grew rapidly, and quickly exceeded those of Western Union and via payment cards. The successful experience of M-Pesa helped to launch new products, such as M-Shwari and M-Kesho, which use the M-Pesa platform.[1] Although the average value of mobile payments in Kenya remains relatively small (at US$24—Figure 3.2.2), the system currently allows sending and withdrawing money at over 123,700 agents, compared with only approximately 1,440 bank branches and 2,700 ATMs. By end-2014, the value of mobile money transactions was higher (at 62 percent of GDP) than the outstanding deposits of the commercial banks (at 60 percent of GDP).

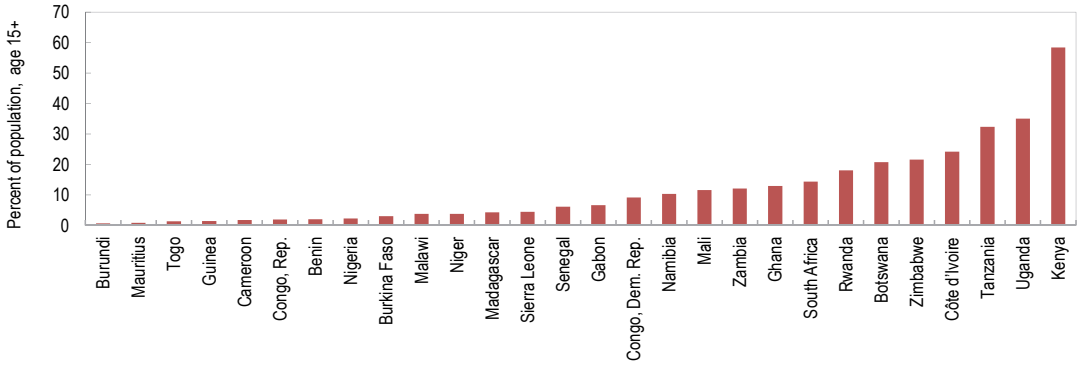
The growing provision of mobile payments to the previously unbanked population in Kenya had positive spillovers to other related areas. A number of factors facilitated the spread of services offered by M-Pesa, including inexpensive use of technology, and the policies allowing the operation of M-Pesa as a parallel payment system. The legal framework was kept open to allow the introduction of new products, while limiting the risks related to security of deposits. Over time, technological innovations have also facilitated access to health insurance and other saving and lending products, from which low-income populations were previously excluded.

There is significant potential to replicate the Kenyan experience in the rest of sub-Saharan Africa. The developments in mobile money boost financial inclusion (Mbiti and Weil 2011), complementing traditional bank services (Figure 3.2.3; GSMA 2014). Out of 28 countries in sub-Saharan Africa for which information is available, in six countries holders of mobile accounts exceeded 20 percent of the adult population. Kenya leads the region with

[1] M-Shwari is a deposit-lending facility tailored to the poor, which gained 7 million customers over a year of operations. M-Kesho is a set of financial services available to customers of Safaricom, which does not have a minimum balance or monthly charges on accounts but pays interest on accounts and offers emergency credit and insurance.

Box 3.2. *(continued)*

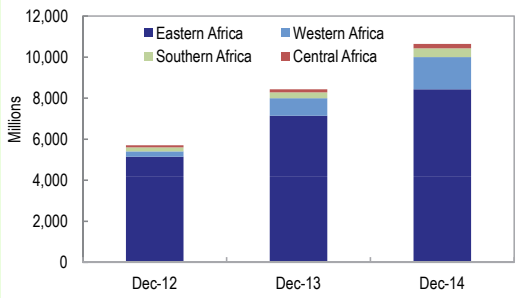
Figure 3.2.3 Mobile Accounts in Sub-Saharan Africa, 2014



Source: GSMA Mobile Money Programme.

almost 60 percent of the population holding such accounts. But mobile money transactions are also growing rapidly in Tanzania and Uganda, where such transactions doubled in the last three years in terms of broad money, reaching about 30 percent in mid-2015. In several African countries (Côte d'Ivoire, Kenya, Niger, Tanzania, Uganda, Zimbabwe), the number of mobile accounts has already exceeded the number of traditional bank accounts (World Bank 2014). However, access to mobile banking remains uneven in the rest of the region, with less than 5 percent of the population benefiting from it in several countries.[2]

Figure 3.2.4 Monthly Mobile Money Transactions



Source: GSMA Mobile Money Programme.

The size and variety of mobile financial products have expanded considerably. The number of banking transactions via mobile devices almost doubled in the region in the last two years (Figure 3.2.4). East Africa has led this trend, but mobile banking has also increased in other parts of Africa. In west Africa, mobile payments increased by a factor of six, although from a low base. Mobile money providers have broadened the range of financial products and services, as transaction accounts have served as a gateway to other financial services: utility bill and tax payments, savings vehicles, and credit and insurance products are gaining momentum in the mobile market in Côte d'Ivoire, Mauritius, Nigeria, Tanzania and Uganda. Products also target specific mobile users. For example, in Uganda, Orange Money has developed an application for farmers enabling them to buy farming supplies and receive payments for harvest. In Côte d'Ivoire, Orange, MTN, Moov, and Celpaid have developed an application that facilitates the payment of school registration (covering 1.5 million secondary school students). Increasingly, customers can also make international money transfers.

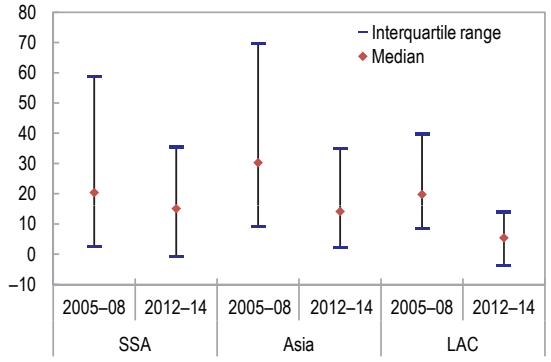
An enabling regulatory environment is essential for supporting the growth in mobile money services and financial inclusion (IMF 2012a; Klein and Mayer 2011). But there are also risks related to rapidly spreading mobile financial transactions, as they add to complexity and may give rise to abuse if conducted by unlicensed operators. Five key areas of risks need to be addressed by supervisors: legal framework, financial integrity, safeguarding funds, operational resiliency, and payment risks (Khiaonarong 2014). Supervisors should also monitor closely mobile money transaction values and ensure adequate protection of customer funds.

[2] A number of factors have been identified as potential impediments to the development of mobile financial services, including high costs of using electronic payments, especially for smaller transactions, a policy framework that requires intermediation via banks, and the lack of interoperability between providers.

Box 3.3. The Roles of Microfinance in Promoting Financial Inclusion

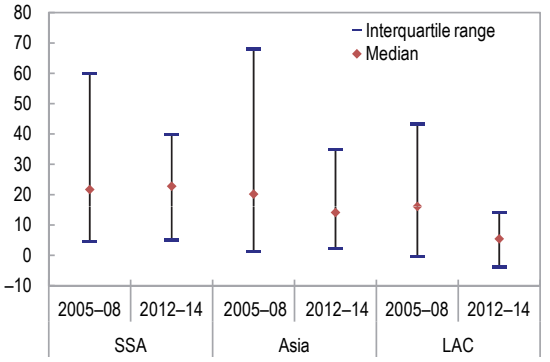
Microfinance has been growing rapidly in sub-Saharan Africa. Microfinance institutions (MFIs) typically provide small loans and saving services to the poor and near poor; some also provide micro-insurance and money transfer services. Following an average growth rate of about 20 percent a year in the number of borrowers and depositors since 2005, microfinance in the region now serves about 45 million clients in 2014 (Figures 3.3.1 and 3.3.2),[1] with the highest growth of MFI assets in east and southern Africa (Figure 3.3.3). In 2015–16, the region's microfinance market is projected to grow by 15–20 percent, second only to Asia, which can further support access to finance of the 350 million unbanked adults in the region (ResponsAbility 2014; Demirgüç-Kunt and others 2015).

Figure 3.3.1. Growth of Borrowers



Sources: MIX database; and IMF staff calculations.
Note: LAC = Latin America and the Caribbean; SSA = sub-Saharan Africa.

Figure 3.3.2. Growth of Depositors



Sources: MIX database; and IMF staff calculations.
Note: LAC = Latin America and the Caribbean; SSA = sub-Saharan Africa.

Microfinance has improved a variety of development indicators.[2] Overall microfinance activities remain small relative to those of banks, but their better reach to the poor with little or no collateral, including in rural areas, has significantly enhanced financial inclusion. MFIs also have had a positive impact on the poor, including through savings and credits (Ghana, Uganda), investment in microfirms (Kenya, Malawi), and income and consumption (Kenya, Madagascar, Malawi), although the evidence on its sustained poverty reduction impact is still mixed. MFIs also enhance gender equality as microcredits typically rely on women group guarantees to overcome the lack of collateral and missing financial market infrastructure. In 2014, about 60 percent of MFI borrowers were women in the region, almost twice women's share of formal bank accounts. But this ratio still lags behind that of the best-performing region of Asia and varies among the subregions, led by east Africa. Studies also find that microcredits by women have stronger positive impact.

Saving mobilization has outpaced credit services of MFIs. Over the past decade, growth in the number of depositors has exceeded that of borrowers. In 2013–14, depositors outnumbered borrowers four to one, while total volume of deposits also exceeded the gross loan portfolio in all subregions (Figure 3.3.3), reducing MFIs' funding needs from borrowing (less than 10 percent in the region). In contrast, numbers of borrowers and depositors are similar in other regions on average, and the volume of gross loan portfolios exceeds that of deposits. Moreover, borrowing in other regions is much higher—at about a quarter of total liabilities, with deposits accounting for one-half. Despite favorable financing costs, MFIs in sub-Saharan Africa encounter higher operational expenses (Figure 3.3.4), largely driven by the lack of physical and financial market infrastructure.

[1] Data are based on reports of microfinance institutions to the MIX database, and thus the incomplete coverage of such data indicates that they are more useful in analyzing the trend than the absolute level.

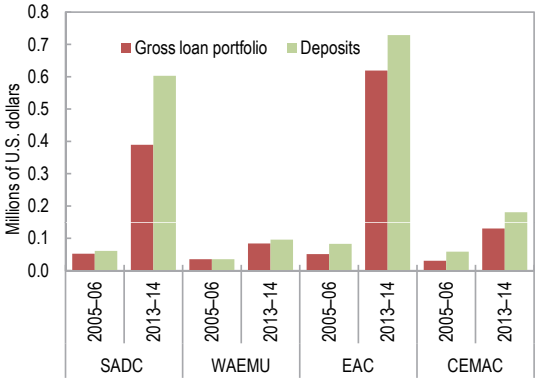
[2] For a detailed overview and results see, for example, Beck and Maimbo (2013), Cull, Ehrbeck, and Holle (2014), Roodman (2012), van Rooyen, Stewart, and De Wet (2012), and Demirgüç-Kunt and others (2015).

Box 3.3. *(continued)*

The declining portfolio quality of MFIs underscores emerging challenges. Despite charging higher interest rates (Figure 3.3.5), MFIs in sub-Saharan Africa produce a portfolio quality similar to the global average. Compared with other regions, sub-Saharan Africa records a higher loan loss rate, which has risen to about 5 percent in 2012–14, the highest of all regions. Although the share of loans at risk is largely at par with the global average, it has risen steadily (Figure 3.3.6). Despite the significant contribution to financial inclusion, MFIs are also subject to boom-bust cycles, and given that their clients are mostly the poor with less education, the sector is particularly vulnerable to natural disasters (for example, India, Nicaragua) and Ponzi schemes (Benin). Although the small size of MFIs generally limits the contingent fiscal risk, any significant shock can affect confidence, undermine financial deepening, and harm the poor the most. Therefore, strong actions are needed to address the risks in light of several recent crisis episodes.

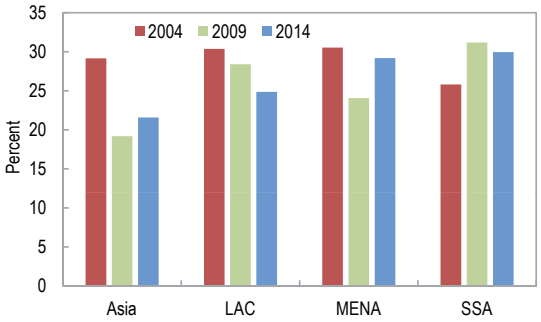
Improving financial literacy and financial market infrastructure are fundamental to strengthening MFIs. These measures help overcome critical information problems that impede access to finance. Also, they enhance the efficiency of microfinance and smooth the transition to bank finance as microfirms grow (CGAP and MIX 2011).

Figure 3.3.3. Microfinance Loans versus Deposits



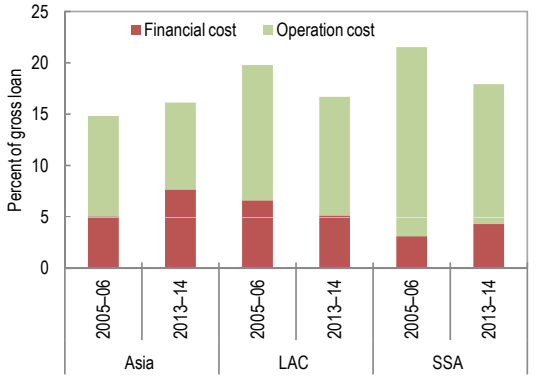
Sources: MIX database; and IMF, staff calculations.

Figure 3.3.5. Nominal Interest of MFIs



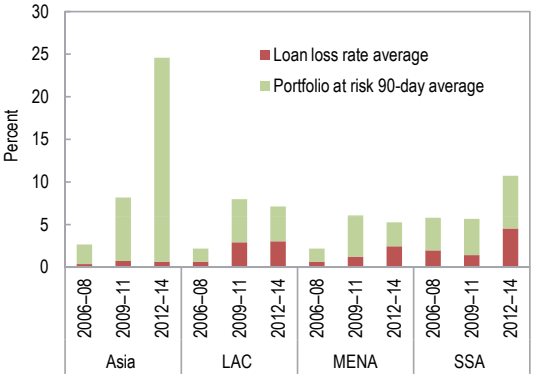
Sources: MIX database; and IMF staff calculations.

Figure 3.3.4. Financial versus Operational Cost



Sources: MIX database; and IMF staff calculations.

Figure 3.3.6. Portfolio Quality Indicators



Sources: MIX database; and IMF staff calculations.

Note: CEMAC = Economic and Monetary Community of Central Africa; EAC = East African community; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SADC = Southern African Development Community; SSA = sub-Saharan Africa; WAEMU = Western African Economic and Monetary Union.

Box 3.3. *(continued)*

Furthermore, these measures help to prevent the borrower overindebtedness that has contributed to repayment crisis episodes in some countries in Asia and Latin America. In particular, technological innovation and product diversification can inject further dynamism in microfinance and enhance its growth and poverty impact. Given its advantage in reducing operational costs by tapping into the fast-growing and high-penetration mobile network, mobile banking has become a fast-growing business for MFIs (Côte d'Ivoire, Kenya).

Strengthening supervision is key to addressing consumer protection and financial stability concerns while supporting financial inclusion. While the "test and learn" approach to supervision has supported rapid growth of the sector in many of the region's countries, enhancing risk-based supervision and enforcement is critical to weed out problem MFIs to support stability and efficiency (BIS 2010; CGAP and MIX 2011; Cui, Dieterich, and Maino 2016). Some countries made progress in regulating MFIs by activities (Democratic Republic of Congo, Kenya, Rwanda, Uganda, and the West African Economic and Monetary Union), but effective enforcement against small-sized, yet often more numerous, MFIs requires stronger commitment and commensurate resources by relevant supervisors. In addition to supervisor monitoring, strengthening professionalism in the microfinance sector is important to mitigate governance risk. Finally, the high share of MFIs that take deposits in the region also require effective collaboration between supervisors of nonbank financial institutions and bank supervisors.

Box 3.4. Measuring Financial Development and Inclusion

The financial development index (Sahay and others 2015b); Svirydzenka 2016) combines subindices on financial institutions and markets along the dimensions of financial depth, access, and efficiency.

Financial Institutions

Depth: Ratios of private sector credit to GDP, pension fund assets to GDP, mutual fund assets to GDP, life and non-life insurance premiums to GDP.

Access: Commercial bank branches per 100,000 adults, and ATMs per 100,000 adults.

Efficiency: Net interest margin, lending-deposit spread, non-interest income to total income, overhead costs to total assets, return on assets, and return on equity.

Financial markets

Depth: Ratios of stock market capitalization to GDP, stock market turnover to GDP, international government debt securities outstanding to GDP, and total debt securities outstanding of private nonfinancial corporations to GDP.

Access: Percent of stock market capitalization outside of top 10 largest companies, total number of debt security issuers (domestic and external, nonfinancial corporations, financial corporations).

Efficiency: Stock market turnover ratio (stock market turnover/capitalization).

The underlying series and subindices are combined in a linear manner, with weights being determined by principal component analysis. Financial depth has a relatively large weight in the financial institutions and markets subindices. However, for the overall index, financial markets and institutions enter with equal weights.

Statistical Appendix

Unless otherwise noted, data and projections presented in this *Regional Economic Outlook* are IMF staff estimates as of 25 March, 2016, consistent with the projections underlying the April 2016 *World Economic Outlook*.

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

Country Groupings

Country classifications have been changed compared to previous *Regional Economic Outlooks.*

Countries are aggregated into four (overlapping) groups: oil exporters, middle-income, low-income, and fragile countries (see table on page 80 for the new country groupings).

The membership of these groups reflects the most recent data on per capita gross national income (averaged over three years) and the 2014 World Bank, Country Policy and Institutional Assessment (CPIA) score.

- The oil exporters are countries where net oil exports make up 30 percent or more of total exports. Except for Angola, Nigeria, and South Sudan, they belong to the Central African Economic and Monetary Community (CEMAC).
- The middle-income countries had per capita gross national income in the years 2012–14 of more than US$1,045.00 (World Bank, using the Atlas method).
- The low-income countries had average per capita gross national income in the years 2012–14 equal to or lower than US$1,045.00 (World Bank, Atlas method).
- The fragile countries had average CPIA scores of 3.2 or less in the years 2012–14 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 80: 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 (WEO) 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 U.S. 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 WEO 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	Middle-income countries	Low-income countries		Fragile countries
Angola	Angola	Benin	Malawi	Burundi
Cameroon	Botswana	Burkina Faso	Mali	Central African Republic
Chad	Cabo Verde	Burundi	Mozambique	Chad
Congo, Republic of	Cameroon	Central African Republic	Niger	Comoros
Equatorial Guinea	Congo, Republic of	Chad	Rwanda	Congo, Dem. Rep. of
Gabon	Côte d'Ivoire	Comoros	Senegal	Congo, Republic of
Nigeria	Equatorial Guinea	Congo, Dem. Rep. of	Sierra Leone	Côte d'Ivoire
South Sudan	Gabon	Eritrea	South Sudan	Eritrea
	Ghana	Ethiopia	Tanzania	Guinea
	Kenya	Gambia, The	Togo	Guinea-Bissau
	Lesotho	Guinea	Uganda	Liberia
	Mauritius	Guinea-Bissau	Zimbabwe	Madagascar
	Namibia	Liberia		Malawi
	Nigeria	Madagascar		Mali
	Seychelles			São Tomé and Príncipe
	São Tomé and Príncipe			Sierra Leone
	South Africa			South Sudan
	Swaziland			Togo
	Zambia			Zimbabwe

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 Republic	Comoros	Kenya	Botswana	Lesotho	Burkina Faso
Côte d'Ivoire	Chad	Congo, Dem. Rep.	Rwanda	Congo, Dem. Rep	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

Sub-Saharan Africa: Country Classifications

	Oil exporters	Oil importers	MICs	LICs	LICs excluding fragile	Fragile countries
Angola	X		X			
Benin		X		X	X	
Botswana		X	X			
Burkina Faso		X		X	X	
Burundi		X		X		X
Cabo Verde		X	X			
Cameroon	X		X			
Central African Rep.		X		X		X
Chad	X			X		X
Comoros		X		X		X
Congo, Dem. Rep. of		X		X		X
Congo, Rep. of	X		X			X
Côte d'Ivoire		X	X			X
Equatorial Guinea	X		X			
Eritrea		X		X		X
Ethiopia		X		X	X	
Gabon	X		X			
Gambia, The		X		X	X	
Ghana		X	X			
Guinea		X		X		X
Guinea-Bissau		X		X		X
Kenya		X	X			
Lesotho		X	X			
Liberia		X		X		X
Madagascar		X		X		X
Malawi		X		X		X
Mali		X		X		X
Mauritius		X	X			
Mozambique		X		X	X	
Namibia		X	X			
Niger		X		X	X	
Nigeria	X		X			
Rwanda		X		X	X	
São Tomé & Príncipe		X	X			X
Senegal		X		X	X	
Seychelles		X	X			
Sierra Leone		X		X		X
South Africa		X	X			
South Sudan	X			X		X
Swaziland		X	X			
Tanzania		X		X	X	
Togo		X		X		X
Uganda		X		X	X	
Zambia		X	X			
Zimbabwe		X		X		X

List of Country Abbreviations:

AGO	Angola	ERI	Eritrea	MLI	Mali	SWZ	Swaziland
BDI	Burundi	ETH	Ethiopia	MOZ	Mozambique	SYC	Seychelles
BEN	Benin	GAB	Gabon	MUS	Mauritius	TCD	Chad
BFA	Burkina Faso	GHA	Ghana	MWI	Malawi	TGO	Togo
BWA	Botswana	GIN	Guinea	NAM	Namibia	TZA	Tanzania
CAF	Central African Republic	GMB	Gambia, The	NER	Niger	UGA	Uganda
CIV	Côte d'Ivoire	GNB	Guinea-Bissau	NIG	Nigeria	ZAF	South Africa
CMR	Cameroon	GNQ	Equatorial Guinea	RWA	Rwanda	ZMB	Zambia
COD	Congo, Dem. Rep. of	KEN	Kenya	SEN	Senegal	ZWE	Zimbabwe
COG	Congo, Rep. of	LBR	Liberia	SLE	Sierra Leone		
COM	Comoros	LSO	Lesotho	SSD	South Sudan		
CPV	Cabo Verde	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, African Department database, and IMF, World Economic Outlook database, 25 March, 2016.

[1] Fiscal year data.

[2] 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 U.S. dollars. Staff estimates of U.S. dollar values may differ from authorities' estimates.

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

Tables SA4–SA5

Sources: IMF, African Department database, and IMF, World Economic Outlook database, 25 March, 2016.

[1] 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 U.S. dollars. Staff estimates of U.S. dollar values may differ from authorities' estimates.

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

Table SA20

Sources: IMF, African Department database, and IMF, World Economic Outlook database, 25 March, 2016.

[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 U.S. dollars. Staff estimates of U.S. 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 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 84
SA2. Real Non-Oil GDP Growth 85
SA3. Real Per Capita GDP Growth 86
SA4. Consumer Prices, Average 87
SA5. Consumer Prices, End of Period 88
SA6. Total Investment 89
SA7. Gross National Savings 90
SA8. Overall Fiscal Balance, Including Grants 91
SA9. Overall Fiscal Balance, Excluding Grants 92
SA10. Government Revenue, Excluding Grants 93
SA11. Government Expenditure 94
SA12. Government Debt 95
SA13. Broad Money 96
SA14. Broad Money Growth 97
SA15. Claims on Nonfinancial Private Sector Growth (Percent change) 98
SA16. Claims on Nonfinancial Private Sector (Percent of GDP) 99
SA17. Exports of Goods and Services 100
SA18. Imports of Goods and Services 101
SA19. Trade Balance on Goods 102
SA20. External Current Account 103
SA21. Net Foreign Direct Investment 104
SA22. Real Effective Exchange Rates 105
SA23. Nominal Effective Exchange Rates 106
SA24. External Debt, Official Debt, Debtor Based 107
SA25. Terms of Trade on Goods 108
SA26. Reserves 109
SA27. Banking Penetration 110
SA28. Banking Sector: Loan-to-Deposit Ratio 111

Table SA1. Real GDP Growth
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	17.3	2.4	3.4	3.9	5.2	6.8	4.8	3.0	2.5	2.7
Benin	4.2	2.3	2.1	3.0	4.6	6.9	6.5	5.2	5.0	5.2
Botswana	6.0	–7.7	8.6	6.0	4.5	9.9	3.2	–0.3	3.7	4.3
Burkina Faso	5.9	3.0	8.4	6.6	6.5	6.6	4.0	4.0	5.0	5.7
Burundi	4.4	3.8	5.1	4.0	4.4	4.5	4.7	–4.1	3.4	3.9
Cabo Verde	7.1	–1.3	1.5	4.0	1.1	1.0	1.8	1.8	2.9	3.5
Cameroon	3.1	1.9	3.3	4.1	4.6	5.6	5.9	5.9	4.9	4.6
Central African Rep.	3.3	1.7	3.0	3.3	4.1	–36.0	1.0	4.3	5.7	5.9
Chad	9.7	4.2	13.6	0.1	8.9	5.7	6.9	1.8	–0.4	1.6
Comoros	1.3	1.8	2.1	2.2	3.0	3.5	2.0	1.0	2.2	3.3
Congo, Dem. Rep. of	6.1	2.9	7.1	6.9	7.1	8.5	9.2	7.7	4.9	5.1
Congo, Rep. of	4.3	7.5	8.7	3.4	3.8	3.3	6.8	2.5	4.4	4.3
Côte d'Ivoire	1.8	3.3	2.0	–4.4	10.7	8.7	7.9	8.6	8.5	8.0
Equatorial Guinea	13.0	–4.5	–3.8	2.0	5.7	–6.5	–0.3	–12.2	–7.4	–1.9
Eritrea	–2.1	3.9	2.2	8.7	7.0	3.1	5.0	4.8	3.7	3.2
Ethiopia[1]	11.8	10.0	10.6	11.4	8.7	9.9	10.3	10.2	4.5	7.0
Gabon	1.3	–2.3	6.3	7.1	5.3	5.6	4.3	4.0	3.2	4.5
Gambia, The	3.3	6.4	6.5	–4.3	5.6	4.8	–0.2	4.4	2.3	3.3
Ghana	6.2	4.8	7.9	14.0	9.3	7.3	4.0	3.5	4.5	7.7
Guinea	2.9	–0.3	1.9	3.9	3.8	2.3	1.1	0.1	4.1	5.4
Guinea-Bissau	3.1	3.3	4.4	9.4	–1.8	0.8	2.5	4.8	4.8	5.0
Kenya	4.6	3.3	8.4	6.1	4.6	5.7	5.3	5.6	6.0	6.1
Lesotho	4.0	4.5	6.9	4.5	5.3	3.6	3.4	2.5	2.6	4.1
Liberia	7.3	5.1	6.1	7.4	8.2	8.7	0.7	0.0	2.5	4.7
Madagascar	5.8	–4.7	0.3	1.5	3.0	2.3	3.3	3.0	4.1	4.5
Malawi	6.1	8.3	6.9	4.9	1.9	5.2	5.7	2.9	3.0	4.0
Mali	4.2	4.7	5.4	3.2	–0.8	2.3	7.5	6.1	5.0	5.2
Mauritius	4.3	3.0	4.1	3.9	3.2	3.2	3.6	3.4	3.8	3.9
Mozambique	8.3	6.4	6.7	7.1	7.2	7.1	7.4	6.3	6.0	6.8
Namibia	4.3	0.3	6.0	5.1	5.1	5.7	6.4	4.5	4.2	5.8
Niger	5.2	–0.7	8.4	2.2	11.8	5.3	7.0	4.0	4.9	6.9
Nigeria	8.6	9.0	10.0	4.9	4.3	5.4	6.3	2.7	2.3	3.5
Rwanda	9.0	6.3	7.3	7.8	8.8	4.7	7.0	6.9	6.3	6.7
São Tomé & Príncipe	5.7	4.0	4.5	4.8	4.5	4.0	4.5	4.0	5.0	5.5
Senegal	4.5	2.4	4.3	1.9	4.5	3.6	4.3	6.5	6.6	6.8
Seychelles	4.8	–1.1	5.9	5.4	3.7	5.0	6.2	4.4	3.3	3.5
Sierra Leone	5.8	3.2	5.3	6.0	15.2	20.7	4.6	–21.5	5.3	–0.7
South Africa	4.8	–1.5	3.0	3.2	2.2	2.2	1.5	1.3	0.6	1.2
South Sudan	...	...	...	...	–52.4	29.3	2.9	–0.2	–7.8	8.2
Swaziland	4.4	1.9	1.4	1.2	3.0	2.9	2.5	1.7	0.5	1.1
Tanzania	6.5	5.4	6.4	7.9	5.1	7.3	7.0	7.0	6.9	6.8
Togo	2.4	3.5	4.1	4.8	5.9	5.4	5.4	5.3	5.2	5.2
Uganda	8.3	8.1	7.7	6.8	2.6	4.0	4.9	5.0	5.3	5.7
Zambia	7.7	9.2	10.3	5.6	7.6	5.1	5.0	3.6	3.4	4.8
Zimbabwe[2]	–7.5	7.5	11.4	11.9	10.6	4.5	3.8	1.5	2.7	3.5
Sub-Saharan Africa	**6.8**	**4.0**	**6.6**	**5.0**	**4.3**	**5.2**	**5.1**	**3.4**	**3.0**	**4.0**
Median	4.8	3.3	6.0	4.8	4.6	5.1	4.7	4.0	4.1	4.7
Excluding Nigeria and South Africa	6.8	3.7	6.2	5.9	5.3	6.5	5.8	4.7	4.4	5.4
Oil-exporting countries	**9.2**	**7.0**	**8.5**	**4.6**	**3.8**	**5.7**	**5.9**	**2.6**	**2.2**	**3.4**
Excluding Nigeria	10.7	1.7	4.2	3.7	2.4	6.5	4.8	2.3	1.8	3.3
Oil-importing countries	**5.3**	**2.0**	**5.3**	**5.2**	**4.7**	**4.8**	**4.4**	**4.0**	**3.6**	**4.4**
Excluding South Africa	5.6	4.4	6.8	6.6	6.2	6.4	6.1	5.4	5.2	6.0
Middle-income countries	**6.9**	**3.8**	**6.5**	**4.5**	**4.2**	**4.6**	**4.6**	**2.6**	**2.5**	**3.4**
Excluding South Africa and Nigeria	7.3	2.5	5.4	5.2	6.0	5.9	4.9	3.8	4.2	5.0
Low-income countries	**6.3**	**5.1**	**7.0**	**6.6**	**4.5**	**7.1**	**6.6**	**5.7**	**4.7**	**5.8**
Excluding low-income fragile countries	7.7	6.3	7.6	7.6	6.2	7.0	7.2	7.2	5.6	6.5
Fragile countries	**3.5**	**3.3**	**5.6**	**3.1**	**3.4**	**7.2**	**6.1**	**3.9**	**4.2**	**5.2**
CFA franc zone	4.6	2.1	4.6	2.3	6.0	4.4	5.7	4.4	4.6	5.2
CEMAC	5.7	1.1	4.8	3.6	5.4	2.7	4.9	2.0	2.3	3.4
WAEMU	3.6	2.9	4.4	1.2	6.5	5.9	6.4	6.4	6.5	6.6
COMESA (SSA members)	6.2	5.6	7.9	7.1	5.9	6.1	6.5	6.0	4.6	5.6
EAC-5	6.2	5.2	7.4	6.9	4.6	5.8	5.9	5.8	6.1	6.3
ECOWAS	7.4	7.5	8.8	5.0	5.1	5.7	6.0	3.1	3.2	4.3
SACU	4.8	–1.6	3.3	3.4	2.4	2.7	1.8	1.3	0.9	1.5
SADC	6.2	0.5	4.2	4.3	3.7	4.2	3.5	2.7	2.4	2.9

See sources and footnotes on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	17.6	8.1	7.6	9.5	5.5	10.9	8.2	1.6	1.6	4.0
Benin	4.2	2.3	2.1	3.0	4.6	6.9	6.5	5.2	5.0	5.2
Botswana	6.0	–7.7	8.6	6.0	4.5	9.9	3.2	–0.3	3.7	4.3
Burkina Faso	5.9	3.0	8.4	6.6	6.5	6.6	4.0	4.0	5.0	5.7
Burundi	4.4	3.8	5.1	4.0	4.4	4.5	4.7	–4.1	3.4	3.9
Cabo Verde	7.1	–1.3	1.5	4.0	1.1	1.0	1.8	1.8	2.9	3.5
Cameroon	3.6	2.9	4.1	4.6	4.6	5.4	5.6	5.2	5.1	5.1
Central African Rep.	3.3	1.7	3.0	3.3	4.1	–36.0	1.0	4.3	5.7	5.9
Chad	6.3	6.4	17.2	0.2	11.6	8.0	7.1	–2.9	0.5	2.6
Comoros	1.3	1.8	2.1	2.2	3.0	3.5	2.0	1.0	2.2	3.3
Congo, Dem. Rep. of	5.9	2.8	7.2	7.0	7.2	8.6	9.2	7.8	5.0	5.1
Congo, Rep. of	5.7	3.9	6.5	7.4	9.7	8.1	7.9	4.8	3.0	3.2
Côte d'Ivoire	1.8	2.1	2.6	–4.8	13.5	8.8	8.3	8.0	7.9	8.0
Equatorial Guinea	31.8	13.0	1.1	9.9	0.3	3.3	–0.5	–0.6	–2.9	–2.9
Eritrea	–2.1	3.9	2.2	8.7	7.0	3.1	5.0	4.8	3.7	3.2
Ethiopia[1]	11.8	10.0	10.6	11.4	8.7	9.9	10.3	10.2	4.5	7.0
Gabon	5.0	–3.3	13.1	10.5	7.1	7.8	5.0	4.0	5.4	6.6
Gambia, The	3.3	6.4	6.5	–4.3	5.6	4.8	–0.2	4.4	2.3	3.3
Ghana	6.2	4.8	7.9	8.4	8.6	6.7	4.0	3.5	3.5	4.5
Guinea	2.9	–0.3	1.9	3.9	3.8	2.3	1.1	0.1	4.1	5.4
Guinea-Bissau	3.1	3.3	4.4	9.4	–1.8	0.8	2.5	4.8	4.8	5.0
Kenya	4.6	3.3	8.4	6.1	4.6	5.7	5.3	5.6	6.0	6.1
Lesotho	4.0	4.5	6.9	4.5	5.3	3.6	3.4	2.5	2.6	4.1
Liberia	7.3	5.1	6.1	7.4	8.2	8.7	0.7	0.0	2.5	4.7
Madagascar	5.8	–4.7	0.3	1.5	3.0	2.3	3.3	3.0	4.1	4.5
Malawi	6.1	8.3	6.9	4.9	1.9	5.2	5.7	2.9	3.0	4.0
Mali	4.2	4.7	5.4	3.2	–0.8	2.3	7.5	6.1	5.0	5.2
Mauritius	4.3	3.0	4.1	3.9	3.2	3.2	3.6	3.4	3.8	3.9
Mozambique	8.3	6.4	6.7	7.1	7.2	7.1	7.4	6.3	6.0	6.8
Namibia	4.3	0.3	6.0	5.1	5.1	5.7	6.4	4.5	4.2	5.8
Niger	5.2	–0.7	8.4	1.3	4.2	3.2	8.1	7.0	3.8	4.4
Nigeria	...	...	...	5.3	5.9	8.3	7.3	3.6	3.1	3.5
Rwanda	9.0	6.3	7.3	7.8	8.8	4.7	7.0	6.9	6.3	6.7
São Tomé & Príncipe	5.7	4.0	4.5	4.8	4.5	4.0	4.5	4.0	5.0	5.5
Senegal	4.5	2.4	4.3	1.9	4.5	3.6	4.3	6.5	6.6	6.8
Seychelles	4.8	–1.1	5.9	5.4	3.7	5.0	6.2	4.4	3.3	3.5
Sierra Leone	5.8	3.2	5.3	6.0	15.2	20.7	4.6	–21.5	5.3	–0.7
South Africa	4.8	–1.5	3.0	3.2	2.2	2.2	1.5	1.3	0.6	1.2
South Sudan	...	...	...	...	–0.8	4.1	–17.5	–1.2	–4.9	2.9
Swaziland	4.4	1.9	1.4	1.2	3.0	2.9	2.5	1.7	0.5	1.1
Tanzania	6.5	5.4	6.4	7.9	5.1	7.3	7.0	7.0	6.9	6.8
Togo	2.4	3.5	4.1	4.8	5.9	5.4	5.4	5.3	5.2	5.2
Uganda	8.3	8.1	7.7	6.8	2.6	4.0	4.9	5.0	5.3	5.7
Zambia	7.7	9.2	10.3	5.6	7.6	5.1	5.0	3.6	3.4	4.8
Zimbabwe[2]	–7.5	7.5	11.4	11.9	10.6	4.5	3.8	1.5	2.7	3.5
Sub-Saharan Africa	**6.5**	**2.6**	**5.7**	**5.4**	**5.1**	**6.3**	**5.4**	**3.6**	**3.2**	**3.9**
Median	5.1	3.3	6.0	5.2	4.6	5.0	4.9	4.0	3.8	4.5
Excluding Nigeria and South Africa	7.4	4.8	7.0	6.5	6.1	6.8	5.9	4.7	4.3	5.3
Oil-exporting countries	**13.2**	**6.2**	**7.5**	**6.0**	**5.8**	**8.3**	**6.7**	**3.2**	**2.8**	**3.6**
Excluding Nigeria	5.0	6.2	7.5	7.9	5.5	8.3	5.2	2.0	2.0	3.8
Oil-importing countries	**5.3**	**1.9**	**5.3**	**4.9**	**4.7**	**4.8**	**4.4**	**4.0**	**3.5**	**4.2**
Excluding South Africa	5.6	4.3	6.9	6.0	6.2	6.4	6.1	5.5	5.0	5.7
Middle-income countries	**6.6**	**1.5**	**5.0**	**5.0**	**5.0**	**6.2**	**5.2**	**3.0**	**2.7**	**3.4**
Excluding South Africa	8.6	4.4	6.9	6.3	6.3	7.3	5.7	3.8	4.0	4.9
Low-income countries	**6.1**	**5.1**	**7.2**	**6.6**	**5.8**	**6.3**	**6.1**	**5.5**	**4.7**	**5.7**
Excluding low-income fragile countries	7.7	6.3	7.6	7.6	6.0	6.9	7.3	7.3	5.5	6.5
Fragile countries	**3.3**	**2.9**	**5.8**	**3.4**	**7.2**	**6.1**	**5.0**	**3.6**	**4.2**	**4.9**
CFA franc zone	6.5	3.4	5.8	3.5	6.4	5.7	5.9	4.9	4.9	5.3
CEMAC	9.8	4.4	7.3	6.3	6.0	5.7	5.1	2.9	3.2	3.8
WAEMU	3.6	2.6	4.6	1.0	6.7	5.8	6.6	6.5	6.2	6.4
COMESA (SSA members)	6.2	5.6	7.9	7.1	5.9	6.2	6.5	6.0	4.6	5.6
EAC-5	6.2	5.2	7.4	6.9	4.6	5.8	5.9	5.8	6.1	6.3
ECOWAS	4.4	3.1	5.4	4.9	6.3	7.8	6.8	3.8	3.6	4.1
SACU	4.8	–1.6	3.3	3.4	2.4	2.7	1.8	1.3	0.9	1.5
SADC	6.3	1.2	4.8	5.0	3.8	4.7	3.9	2.6	2.2	3.1

See sources and footnotes on page 82.

Table SA3. Real Per Capita GDP Growth
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	13.8	–0.6	0.4	0.9	2.1	3.7	1.8	–0.0	–0.5	–0.3
Benin	1.0	–0.6	–0.8	0.1	1.8	4.1	3.8	2.6	2.5	2.7
Botswana	4.6	–8.9	7.2	4.8	3.2	8.6	2.0	–1.5	2.5	3.1
Burkina Faso	2.8	0.2	5.6	3.3	3.2	4.0	0.9	1.1	2.1	2.8
Burundi	2.2	1.4	2.7	1.6	2.0	2.1	2.2	–6.4	1.0	1.5
Cabo Verde	6.4	–1.5	1.1	3.3	–2.0	–0.2	0.6	0.5	1.6	2.3
Cameroon	0.3	–0.8	0.8	1.6	2.0	3.0	3.3	3.3	2.3	2.1
Central African Rep.	1.5	–0.2	1.1	1.3	2.1	–37.3	–0.9	2.3	3.7	3.9
Chad	7.0	1.7	10.8	–2.4	6.2	3.1	4.3	–0.7	–2.8	–1.2
Comoros	–1.1	–1.2	–0.9	–0.8	–0.0	0.5	–1.0	–1.9	–0.8	0.3
Congo, Dem. Rep. of	3.0	–0.1	4.0	3.8	4.0	5.3	6.0	4.6	1.9	2.0
Congo, Rep. of	1.4	4.4	5.7	0.5	0.9	1.1	4.5	0.3	2.2	2.1
Côte d'Ivoire	–0.8	0.6	–0.6	–6.8	7.9	5.9	5.2	5.9	5.8	5.2
Equatorial Guinea	9.7	–7.2	–6.5	–0.8	2.8	–9.1	–3.0	–14.5	–9.8	–4.5
Eritrea	–5.2	0.6	–1.1	5.2	3.6	–0.2	1.6	1.4	0.4	–0.0
Ethiopia[1]	9.2	8.3	8.8	9.6	7.0	8.2	8.6	8.5	2.8	5.3
Gabon	–1.5	–5.9	2.4	3.2	1.4	1.7	2.8	2.5	1.7	3.1
Gambia, The	0.4	3.6	3.7	–6.9	2.8	2.0	–2.9	1.6	–0.4	0.5
Ghana	3.6	2.2	5.2	11.2	6.6	4.6	1.4	0.9	1.9	5.0
Guinea	0.6	–2.9	–0.7	1.2	1.2	–0.3	–1.4	–2.3	1.5	2.8
Guinea-Bissau	0.9	1.1	2.1	6.8	–4.0	–1.4	0.3	2.5	2.5	2.7
Kenya	1.8	0.5	6.1	3.4	1.5	2.9	2.4	2.7	3.1	3.2
Lesotho	3.7	4.3	6.6	4.3	5.0	3.3	3.2	2.2	2.3	3.8
Liberia	5.7	0.8	1.8	4.7	5.5	5.9	–1.9	–2.5	0.1	2.3
Madagascar	2.8	–7.4	–2.5	–1.4	0.2	–0.6	0.5	0.2	1.3	1.6
Malawi	3.5	5.3	3.9	1.9	–1.0	2.3	2.7	0.1	0.1	1.1
Mali	1.0	1.4	2.2	0.2	–3.8	–0.7	4.2	2.8	1.8	1.9
Mauritius	3.8	2.8	3.9	3.7	2.9	3.0	3.6	3.4	3.8	3.9
Mozambique	5.2	3.4	3.7	4.1	4.2	4.2	4.5	3.4	3.1	4.0
Namibia	2.9	–1.2	4.5	3.5	3.6	4.2	4.9	3.6	3.3	5.0
Niger	1.5	–4.1	5.1	–0.9	8.5	2.1	3.8	0.9	1.8	3.7
Nigeria	5.7	6.1	7.0	2.1	1.5	2.6	3.5	–0.1	–0.4	0.7
Rwanda	6.8	4.1	4.1	5.7	5.7	2.4	4.4	4.1	3.6	4.0
São Tomé & Príncipe	3.0	1.0	1.5	1.9	1.8	1.4	1.9	1.5	2.5	3.1
Senegal	1.7	–0.4	1.3	–1.1	1.5	0.6	1.4	3.4	3.6	3.8
Seychelles	3.7	–1.5	3.0	8.2	2.7	3.1	4.6	3.6	2.6	2.8
Sierra Leone	2.4	1.2	3.3	3.9	13.0	18.2	2.5	–22.5	3.3	–2.5
South Africa	3.4	–2.9	1.5	1.7	0.7	0.6	–0.0	–0.5	–1.0	–0.4
South Sudan	...	...	...	...	–54.7	23.4	–1.6	–4.4	–12.3	3.0
Swaziland	3.2	0.1	–0.3	–0.4	1.5	1.4	1.0	0.5	–0.7	–0.2
Tanzania	3.6	2.7	3.8	5.3	2.7	5.2	4.9	4.9	4.8	4.7
Togo	–0.7	0.7	1.3	2.0	3.1	2.6	2.6	2.5	2.4	2.4
Uganda	4.6	4.5	4.2	3.5	–0.8	0.4	1.9	2.0	2.2	2.6
Zambia	4.7	6.0	7.1	2.5	4.3	2.0	1.9	0.5	0.3	1.6
Zimbabwe[2]	–8.3	6.6	10.4	9.1	7.8	3.3	2.7	0.4	1.6	2.4
Sub-Saharan Africa	**4.3**	**1.6**	**4.2**	**2.5**	**1.8**	**2.7**	**2.6**	**0.9**	**0.6**	**1.6**
Median	3.0	0.7	3.2	2.3	2.7	2.6	2.4	1.4	1.9	2.6
Excluding Nigeria and South Africa	4.0	1.1	3.6	3.2	2.6	3.8	3.2	2.2	1.9	2.9
Oil-exporting countries	**6.2**	**4.1**	**5.5**	**1.7**	**0.9**	**2.8**	**3.1**	**–0.2**	**–0.5**	**0.6**
Excluding Nigeria	7.6	–1.2	1.2	0.8	–0.6	3.4	2.0	–0.4	–0.9	0.5
Oil-importing countries	**3.2**	**–0.1**	**3.2**	**3.1**	**2.5**	**2.7**	**2.3**	**1.8**	**1.5**	**2.3**
Excluding South Africa	3.0	1.9	4.3	4.0	3.6	3.9	3.6	3.0	2.8	3.6
Middle-income countries	**4.6**	**1.4**	**4.1**	**2.1**	**1.8**	**2.2**	**2.2**	**0.2**	**0.1**	**1.0**
Excluding South Africa	4.6	–0.1	2.9	2.6	3.3	3.2	2.4	1.3	1.7	2.5
Low-income countries	**3.4**	**2.4**	**4.4**	**4.0**	**1.9**	**4.4**	**4.1**	**3.1**	**2.2**	**3.3**
Excluding low-income fragile countries	4.8	3.7	4.9	5.0	3.6	4.6	4.9	4.8	3.2	4.2
Fragile countries	**0.9**	**0.6**	**2.8**	**0.4**	**0.6**	**4.3**	**3.3**	**1.2**	**1.4**	**2.4**
CFA franc zone	1.7	–0.8	1.7	–0.5	3.0	1.6	3.0	1.8	2.0	2.6
CEMAC	2.8	–1.7	2.0	0.7	2.5	–0.0	2.6	–0.2	0.0	1.1
WAEMU	0.7	0.1	1.5	–1.6	3.5	3.1	3.5	3.5	3.6	3.7
COMESA (SSA members)	3.5	3.1	5.4	4.6	3.3	3.6	4.0	3.6	2.2	3.1
EAC-5	3.2	2.3	4.7	4.2	1.6	3.1	3.3	3.2	3.5	3.6
ECOWAS	4.5	4.6	5.9	2.2	2.3	2.9	3.2	0.4	0.5	1.6
SACU	3.4	–3.0	1.9	1.9	0.9	1.1	0.2	–0.4	–0.6	–0.0
SADC	4.3	–1.4	2.3	2.3	1.7	2.2	1.5	0.7	0.4	0.9

See sources and footnotes on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	20.9	13.7	14.5	13.5	10.3	8.8	7.3	10.3	19.1	15.2
Benin	3.7	0.9	2.2	2.7	6.7	1.0	–1.1	0.3	2.0	2.3
Botswana	9.4	8.1	6.9	8.5	7.5	5.9	4.4	3.0	3.3	3.6
Burkina Faso	3.8	0.9	–0.6	2.8	3.8	0.5	–0.3	0.9	1.6	2.0
Burundi	11.4	10.6	6.5	9.6	18.2	7.9	4.4	5.6	7.6	6.2
Cabo Verde	2.9	1.0	2.1	4.5	2.5	1.5	–0.2	0.1	0.8	1.3
Cameroon	2.7	3.0	1.3	2.9	2.4	2.1	1.9	2.7	2.2	2.2
Central African Rep.	3.5	3.5	1.5	1.2	5.9	6.6	11.6	5.4	4.9	4.3
Chad	1.5	10.1	–2.1	1.9	7.7	0.2	1.7	3.6	3.2	3.1
Comoros	4.0	4.8	3.9	2.2	5.9	1.6	1.3	2.0	2.2	2.2
Congo, Dem. Rep. of	14.7	46.2	23.5	15.5	2.1	0.8	1.0	1.0	1.7	2.5
Congo, Rep. of	3.9	4.3	5.0	1.8	5.0	4.6	0.9	2.0	2.3	2.4
Côte d'Ivoire	3.2	1.0	1.4	4.9	1.3	2.6	0.4	1.2	2.1	2.0
Equatorial Guinea	4.4	5.7	5.3	4.8	3.4	3.2	4.3	3.2	2.0	2.8
Eritrea	16.4	33.0	11.2	3.9	6.0	6.5	10.0	9.0	9.0	9.0
Ethiopia	18.0	8.5	8.1	33.2	24.1	8.1	7.4	10.1	10.6	11.6
Gabon	0.9	1.9	1.4	1.3	2.7	0.5	4.5	0.1	2.5	2.5
Gambia, The	6.2	4.6	5.0	4.8	4.6	5.2	6.2	6.8	8.3	7.6
Ghana	13.3	13.1	6.7	7.7	7.1	11.7	15.5	17.2	15.7	8.9
Guinea	25.0	4.7	15.5	21.4	15.2	11.9	9.7	8.2	7.9	8.0
Guinea-Bissau	4.0	–1.6	1.1	5.1	2.1	0.8	–1.0	1.5	2.6	2.8
Kenya	8.3	10.6	4.3	14.0	9.4	5.7	6.9	6.6	6.3	6.0
Lesotho	6.9	5.9	3.4	6.0	5.5	5.0	4.0	4.8	6.5	6.0
Liberia	9.8	7.4	7.3	8.5	6.8	7.6	9.9	7.7	8.2	8.0
Madagascar	12.5	9.0	9.2	9.5	5.7	5.8	6.1	7.4	7.2	7.0
Malawi	11.5	8.4	7.4	7.6	21.3	28.3	23.8	21.9	19.7	13.9
Mali	3.1	2.2	1.3	3.1	5.3	–0.6	0.9	1.4	1.0	1.3
Mauritius	7.4	2.5	2.9	6.5	3.9	3.5	3.2	1.3	1.5	2.1
Mozambique	10.2	3.3	12.7	10.4	2.1	4.2	2.3	2.4	6.0	5.6
Namibia	5.4	9.5	4.9	5.0	6.7	5.6	5.3	3.4	5.2	6.0
Niger	4.0	4.3	–2.8	2.9	0.5	2.3	–0.9	1.0	1.5	1.5
Nigeria	11.6	12.5	13.7	10.8	12.2	8.5	8.0	9.0	10.4	12.4
Rwanda	10.9	10.3	2.3	5.7	6.3	4.2	1.8	2.5	4.8	5.0
São Tomé & Príncipe	20.8	17.0	13.3	14.3	10.6	8.1	7.0	5.3	3.0	3.5
Senegal	3.3	–2.2	1.2	3.4	1.4	0.7	–1.1	0.1	1.2	1.2
Seychelles	9.0	31.8	–2.4	2.6	7.1	4.3	1.4	4.0	2.2	2.6
Sierra Leone	12.5	9.2	17.8	18.5	13.8	9.8	8.3	9.0	9.5	9.0
South Africa	5.6	7.1	4.3	5.0	5.7	5.8	6.1	4.6	6.5	6.3
South Sudan	...	...	...	...	45.1	–0.0	1.7	52.8	212.4	21.6
Swaziland	6.2	7.4	4.5	6.1	8.9	5.6	5.7	5.0	6.6	5.9
Tanzania	6.6	12.1	7.2	12.7	16.0	7.9	6.1	5.6	6.1	5.1
Togo	3.8	3.7	1.4	3.6	2.6	1.8	0.2	1.8	2.1	2.5
Uganda	7.5	13.1	4.0	18.7	14.0	4.8	4.6	5.8	6.7	5.9
Zambia	13.7	13.4	8.5	8.7	6.6	7.0	7.8	10.1	22.5	9.9
Zimbabwe[1]	39.9	6.2	3.0	3.5	3.7	1.6	–0.2	–2.4	–1.2	1.2
Sub-Saharan Africa	**8.8**	**9.8**	**8.2**	**9.5**	**9.3**	**6.6**	**6.4**	**7.0**	**9.0**	**8.3**
Median	7.2	7.3	4.4	5.4	6.0	4.8	4.4	4.0	4.9	5.0
Excluding Nigeria and South Africa	9.2	9.5	6.6	10.9	9.2	5.7	5.4	6.7	9.2	6.7
Oil-exporting countries	**10.9**	**11.5**	**12.2**	**10.0**	**11.2**	**7.5**	**7.1**	**8.9**	**12.0**	**11.5**
Excluding Nigeria	9.2	8.8	7.8	7.7	8.5	4.9	4.6	8.5	16.6	9.2
Oil-importing countries	**7.7**	**8.6**	**5.4**	**9.1**	**8.0**	**5.9**	**5.8**	**5.6**	**6.9**	**6.1**
Excluding South Africa	9.3	9.7	6.2	11.9	9.5	5.9	5.6	6.2	7.1	6.0
Middle-income countries	**8.7**	**9.7**	**8.6**	**8.4**	**8.6**	**7.0**	**7.0**	**7.2**	**9.1**	**9.0**
Excluding South Africa	9.1	8.9	6.5	8.6	6.7	6.2	6.4	7.1	9.7	7.2
Low-income countries	**9.3**	**10.2**	**6.6**	**13.3**	**12.0**	**5.1**	**4.3**	**6.3**	**8.7**	**6.2**
Excluding low-income fragile countries	8.8	8.0	5.5	16.1	13.6	5.6	4.4	5.6	6.5	6.4
Fragile countries	**8.2**	**10.6**	**7.0**	**7.3**	**7.6**	**4.1**	**3.3**	**6.0**	**9.9**	**4.7**
CFA franc zone	3.1	2.6	1.4	3.1	3.3	1.7	1.2	1.6	2.0	2.1
CEMAC	2.7	4.5	2.0	2.6	3.8	2.1	2.6	2.4	2.4	2.5
WAEMU	3.4	1.0	0.8	3.6	2.8	1.3	–0.1	1.0	1.7	1.8
COMESA (SSA members)	11.5	13.0	7.3	16.0	11.6	6.2	6.0	6.8	8.2	7.3
EAC-5	7.7	11.6	5.2	14.0	12.6	6.2	5.8	5.8	6.2	5.6
ECOWAS	10.2	10.4	11.1	9.6	10.3	7.6	7.3	8.2	9.2	10.1
SACU	5.8	7.2	4.4	5.2	5.8	5.7	6.0	4.5	6.3	6.1
SADC	8.0	9.8	6.9	7.6	7.2	6.3	6.0	5.5	8.3	7.1

See sources and footnote on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	17.3	14.0	15.3	11.4	9.0	7.7	7.5	14.3	19.2	14.0
Benin	4.1	–0.5	4.0	1.8	6.8	–1.8	–0.8	2.3	2.2	2.4
Botswana	9.9	5.8	7.4	9.2	7.4	4.1	3.7	3.1	3.6	3.6
Burkina Faso	4.1	–1.8	–0.3	5.1	1.7	0.1	–0.1	1.3	1.6	2.0
Burundi	12.5	4.6	4.1	14.9	11.8	9.0	3.7	7.1	10.7	2.6
Cabo Verde	3.5	–0.4	3.4	3.6	4.1	0.1	–0.4	–0.5	1.0	1.5
Cameroon	3.1	0.9	2.6	2.7	2.5	1.7	2.6	2.8	2.2	2.2
Central African Rep.	4.7	–1.2	2.3	4.3	5.9	5.9	8.4	6.5	2.5	2.5
Chad	3.2	4.7	–2.2	10.8	2.1	0.9	3.7	–1.0	3.0	3.0
Comoros	4.4	2.2	6.7	4.9	1.0	3.5	0.0	3.4	2.2	2.2
Congo, Dem. Rep. of	17.2	53.4	9.8	15.4	2.7	1.0	1.2	0.9	2.5	2.5
Congo, Rep. of	4.4	2.5	5.4	1.8	7.5	2.1	0.5	2.2	2.3	2.5
Côte d'Ivoire	3.9	–1.7	5.1	2.0	3.4	0.4	0.9	1.3	2.1	2.0
Equatorial Guinea	4.3	5.0	5.4	4.9	2.6	4.9	4.3	2.0	2.0	2.8
Eritrea	17.5	22.2	14.2	12.3	2.9	9.5	10.0	9.0	9.0	9.0
Ethiopia	19.3	7.1	14.6	35.9	15.0	7.7	7.1	10.0	14.0	8.5
Gabon	1.1	0.9	0.7	2.3	2.2	3.3	1.7	0.1	2.5	2.5
Gambia, The	5.2	2.7	5.8	4.4	4.9	5.5	6.9	6.7	10.0	5.2
Ghana	13.7	9.5	6.9	8.4	8.1	13.5	17.0	17.7	12.4	7.1
Guinea	24.6	7.9	20.8	19.0	12.8	10.5	9.0	7.3	8.5	7.5
Guinea-Bissau	4.6	–6.4	5.7	3.4	1.6	–0.1	–0.1	2.9	2.5	2.5
Kenya	9.0	8.0	5.8	18.9	3.2	7.1	6.0	8.0	5.8	5.5
Lesotho	7.2	3.8	3.6	7.2	5.0	5.6	2.9	5.5	6.4	6.0
Liberia	9.5	9.7	6.6	11.4	7.7	8.5	7.7	8.0	8.3	7.7
Madagascar	13.6	8.0	10.2	6.9	5.8	6.3	6.0	7.6	7.1	7.0
Malawi	11.6	7.6	6.3	9.8	34.6	23.5	24.2	24.9	16.0	9.6
Mali	3.7	1.7	1.9	5.3	2.4	0.0	1.2	1.0	1.0	1.5
Mauritius	7.3	1.5	6.1	4.9	3.2	4.1	0.2	1.3	2.0	2.2
Mozambique	9.2	4.2	16.6	5.5	2.2	3.0	1.1	11.1	5.6	5.6
Namibia	6.1	7.9	3.1	7.4	6.4	4.9	4.6	3.5	5.0	5.7
Niger	5.3	–3.1	1.4	1.4	0.7	1.1	–0.6	2.2	1.2	1.7
Nigeria	10.4	13.9	11.8	10.3	12.0	8.0	8.0	9.6	12.0	12.5
Rwanda	11.4	5.7	0.2	8.3	3.9	3.6	2.1	4.5	5.0	5.0
São Tomé & Príncipe	21.9	16.1	12.9	11.9	10.4	7.1	6.4	4.0	4.0	3.0
Senegal	3.8	–4.5	4.3	2.7	1.1	–0.1	–0.8	0.4	1.2	–0.1
Seychelles	16.1	–2.5	0.4	5.5	5.8	3.4	0.5	3.2	2.8	3.1
Sierra Leone	12.4	10.8	18.4	16.9	12.0	8.5	9.8	10.1	9.5	9.0
South Africa	6.4	6.3	3.5	6.1	5.7	5.4	5.8	4.9	6.9	5.8
South Sudan	...	...	...	...	25.2	–8.8	9.9	109.9	119.1	7.5
Swaziland	7.7	4.5	4.5	7.8	8.3	4.4	6.2	4.9	8.9	3.4
Tanzania	7.1	12.2	5.6	19.8	12.1	5.6	4.8	6.8	5.4	5.0
Togo	4.9	0.6	3.8	1.5	2.9	–0.4	1.8	1.8	2.3	2.5
Uganda	8.4	11.0	3.1	27.0	5.3	4.3	4.9	6.6	6.8	5.1
Zambia	13.4	9.9	7.9	7.2	7.3	7.1	7.9	21.1	14.3	8.7
Zimbabwe[1]	...	–7.7	3.2	4.9	2.9	0.3	–0.8	–2.4	–1.1	1.2
Sub-Saharan Africa	**8.9**	**9.2**	**7.7**	**10.2**	**8.2**	**6.1**	**6.3**	**8.1**	**9.2**	**7.8**
Median	7.3	4.7	5.4	7.0	5.3	4.3	3.7	4.5	5.0	3.4
Excluding Nigeria and South Africa	9.5	7.7	7.3	12.3	7.0	5.2	5.4	8.5	8.5	5.7
Oil-exporting countries	**9.8**	**12.2**	**10.9**	**9.6**	**10.6**	**6.9**	**7.2**	**10.2**	**12.6**	**11.3**
Excluding Nigeria	8.4	7.8	8.4	7.5	6.8	4.0	5.2	11.9	14.4	7.9
Oil-importing countries	**8.4**	**7.1**	**5.5**	**10.7**	**6.5**	**5.5**	**5.6**	**6.5**	**6.8**	**5.3**
Excluding South Africa	10.0	7.7	6.9	13.8	7.1	5.5	5.4	7.4	6.8	5.1
Middle-income countries	**8.6**	**9.4**	**7.9**	**8.6**	**8.2**	**6.7**	**6.8**	**8.1**	**9.6**	**8.7**
Excluding South Africa	9.0	7.0	7.4	8.8	5.8	6.2	6.3	9.0	8.7	6.5
Low-income countries	**10.2**	**8.6**	**7.0**	**16.1**	**8.3**	**4.1**	**4.4**	**7.9**	**8.3**	**5.0**
Excluding low-income fragile countries	9.5	6.5	7.1	19.6	8.6	4.5	4.0	6.8	7.3	5.3
Fragile countries	**9.1**	**8.7**	**6.4**	**7.8**	**6.9**	**2.7**	**4.0**	**7.7**	**7.9**	**3.7**
CFA franc zone	3.6	0.3	2.9	3.5	2.9	1.1	1.4	1.4	2.0	2.0
CEMAC	3.2	2.4	2.4	4.0	3.2	2.4	2.6	1.6	2.4	2.5
WAEMU	4.0	–1.6	3.3	3.0	2.7	0.0	0.3	1.3	1.7	1.6
COMESA (SSA members)	12.5	10.7	7.8	18.7	7.5	6.2	5.7	8.4	8.3	6.0
EAC-5	8.4	9.9	4.8	20.3	6.8	5.9	5.1	7.1	5.9	5.1
ECOWAS	9.5	10.7	10.2	9.1	10.2	7.1	7.4	8.7	10.2	10.0
SACU	6.5	6.3	3.6	6.2	5.8	5.3	5.6	4.8	6.7	5.7
SADC	8.4	8.9	6.1	8.4	6.9	5.6	5.6	7.0	8.1	6.6

See sources and footnote on page 82.

Table SA6. Total Investment
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	12.6	15.2	14.4	12.9	14.9	14.7	15.3	9.3	10.5	11.6
Benin	20.7	21.9	23.1	24.1	22.7	28.5	25.0	27.8	28.0	27.6
Botswana	30.0	37.3	35.4	38.7	38.1	32.9	30.6	27.8	29.4	30.4
Burkina Faso	18.5	17.9	18.0	15.4	14.9	20.8	19.8	14.2	13.2	15.5
Burundi	14.6	14.2	15.1	14.7	14.3	14.9	15.5	10.6	13.4	15.6
Cabo Verde	36.7	36.5	37.7	37.2	40.3	39.4	37.4	40.7	42.4	43.9
Cameroon	16.5	21.0	20.3	20.5	20.7	21.6	21.7	21.8	21.4	20.5
Central African Rep.	10.1	13.2	14.3	12.2	15.0	8.7	10.2	14.5	20.6	17.1
Chad	22.6	30.2	34.5	28.5	31.5	27.5	30.5	27.1	37.5	25.3
Comoros	10.7	12.4	15.4	14.9	16.8	20.4	18.6	18.4	20.9	21.5
Congo, Dem. Rep. of	12.7	14.8	12.3	12.2	12.7	15.3	15.7	15.6	14.9	16.7
Congo, Rep. of	20.9	22.5	20.5	25.3	26.0	30.9	42.2	33.4	37.6	31.7
Côte d'Ivoire	12.8	11.6	14.9	10.5	16.5	17.0	16.8	18.2	19.4	20.2
Equatorial Guinea	38.6	69.3	63.8	56.7	49.2	55.1	47.2	54.4	39.2	28.5
Eritrea	15.9	9.3	9.3	10.0	9.5	8.7	7.9	7.6	7.4	7.2
Ethiopia[1]	22.7	24.7	25.5	32.1	37.1	34.1	34.5	39.8	38.8	35.8
Gabon	23.2	29.1	26.1	29.0	28.2	29.5	34.9	37.8	36.5	36.0
Gambia, The	21.1	19.6	21.3	18.9	27.8	20.0	25.2	19.8	22.3	28.4
Ghana	22.0	20.7	25.7	26.6	32.0	23.5	24.8	23.9	24.0	24.4
Guinea	17.3	10.3	9.4	13.4	24.6	20.4	9.3	10.1	20.6	33.7
Guinea-Bissau	6.8	6.0	6.6	5.3	7.3	7.0	10.8	11.2	10.8	11.9
Kenya	18.9	19.3	20.7	21.7	21.5	20.1	21.4	22.5	22.4	22.2
Lesotho	25.5	29.5	29.0	35.0	36.7	35.0	33.0	29.8	33.3	33.2
Liberia	...	...	...	...	...	...	...	...	...	...
Madagascar	29.7	35.6	23.4	17.6	17.6	15.9	15.6	17.1	18.0	19.2
Malawi	19.4	24.5	22.8	12.4	12.1	12.7	12.0	12.0	13.8	13.1
Mali	23.7	24.4	26.7	19.4	18.7	25.4	27.8	24.0	25.5	24.5
Mauritius	25.6	21.3	23.7	26.0	24.8	25.2	23.0	25.5	26.1	26.7
Mozambique	21.1	15.2	18.3	25.7	47.4	54.5	46.2	28.2	38.3	73.5
Namibia	22.6	26.5	24.1	22.4	26.7	25.1	34.2	29.4	31.8	21.6
Niger	23.2	32.1	49.5	43.9	39.5	40.2	40.2	42.1	40.3	40.5
Nigeria	17.0	21.6	17.3	16.2	14.9	14.9	15.8	14.5	13.6	13.2
Rwanda	20.1	23.6	23.2	23.5	25.9	26.5	26.1	25.0	25.5	26.0
São Tomé & Príncipe	54.9	37.1	54.3	42.9	35.6	31.5	25.7	26.2	30.7	26.3
Senegal	26.3	22.1	22.1	25.6	29.3	27.8	25.1	25.3	26.4	27.1
Seychelles	28.6	27.3	36.6	35.4	38.1	38.5	37.7	31.8	35.6	33.9
Sierra Leone	10.2	10.0	31.1	42.1	27.9	12.8	13.5	16.3	15.4	15.5
South Africa	20.2	20.7	19.5	19.1	20.1	20.1	20.4	19.5	18.8	18.5
South Sudan	...	...	...	5.5	10.7	12.5	11.5	9.9	10.7	9.2
Swaziland	22.8	14.4	6.5	4.6	5.4	7.6	9.2	10.9	8.4	6.6
Tanzania	26.3	25.1	27.3	33.2	28.5	30.3	31.0	31.3	31.4	31.7
Togo	19.2	22.8	23.9	23.5	23.8	23.6	23.5	24.2	25.6	24.3
Uganda	29.1	27.6	26.0	29.5	29.5	27.8	26.4	26.5	27.8	29.0
Zambia	33.2	30.3	29.9	33.6	31.8	34.0	34.9	34.6	30.3	31.6
Zimbabwe[2]	...	15.1	23.9	22.4	13.5	13.0	13.2	13.0	13.6	13.5
Sub-Saharan Africa	**19.9**	**22.0**	**20.6**	**20.4**	**20.9**	**20.7**	**21.2**	**20.3**	**20.2**	**20.3**
Median	21.1	21.9	23.2	22.9	24.7	23.5	24.2	24.0	24.7	24.4
Excluding Nigeria and South Africa	21.5	22.9	23.5	23.8	25.3	24.8	25.1	24.5	25.0	25.3
Oil-exporting countries	**17.6**	**22.4**	**18.8**	**17.3**	**16.8**	**16.9**	**17.8**	**16.0**	**15.5**	**14.7**
Excluding Nigeria	19.0	24.6	23.2	20.2	21.9	22.3	23.4	20.0	20.6	18.7
Oil-importing countries	**21.4**	**21.7**	**21.9**	**22.7**	**23.9**	**23.6**	**23.7**	**23.6**	**23.7**	**24.3**
Excluding South Africa	22.3	22.3	23.5	25.1	26.4	25.7	25.7	25.9	26.3	27.3
Middle-income countries	**19.2**	**21.7**	**19.7**	**19.2**	**19.3**	**19.0**	**19.7**	**18.5**	**17.9**	**17.5**
Excluding South Africa	20.6	22.8	22.9	23.0	24.3	23.2	24.2	22.7	22.5	22.1
Low-income countries	**22.6**	**23.1**	**24.0**	**24.6**	**26.3**	**26.5**	**26.1**	**26.3**	**27.4**	**28.6**
Excluding low-income fragile countries	24.3	24.1	25.6	29.8	31.4	31.8	31.0	31.5	32.0	33.8
Fragile countries	**18.2**	**19.4**	**20.0**	**16.2**	**18.0**	**18.3**	**19.1**	**18.2**	**20.3**	**19.8**
CFA franc zone	21.0	25.5	26.2	24.4	25.0	26.8	27.2	26.6	26.7	25.0
CEMAC	23.0	32.8	30.8	29.8	29.1	30.3	32.1	31.3	31.1	26.6
WAEMU	19.1	19.1	22.2	19.6	21.4	23.7	23.1	22.7	23.2	23.7
COMESA (SSA members)	22.8	23.1	22.7	24.4	25.0	24.3	24.6	26.3	26.0	25.7
EAC-5	23.4	23.2	24.1	27.3	25.7	25.5	25.9	26.4	26.7	27.1
ECOWAS	17.8	20.9	18.7	17.7	17.5	17.1	17.6	16.6	16.2	16.2
SACU	20.7	21.4	20.1	19.9	20.9	20.8	21.2	20.1	19.6	19.1
SADC	20.9	21.3	20.4	20.6	21.3	21.7	21.9	20.2	20.3	21.3

See sources and footnotes on page 82.

Table SA7. Gross National Savings
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	27.3	5.2	23.5	25.5	26.9	21.4	12.4	0.8	–1.1	2.7
Benin	14.0	13.6	14.9	16.8	13.2	19.0	15.6	16.7	17.0	17.0
Botswana	40.9	29.9	32.2	41.5	39.6	41.8	46.3	37.1	31.6	33.3
Burkina Faso	8.1	13.2	15.8	13.9	7.7	9.8	11.7	8.5	8.0	10.9
Burundi	8.8	16.9	3.7	1.0	–3.7	–4.2	–2.9	–4.4	4.8	9.2
Cabo Verde	27.2	21.9	25.3	20.9	27.7	34.5	29.4	31.5	32.6	34.3
Cameroon	15.5	17.6	17.5	17.5	17.1	17.7	17.3	16.0	15.7	15.0
Central African Rep.	4.6	4.1	4.1	4.6	10.4	5.7	4.7	1.7	9.6	6.6
Chad	23.1	21.1	25.5	22.8	22.8	18.3	21.6	14.4	24.5	16.5
Comoros	4.4	6.2	15.2	10.0	12.2	12.2	12.4	14.6	11.2	10.7
Congo, Dem. Rep. of	8.0	7.8	12.8	9.8	6.4	10.4	7.0	5.5	1.4	5.4
Congo, Rep. of	18.2	8.4	27.9	30.2	23.6	26.5	32.7	19.1	14.5	20.9
Côte d'Ivoire	13.9	18.3	16.8	21.0	15.3	15.7	16.1	16.4	17.5	17.5
Equatorial Guinea	52.7	24.4	22.7	34.4	36.3	29.4	25.3	23.9	25.6	26.2
Eritrea	–19.9	–9.7	–9.3	1.2	5.9	3.6	4.0	1.3	4.2	4.8
Ethiopia[1]	19.7	15.4	24.5	33.1	31.2	28.1	26.7	27.0	28.2	26.1
Gabon	39.5	33.5	41.0	44.2	44.1	41.0	42.9	34.8	29.0	29.9
Gambia, The	12.6	7.1	5.0	6.7	19.9	9.8	14.3	4.6	11.8	18.2
Ghana	14.7	18.4	19.6	19.0	16.8	13.5	15.2	15.6	16.8	18.9
Guinea	11.4	2.0	0.1	–11.7	–1.4	–6.5	–16.4	–12.3	7.1	8.2
Guinea-Bissau	5.6	0.8	–2.2	5.8	–2.6	2.6	7.4	10.3	12.6	10.9
Kenya	16.4	14.9	14.8	12.5	13.1	11.2	11.0	14.4	14.2	15.2
Lesotho	43.2	33.1	19.2	20.0	26.5	24.4	24.8	27.0	19.3	23.4
Liberia	...	...	...	...	...	...	...	...	...	...
Madagascar	20.4	14.5	13.7	10.8	10.7	10.0	15.3	14.9	15.0	14.8
Malawi	12.8	20.5	26.2	3.8	2.8	4.0	4.0	4.1	3.5	4.5
Mali	16.5	18.0	15.6	14.3	16.5	22.6	23.2	21.2	21.5	20.1
Mauritius	20.0	15.0	14.3	13.1	18.5	19.8	18.4	20.4	20.7	21.5
Mozambique	10.6	4.4	7.6	0.3	2.6	15.4	11.8	–13.1	–4.2	1.0
Namibia	30.0	24.9	20.6	19.3	20.9	21.1	25.3	19.6	17.4	13.7
Niger	14.1	7.7	25.5	21.5	24.8	25.2	24.3	24.1	23.0	22.3
Nigeria	30.7	26.6	21.2	19.2	19.3	18.8	16.0	12.0	10.8	11.5
Rwanda	18.4	16.4	17.8	16.4	14.7	19.1	14.6	11.2	11.3	13.5
São Tomé & Príncipe	27.8	13.8	32.6	17.4	14.3	8.1	–1.8	15.0	21.3	16.5
Senegal	16.4	15.4	17.7	17.6	18.5	17.3	16.1	17.7	20.5	21.3
Seychelles	14.8	12.5	17.5	12.8	16.8	26.3	15.4	17.6	22.4	21.1
Sierra Leone	4.5	–1.7	9.6	–17.0	–4.0	–4.8	–7.9	3.9	8.0	4.7
South Africa	16.0	18.0	18.0	17.0	15.1	14.4	14.9	15.1	14.4	13.6
South Sudan	...	...	...	23.5	–5.2	11.3	13.6	7.1	4.6	2.7
Swaziland	19.6	2.8	–2.1	–2.3	8.6	12.7	12.5	11.4	6.6	5.8
Tanzania	20.9	18.3	21.2	21.6	19.3	14.9	21.7	22.6	23.7	24.3
Togo	10.4	17.2	17.6	15.4	16.3	10.5	10.7	11.7	15.4	14.2
Uganda	24.9	21.2	18.0	19.5	22.7	20.8	16.8	17.7	19.4	20.5
Zambia	32.1	36.2	37.4	38.3	37.1	33.5	37.1	31.1	26.5	29.9
Zimbabwe[2]	...	–32.0	8.0	–8.4	–11.0	–11.0	–5.5	–4.3	–2.9	–2.5
Sub-Saharan Africa	**22.1**	**19.3**	**19.8**	**19.1**	**18.4**	**17.6**	**16.7**	**14.3**	**13.9**	**14.5**
Median	16.4	15.4	17.6	16.9	16.4	15.5	15.2	14.9	15.2	15.1
Excluding Nigeria and South Africa	20.4	15.2	19.8	20.1	19.5	18.3	17.9	15.4	15.7	16.7
Oil-exporting countries	**29.9**	**22.9**	**22.0**	**21.2**	**20.9**	**19.8**	**16.8**	**11.7**	**10.5**	**11.4**
Excluding Nigeria	27.9	13.2	24.4	26.3	25.3	22.5	19.1	10.7	9.6	11.1
Oil-importing countries	**17.1**	**16.7**	**18.2**	**17.6**	**16.6**	**15.9**	**16.5**	**16.3**	**16.4**	**16.7**
Excluding South Africa	18.0	15.8	18.3	18.0	17.6	16.9	17.5	16.9	17.5	18.3
Middle-income countries	**23.6**	**21.0**	**20.5**	**19.8**	**19.3**	**18.2**	**16.9**	**14.1**	**13.0**	**13.7**
Excluding South Africa	23.9	17.0	21.9	23.3	23.1	20.8	19.6	15.8	14.6	16.4
Low-income countries	**16.4**	**13.1**	**17.4**	**16.9**	**15.6**	**15.6**	**16.0**	**15.0**	**16.8**	**17.0**
Excluding low-income fragile countries	18.6	15.9	19.7	21.8	21.1	20.0	20.4	19.2	20.7	21.1
Fragile countries	**13.3**	**10.3**	**15.2**	**12.6**	**9.2**	**10.6**	**11.6**	**10.1**	**11.3**	**11.7**
CFA franc zone	20.4	17.8	20.5	22.1	20.7	20.6	21.0	18.3	18.8	18.7
CEMAC	27.7	20.3	24.6	27.2	26.6	24.8	25.7	20.4	20.3	19.9
WAEMU	13.8	15.6	16.9	17.5	15.3	16.9	16.9	16.7	17.6	17.8
COMESA (SSA members)	18.4	15.0	18.5	18.2	18.3	17.3	16.9	17.2	17.0	17.7
EAC-5	19.5	17.5	17.6	17.1	17.0	14.6	15.8	17.4	18.3	19.4
ECOWAS	25.8	23.6	20.0	18.3	18.1	17.6	15.6	12.8	12.4	13.1
SACU	17.5	18.5	18.4	17.8	16.3	15.8	16.7	16.3	15.2	14.5
SADC	18.9	15.8	19.4	18.3	17.3	16.2	16.3	13.8	12.9	13.6

See sources and footnotes on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	4.6	–7.4	3.4	8.7	4.6	–0.3	–6.6	–4.1	–7.1	–6.1
Benin	–0.6	–3.1	–0.4	–1.3	–0.3	–1.9	–2.3	–7.9	–3.8	–3.8
Botswana	4.5	–13.3	–7.5	–0.1	0.8	5.4	2.5	–1.6	–0.7	–3.0
Burkina Faso	–0.8	–4.7	–3.0	–1.4	–3.1	–3.9	–1.9	–1.5	–3.0	–3.1
Burundi	–2.7	–5.1	–3.6	–4.2	–3.8	–1.8	–3.7	–6.9	–3.3	–2.4
Cabo Verde	–3.3	–5.9	–10.7	–7.7	–10.3	–8.9	–7.3	–4.8	–4.6	–4.2
Cameroon	8.6	–0.0	–1.1	–2.6	–1.6	–4.0	–4.7	–5.7	–7.9	–6.5
Central African Rep.	0.5	–0.6	–1.5	–2.4	–0.0	–6.3	3.0	–3.1	–3.5	–2.7
Chad	1.2	–9.2	–4.2	2.4	0.5	–2.1	–4.2	–4.9	–6.1	–2.1
Comoros	–1.7	0.6	7.0	1.4	3.3	17.8	–0.5	4.6	–6.5	–7.5
Congo, Dem. Rep. of	–0.3	1.3	2.4	–0.5	1.8	3.0	1.3	1.9	1.1	1.1
Congo, Rep. of	13.5	4.8	16.1	16.5	6.4	–1.8	–7.7	–11.8	–12.6	–5.7
Côte d'Ivoire	–1.0	–1.4	–1.8	–5.4	–3.1	–2.2	–2.3	–3.2	–3.1	–3.0
Equatorial Guinea	18.4	–9.5	–5.8	1.0	–9.0	–7.5	–6.7	–3.0	–8.1	–10.3
Eritrea	–17.9	–14.7	–16.0	–16.2	–15.3	–15.1	–14.4	–14.2	–14.0	–13.8
Ethiopia[1]	–3.4	–0.9	–1.3	–1.6	–1.2	–1.9	–2.6	–2.5	–3.0	–2.9
Gabon	8.5	6.8	2.7	2.5	1.6	1.8	2.7	–2.3	–4.8	–3.8
Gambia, The	–3.2	–2.7	–4.7	–4.7	–4.4	–8.5	–10.0	–6.5	–8.6	–10.4
Ghana	–4.9	–7.0	–9.4	–7.3	–11.3	–12.5	–12.4	–5.0	–3.9	–1.6
Guinea	–1.5	–7.1	–14.0	–1.3	–3.3	–5.3	–4.2	–9.0	–1.3	–0.4
Guinea-Bissau	–4.0	4.1	1.6	–0.8	–2.2	–1.8	–1.4	–6.8	2.8	–2.1
Kenya	–1.9	–4.3	–4.4	–4.1	–5.0	–5.7	–7.5	–8.4	–7.3	–6.2
Lesotho	9.0	–4.0	–4.2	–10.6	5.0	–2.5	0.6	0.1	–8.1	–7.4
Liberia	–0.5	–10.1	–5.7	–3.1	–1.6	–4.7	–1.8	–12.0	–7.8	–7.6
Madagascar	–2.6	–2.5	–0.9	–2.4	–2.6	–4.0	–2.3	–3.7	–3.1	–3.8
Malawi	–2.3	–3.6	1.8	–4.1	–1.8	–6.4	–4.8	–5.9	–5.0	–3.2
Mali	3.6	–3.7	–2.6	–3.4	–1.0	–2.4	–2.9	–2.1	–3.8	–3.8
Mauritius	–3.9	–3.6	–3.2	–3.2	–1.8	–3.5	–3.2	–3.4	–2.8	–2.9
Mozambique	–2.9	–4.9	–3.9	–4.8	–3.8	–2.6	–10.7	–6.0	–4.0	–4.3
Namibia	2.0	–0.1	–4.6	–7.0	–2.4	–3.6	–4.0	–5.9	–5.6	–3.9
Niger	7.1	–5.3	–2.4	–1.5	–1.1	–2.6	–8.0	–7.4	–6.6	–4.5
Nigeria	4.9	–6.0	–4.2	0.4	0.2	–2.3	–2.1	–4.0	–4.7	–4.3
Rwanda	0.2	0.0	0.4	–1.7	–1.6	–2.5	–3.6	–2.8	–3.1	–2.9
São Tomé & Príncipe	24.9	–18.1	–11.1	–11.5	–10.9	1.9	–5.5	–6.8	–10.6	–1.4
Senegal	–2.5	–4.6	–4.9	–6.1	–5.2	–5.5	–5.0	–4.8	–4.2	–3.7
Seychelles	–0.7	4.8	0.5	3.4	2.9	0.4	3.7	2.0	1.9	2.1
Sierra Leone	2.2	–2.3	–5.0	–4.6	–5.2	–2.4	–3.7	–4.4	–5.3	–3.3
South Africa	–0.0	–4.7	–4.8	–3.9	–4.1	–4.0	–3.8	–4.0	–3.8	–3.6
South Sudan	...	...	...	4.6	–11.3	–6.0	–9.7	4.2	–44.5	–19.9
Swaziland	1.4	–2.9	–8.8	–3.7	3.4	0.7	–1.2	–5.4	–5.9	–4.2
Tanzania	–2.5	–4.5	–4.8	–3.6	–4.1	–3.9	–3.0	–3.7	–3.6	–3.0
Togo	–1.4	–3.9	–2.5	–4.0	–7.2	–4.6	–5.3	–6.4	–6.2	–5.5
Uganda	–0.8	–2.1	–5.7	–2.7	–3.0	–4.0	–3.5	–2.9	–4.4	–4.2
Zambia	2.1	–2.1	–2.4	–1.8	–2.8	–6.2	–6.0	–8.1	–8.3	–6.3
Zimbabwe[2]	–3.5	–2.1	0.7	–1.2	–0.5	–1.9	–1.5	–1.2	–1.6	–1.5
Sub-Saharan Africa	**1.7**	**–4.6**	**–3.4**	**–1.2**	**–1.8**	**–3.1**	**–3.6**	**–4.1**	**–4.6**	**–4.1**
Median	–0.7	–3.6	–3.4	–2.6	–2.2	–2.6	–3.7	–4.4	–4.6	–3.8
Excluding Nigeria and South Africa	1.2	–3.7	–1.9	–0.4	–1.8	–3.2	–4.7	–4.3	–4.9	–4.1
Oil-exporting countries	**5.6**	**–5.4**	**–2.3**	**2.2**	**0.6**	**–2.1**	**–3.1**	**–4.1**	**–5.5**	**–4.7**
Excluding Nigeria	7.3	–4.4	2.4	5.9	1.5	–1.7	–5.7	–4.5	–8.1	–6.3
Oil-importing countries	**–0.6**	**–4.1**	**–4.3**	**–3.7**	**–3.7**	**–4.0**	**–4.1**	**–4.1**	**–3.9**	**–3.5**
Excluding South Africa	–1.2	–3.5	–3.7	–3.6	–3.3	–3.9	–4.3	–4.2	–3.9	–3.4
Middle-income countries	**2.3**	**–5.0**	**–3.6**	**–1.0**	**–1.6**	**–3.2**	**–3.7**	**–4.4**	**–4.9**	**–4.3**
Excluding South Africa	3.1	–4.2	–1.3	0.9	–1.2	–3.5	–5.7	–5.2	–6.1	–5.0
Low-income countries	**–1.4**	**–3.2**	**–2.7**	**–2.1**	**–2.5**	**–2.8**	**–3.5**	**–3.2**	**–3.6**	**–3.1**
Excluding low-income fragile countries	–1.7	–3.1	–3.4	–2.9	–2.8	–3.3	–3.9	–3.6	–3.7	–3.4
Fragile countries	**0.5**	**–2.2**	**0.0**	**–0.1**	**–1.6**	**–2.2**	**–3.2**	**–3.2**	**–3.9**	**–3.0**
CFA franc zone	4.9	–2.1	–0.7	–0.4	–1.9	–3.0	–3.6	–4.6	–5.4	–4.4
CEMAC	9.7	–0.8	1.1	2.8	–0.9	–3.0	–3.8	–5.3	–7.5	–5.6
WAEMU	–0.1	–3.2	–2.5	–3.9	–2.9	–3.1	–3.4	–4.0	–3.8	–3.5
COMESA (SSA members)	–1.6	–2.2	–2.3	–2.6	–2.2	–3.2	–3.8	–4.0	–4.1	–3.6
EAC-5	–1.8	–3.7	–4.5	–3.5	–4.1	–4.6	–5.0	–5.6	–5.3	–4.6
ECOWAS	3.0	–5.5	–4.4	–0.9	–1.1	–3.2	–2.9	–4.1	–4.5	–4.0
SACU	0.3	–4.9	–4.9	–3.9	–3.7	–3.6	–3.5	–4.0	–3.8	–3.6
SADC	0.3	–4.8	–3.2	–1.7	–2.0	–2.8	–4.0	–3.7	–3.9	–3.6

See sources and footnotes on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	4.4	–7.4	3.4	8.7	4.6	–0.3	–6.6	–4.1	–7.1	–6.1
Benin	–2.7	–6.0	–1.8	–3.7	–2.1	–2.8	–3.2	–8.5	–5.5	–5.0
Botswana	3.8	–14.3	–7.8	–0.6	0.7	5.1	2.2	–1.8	–1.0	–3.2
Burkina Faso	–10.2	–10.6	–7.5	–6.4	–8.0	–9.3	–6.1	–5.0	–6.8	–7.6
Burundi	–18.7	–24.0	–26.3	–26.0	–21.9	–19.4	–17.6	–19.6	–15.7	–14.3
Cabo Verde	–9.0	–11.0	–17.0	–10.6	–13.1	–11.4	–9.0	–7.2	–6.7	–5.6
Cameroon	2.3	–0.8	–1.7	–3.1	–2.0	–4.3	–5.0	–6.1	–8.2	–6.8
Central African Rep.	–5.5	–5.9	–7.0	–4.9	–4.9	–9.1	–7.7	–7.8	–12.0	–6.8
Chad	–0.7	–11.9	–5.5	0.8	–2.2	–4.3	–6.2	–8.4	–10.7	–5.7
Comoros	–7.8	–9.1	–7.8	–6.0	–6.0	–9.7	–9.9	–10.2	–16.0	–16.9
Congo, Dem. Rep. of	–1.9	–3.2	–5.7	–3.9	–1.1	0.6	0.1	–0.6	–1.8	–1.3
Congo, Rep. of	13.2	4.5	16.0	15.9	6.3	–2.2	–8.2	–11.8	–13.1	–6.0
Côte d'Ivoire	–2.0	–1.9	–2.3	–5.8	–3.7	–3.6	–4.6	–5.2	–5.0	–4.8
Equatorial Guinea	18.4	–9.5	–5.8	1.0	–9.0	–7.5	–6.7	–3.0	–8.1	–10.3
Eritrea	–24.8	–17.3	–21.3	–19.4	–16.5	–15.6	–14.8	–14.6	–14.3	–14.1
Ethiopia[1]	–7.5	–5.2	–4.5	–4.8	–2.9	–3.4	–3.7	–3.6	–4.1	–4.0
Gabon	8.5	6.8	2.7	2.5	1.6	1.8	2.7	–2.3	–4.8	–3.8
Gambia, The	–4.8	–6.9	–8.7	–9.9	–13.3	–10.8	–13.7	–8.4	–12.1	–14.4
Ghana	–8.3	–10.0	–11.7	–9.4	–12.8	–12.9	–13.1	–6.3	–4.9	–2.3
Guinea	–2.5	–7.5	–14.4	–4.8	–6.0	–6.8	–8.3	–10.6	–5.3	–4.7
Guinea-Bissau	–12.7	–11.8	–7.9	–7.4	–4.6	–5.3	–10.4	–11.9	–4.0	–9.1
Kenya	–2.9	–5.0	–5.0	–4.6	–5.5	–6.2	–8.0	–8.8	–7.7	–6.6
Lesotho	7.3	–7.0	–11.5	–18.4	–3.6	–7.3	–1.4	–3.6	–12.2	–11.4
Liberia	–0.7	–12.6	–7.5	–4.7	–4.1	–7.8	–8.6	–23.1	–17.6	–13.1
Madagascar	–9.2	–4.2	–2.8	–4.3	–3.8	–5.3	–4.6	–5.2	–5.3	–5.9
Malawi	–12.3	–11.1	–8.2	–7.7	–10.6	–13.1	–8.0	–9.8	–10.0	–7.6
Mali	–6.2	–7.8	–5.1	–6.6	–1.2	–5.2	–5.1	–4.5	–6.2	–5.8
Mauritius	–4.2	–5.2	–3.9	–3.9	–2.5	–3.9	–3.3	–4.1	–3.1	–3.2
Mozambique	–9.7	–13.3	–12.1	–12.3	–8.8	–7.8	–15.0	–10.2	–8.6	–8.2
Namibia	1.9	–0.4	–4.7	–7.1	–2.5	–3.8	–4.1	–5.9	–5.7	–4.0
Niger	–7.6	–9.7	–7.0	–5.2	–7.2	–10.6	–13.5	–13.3	–11.7	–8.8
Nigeria	4.9	–6.0	–4.2	0.4	0.2	–2.3	–2.1	–4.0	–4.7	–4.3
Rwanda	–10.0	–11.5	–12.9	–12.5	–10.9	–11.2	–11.0	–9.6	–8.6	–6.7
São Tomé & Príncipe	–15.0	–32.5	–29.7	–29.4	–28.6	–11.0	–15.8	–19.8	–27.8	–18.3
Senegal	–4.5	–7.6	–7.4	–8.3	–8.0	–8.1	–8.4	–7.7	–7.2	–6.6
Seychelles	–1.8	0.8	–0.3	0.9	–1.9	–4.0	0.5	1.2	–0.9	0.7
Sierra Leone	–7.5	–8.4	–10.3	–10.1	–9.0	–5.0	–8.0	–9.7	–8.9	–6.6
South Africa	–0.0	–4.7	–4.8	–3.9	–4.1	–4.0	–3.8	–4.0	–3.8	–3.6
South Sudan	...	...	...	1.6	–15.9	–12.0	–15.7	–11.3	–81.4	–36.3
Swaziland	0.9	–3.4	–8.9	–3.7	3.3	0.3	–2.8	–6.1	–6.4	–4.7
Tanzania	–7.2	–8.1	–8.2	–6.9	–7.0	–6.3	–4.7	–4.9	–4.9	–4.4
Togo	–2.7	–5.4	–4.5	–7.2	–8.8	–7.6	–7.3	–8.6	–8.6	–7.9
Uganda	–5.3	–4.5	–8.2	–4.4	–4.9	–5.1	–4.6	–4.3	–6.3	–5.4
Zambia	–5.7	–4.5	–3.9	–2.4	–4.5	–7.7	–6.7	–8.3	–8.6	–6.5
Zimbabwe[2]	–3.5	–2.6	0.7	–1.2	–0.5	–1.9	–1.5	–1.2	–1.6	–1.5
Sub-Saharan Africa	**0.4**	**–5.7**	**–4.3**	**–1.9**	**–2.5**	**–3.8**	**–4.2**	**–4.8**	**–5.4**	**–4.7**
Median	–4.4	–7.2	–7.0	–4.8	–4.6	–6.2	–6.7	–7.2	–7.1	–6.1
Excluding Nigeria and South Africa	–1.9	–6.0	–4.1	–2.2	–3.4	–4.7	–6.1	–5.7	–6.5	–5.5
Oil-exporting countries	**5.2**	**–5.5**	**–2.3**	**2.1**	**0.5**	**–2.3**	**–3.3**	**–4.2**	**–5.7**	**–4.9**
Excluding Nigeria	5.9	–4.7	2.2	5.5	1.0	–2.3	–6.3	–5.0	–9.2	–7.2
Oil-importing countries	**–2.4**	**–5.7**	**–5.7**	**–4.9**	**–4.8**	**–5.1**	**–5.1**	**–5.2**	**–5.1**	**–4.5**
Excluding South Africa	–5.0	–6.6	–6.7	–6.0	–5.5	–5.9	–6.0	–5.9	–5.7	–5.0
Middle-income countries	**1.8**	**–5.2**	**–3.8**	**–1.1**	**–1.8**	**–3.3**	**–3.8**	**–4.5**	**–5.1**	**–4.5**
Excluding South Africa	1.3	–5.0	–2.0	0.3	–1.8	–4.0	–6.2	–5.7	–6.6	–5.4
Low-income countries	**–6.3**	**–7.4**	**–7.0**	**–5.5**	**–5.6**	**–5.7**	**–6.0**	**–5.6**	**–6.4**	**–5.5**
Excluding low-income fragile countries	–6.9	–7.5	–7.4	–6.7	–6.0	–6.1	–6.2	–5.7	–5.8	–5.3
Fragile countries	**–2.9**	**–5.0**	**–3.4**	**–2.5**	**–3.9**	**–4.7**	**–5.7**	**–5.8**	**–7.3**	**–5.7**
CFA franc zone	1.4	–3.9	–2.0	–1.8	–3.2	–4.7	–5.4	–6.4	–7.3	–6.2
CEMAC	7.2	–1.7	0.6	2.3	–1.5	–3.5	–4.5	–6.1	–8.5	–6.3
WAEMU	–4.6	–6.0	–4.7	–6.3	–5.0	–6.0	–6.2	–6.6	–6.4	–6.1
COMESA (SSA members)	–5.3	–5.3	–5.6	–4.8	–4.2	–4.9	–5.1	–5.4	–5.6	–4.9
EAC-5	–5.4	–6.6	–7.6	–6.2	–6.5	–6.5	–6.6	–7.1	–6.8	–5.9
ECOWAS	1.9	–6.3	–5.0	–1.5	–1.6	–3.7	–3.4	–4.7	–5.1	–4.5
SACU	0.2	–4.9	–5.0	–3.9	–3.8	–3.7	–3.5	–4.1	–3.8	–3.6
SADC	–0.6	–5.6	–4.0	–2.3	–2.6	–3.4	–4.4	–4.2	–4.5	–4.1

See sources and footnotes on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	45.5	34.5	43.5	48.8	45.9	40.2	35.3	24.8	21.6	23.0
Benin	16.6	17.2	17.5	16.4	17.4	17.7	16.5	16.4	16.6	16.7
Botswana	41.4	36.0	32.1	35.7	36.1	37.5	38.0	37.9	34.2	31.1
Burkina Faso	13.1	13.6	15.3	15.7	17.5	18.5	17.3	16.2	17.8	18.1
Burundi	13.9	13.9	14.5	16.2	15.6	14.2	14.6	10.3	8.8	10.8
Cabo Verde	22.7	21.9	21.7	22.7	21.6	22.2	21.2	22.7	23.1	23.8
Cameroon	18.2	16.7	16.0	17.5	17.5	17.6	18.1	17.4	15.6	15.8
Central African Rep.	9.4	10.8	11.6	10.8	11.5	5.7	4.9	6.8	7.7	8.1
Chad	14.1	12.3	18.9	23.2	21.8	18.5	15.9	8.7	8.8	9.8
Comoros	14.1	13.9	14.3	16.1	19.3	15.5	14.5	15.3	14.7	14.0
Congo, Dem. Rep. of	8.6	10.7	12.1	11.8	14.4	12.9	13.3	13.6	13.8	14.3
Congo, Rep. of	39.6	29.1	37.5	42.0	42.5	46.5	41.9	27.7	30.3	31.2
Côte d'Ivoire	17.5	18.0	17.7	18.8	18.4	18.5	18.6	17.5	17.6	17.9
Equatorial Guinea	38.3	49.1	34.2	35.1	34.8	31.8	33.7	35.2	29.4	25.2
Eritrea	22.3	13.3	13.3	14.2	14.2	14.1	14.1	13.9	13.9	13.9
Ethiopia[1]	13.9	11.9	14.0	13.4	13.8	14.3	13.8	15.1	14.8	15.0
Gabon	28.7	29.4	25.8	29.0	30.1	30.2	26.1	21.4	19.8	20.2
Gambia, The	15.8	16.2	14.9	16.1	16.4	16.3	18.7	19.8	18.3	19.5
Ghana	13.6	13.4	14.4	17.1	17.0	16.3	17.7	18.0	19.9	19.6
Guinea	14.1	16.2	15.3	17.1	20.1	18.7	18.2	17.9	20.4	20.4
Guinea-Bissau	9.4	9.1	10.8	10.1	9.1	8.1	12.0	13.6	14.2	13.2
Kenya	18.7	18.1	19.2	19.0	18.7	19.3	19.4	19.8	20.1	20.3
Lesotho	57.0	60.4	44.7	44.4	57.9	55.6	58.5	55.7	47.1	47.2
Liberia	15.1	20.6	25.0	24.3	26.0	25.0	23.5	21.3	21.5	22.7
Madagascar	11.7	9.9	11.2	9.7	9.6	9.6	10.1	10.3	11.0	11.4
Malawi	16.4	19.4	21.8	18.4	18.3	21.6	21.8	20.9	21.8	22.3
Mali	15.0	15.1	15.2	14.0	14.4	14.5	14.8	15.8	16.5	17.0
Mauritius	19.4	21.2	21.2	20.7	20.8	21.0	20.5	21.8	22.4	22.4
Mozambique	12.7	15.6	17.9	19.8	21.9	26.3	27.6	25.2	26.3	27.1
Namibia	29.3	31.5	28.4	31.2	32.5	32.7	35.3	33.6	32.0	31.6
Niger	13.7	14.3	13.6	14.2	15.3	16.6	17.5	17.8	18.6	19.3
Nigeria	21.8	11.2	12.4	17.7	14.3	11.0	10.5	7.8	5.9	6.8
Rwanda	12.7	12.6	13.0	14.0	15.0	16.5	16.7	17.6	18.7	18.3
São Tomé & Príncipe	27.7	16.3	17.5	18.6	16.3	20.6	15.6	15.5	16.3	16.8
Senegal	20.8	19.0	19.6	20.5	20.5	20.1	21.4	22.2	21.4	21.5
Seychelles	36.5	32.9	34.2	37.2	36.7	34.2	34.1	33.5	34.5	34.6
Sierra Leone	8.8	9.1	9.9	11.5	11.4	10.8	10.1	10.6	10.3	10.8
South Africa	26.8	27.0	26.7	27.0	27.2	27.6	28.2	29.7	30.1	30.2
South Sudan	...	...	...	22.7	8.2	15.1	23.5	56.5	28.1	26.5
Swaziland	30.5	29.3	20.5	20.1	29.4	28.2	28.5	27.0	23.7	24.2
Tanzania	10.8	12.1	12.0	12.3	12.7	13.1	13.3	13.9	14.7	14.8
Togo	16.3	15.8	18.0	16.7	17.6	18.0	17.7	18.8	18.9	19.1
Uganda	10.9	10.8	10.6	12.8	11.6	11.7	12.5	13.7	14.0	14.4
Zambia	15.2	13.3	14.2	17.1	17.0	16.2	18.1	17.3	16.7	17.1
Zimbabwe[2]	6.1	11.4	23.3	26.7	28.0	27.7	26.6	27.3	25.7	25.8
Sub-Saharan Africa	**23.4**	**19.8**	**20.6**	**23.3**	**21.8**	**20.1**	**19.4**	**17.9**	**16.1**	**16.3**
Median	16.1	16.0	17.5	17.7	17.6	18.5	18.1	17.9	18.7	19.3
Excluding Nigeria and South Africa	21.8	20.2	22.1	24.5	23.9	22.9	22.1	19.7	18.8	19.1
Oil-exporting countries	**25.9**	**17.8**	**19.0**	**24.5**	**21.3**	**17.9**	**16.3**	**12.0**	**9.2**	**9.9**
Excluding Nigeria	34.7	30.3	34.8	37.9	36.6	33.4	30.7	23.5	20.4	21.1
Oil-importing countries	**21.8**	**21.1**	**21.8**	**22.4**	**22.3**	**22.1**	**22.3**	**22.7**	**22.3**	**22.3**
Excluding South Africa	16.5	16.0	16.8	17.6	18.0	18.0	18.3	18.3	18.3	18.4
Middle-income countries	**25.6**	**21.5**	**21.9**	**24.9**	**23.3**	**21.2**	**20.3**	**18.3**	**16.1**	**16.2**
Excluding South Africa	28.2	25.6	27.4	30.8	30.2	28.2	27.0	22.7	21.3	21.5
Low-income countries	**12.9**	**13.2**	**14.8**	**15.8**	**15.5**	**15.9**	**16.2**	**16.3**	**16.2**	**16.5**
Excluding low-income fragile countries	13.5	13.3	14.1	14.7	15.0	15.8	15.9	16.3	16.4	16.6
Fragile countries	**15.8**	**15.4**	**18.3**	**19.7**	**18.9**	**18.8**	**18.8**	**17.2**	**17.0**	**17.5**
CFA franc zone	21.4	20.7	20.8	22.6	22.7	22.3	21.4	18.8	18.2	18.4
CEMAC	25.9	25.0	24.6	27.6	27.6	26.8	25.0	20.2	18.5	18.4
WAEMU	16.8	16.7	17.0	17.1	17.5	17.8	17.9	17.7	18.0	18.4
COMESA (SSA members)	14.8	14.4	15.8	16.2	16.6	16.6	16.7	17.2	17.1	17.3
EAC-5	14.2	14.3	14.7	15.2	15.1	15.6	15.9	16.5	17.1	17.3
ECOWAS	20.0	12.6	13.3	17.6	15.0	12.5	12.1	10.0	8.7	9.3
SACU	27.6	27.6	27.0	27.5	27.8	28.3	29.0	30.2	30.4	30.4
SADC	26.7	25.7	26.9	28.4	28.5	27.7	27.2	25.9	25.2	25.4

See sources and footnotes on page 82

Table SA11. Government Expenditure
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	41.1	41.9	40.0	40.2	41.3	40.5	41.9	28.9	28.7	29.1
Benin	19.4	23.2	19.2	20.1	19.5	20.5	19.7	24.9	22.1	21.7
Botswana	37.6	50.3	39.9	36.3	35.4	32.4	35.8	39.7	35.2	34.3
Burkina Faso	23.3	24.2	22.8	22.1	25.5	27.8	23.4	21.3	24.6	25.7
Burundi	32.6	38.0	40.8	42.2	37.5	33.5	32.2	29.9	24.4	25.1
Cabo Verde	31.7	32.8	38.7	33.3	34.7	33.6	30.2	29.9	29.8	29.4
Cameroon	15.9	17.5	17.7	20.5	19.5	21.9	23.1	23.5	23.8	22.6
Central African Rep.	14.9	16.6	18.6	15.7	16.4	14.7	12.6	14.6	19.7	14.9
Chad	14.9	24.2	24.4	22.4	23.9	22.9	22.1	17.1	19.5	15.5
Comoros	21.9	23.0	22.1	22.1	25.3	25.2	24.4	25.5	30.7	30.9
Congo, Dem. Rep. of	10.6	13.9	17.7	15.7	15.4	12.2	13.3	14.2	15.6	15.5
Congo, Rep. of	26.4	24.7	21.4	26.1	36.2	48.7	50.1	39.6	43.3	37.3
Côte d'Ivoire	19.5	19.9	20.0	24.6	22.1	22.1	23.2	22.7	22.6	22.8
Equatorial Guinea	20.0	58.6	40.0	34.0	43.8	39.3	40.4	38.2	37.5	35.5
Eritrea	47.1	30.6	34.6	33.6	30.7	29.7	28.9	28.5	28.2	28.0
Ethiopia[1]	21.5	17.1	18.5	18.2	16.6	17.8	17.5	18.6	18.9	19.0
Gabon	20.2	22.6	23.1	26.5	28.5	28.4	23.5	23.7	24.6	24.0
Gambia, The	20.6	23.1	23.6	26.0	29.7	27.1	32.5	28.2	30.4	33.9
Ghana	21.8	23.5	26.1	26.5	29.8	29.2	30.8	24.4	24.8	21.9
Guinea	16.5	23.7	29.7	21.9	26.1	25.5	26.5	28.5	25.7	25.1
Guinea-Bissau	22.1	20.9	18.7	17.5	13.7	13.4	22.4	25.5	18.1	22.3
Kenya	21.6	23.1	24.2	23.6	24.2	25.5	27.4	28.6	27.9	27.0
Lesotho	49.8	67.4	56.2	62.8	61.5	62.9	59.9	59.3	59.3	58.6
Liberia	15.8	33.2	32.5	29.0	30.1	32.8	32.1	44.5	39.1	35.8
Madagascar	20.9	14.1	14.0	14.1	13.4	14.9	14.7	15.5	16.3	17.3
Malawi	28.6	30.5	30.0	26.1	28.9	34.7	29.8	30.7	31.8	29.9
Mali	21.2	22.8	20.3	20.6	15.5	19.7	19.9	20.3	22.6	22.8
Mauritius	23.7	26.3	25.1	24.6	23.3	24.9	23.8	25.9	25.4	25.5
Mozambique	22.5	28.9	30.0	32.2	30.7	34.0	42.5	35.4	34.9	35.3
Namibia	27.4	31.9	33.1	38.4	35.0	36.5	39.4	39.6	37.6	35.6
Niger	21.3	23.9	20.6	19.4	22.5	27.2	31.0	31.1	30.3	28.1
Nigeria	16.9	17.2	16.7	17.4	14.1	13.4	12.6	11.8	10.6	11.1
Rwanda	22.7	24.1	25.9	26.5	25.9	27.6	27.7	27.2	27.3	24.9
São Tomé & Príncipe	42.6	48.8	47.3	48.0	44.9	31.6	31.4	35.2	44.1	35.1
Senegal	25.3	26.6	27.0	28.8	28.5	28.1	29.8	29.9	28.7	28.1
Seychelles	38.3	32.1	34.6	36.3	38.6	38.2	33.6	32.3	35.4	33.8
Sierra Leone	16.4	17.5	20.2	21.6	20.4	15.8	18.1	20.3	19.2	17.3
South Africa	26.8	31.7	31.5	30.9	31.3	31.7	32.0	33.7	33.9	33.8
South Sudan	...	...	...	21.1	24.1	27.1	39.2	67.9	109.5	62.7
Swaziland	29.6	32.7	29.4	23.9	26.1	28.0	31.3	33.1	30.1	28.9
Tanzania	18.0	20.2	20.2	19.1	19.8	19.4	18.0	18.8	19.6	19.2
Togo	19.0	21.2	22.5	23.8	26.4	25.5	25.0	27.4	27.5	27.0
Uganda	16.2	15.3	18.8	17.2	16.5	16.8	17.1	18.0	20.4	19.8
Zambia	21.0	17.8	18.1	19.5	21.5	23.8	24.9	25.6	25.2	23.6
Zimbabwe[2]	9.6	14.0	22.6	27.8	28.5	29.6	28.1	28.5	27.3	27.3
Sub-Saharan Africa	**23.0**	**25.5**	**25.0**	**25.2**	**24.3**	**23.9**	**23.7**	**22.6**	**21.5**	**21.0**
Median	21.5	23.8	23.9	24.6	26.1	27.2	27.7	28.2	27.3	27.0
Excluding Nigeria and South Africa	23.7	26.2	26.2	26.6	27.3	27.6	28.2	25.4	25.3	24.5
Oil-exporting countries	**20.7**	**23.3**	**21.3**	**22.4**	**20.8**	**20.2**	**19.6**	**16.2**	**14.9**	**14.8**
Excluding Nigeria	28.8	35.0	32.6	32.4	35.6	35.7	36.9	28.5	29.6	28.3
Oil-importing countries	**24.2**	**26.8**	**27.5**	**27.3**	**27.1**	**27.1**	**27.4**	**27.9**	**27.4**	**26.8**
Excluding South Africa	21.5	22.6	23.5	23.7	23.5	23.8	24.3	24.3	24.1	23.4
Middle-income countries	**23.8**	**26.7**	**25.6**	**26.0**	**25.0**	**24.5**	**24.1**	**22.9**	**21.2**	**20.7**
Excluding South Africa	27.0	30.7	29.4	30.5	31.9	32.2	33.2	28.4	27.9	27.0
Low-income countries	**19.2**	**20.5**	**21.7**	**21.3**	**21.1**	**21.6**	**22.1**	**21.9**	**22.7**	**22.1**
Excluding low-income fragile countries	20.4	20.9	21.5	21.4	21.0	21.9	22.1	21.9	22.2	21.9
Fragile countries	**18.7**	**20.4**	**21.7**	**22.2**	**22.8**	**23.5**	**24.5**	**23.0**	**24.2**	**23.2**
CFA franc zone	20.0	24.6	22.9	24.4	25.9	27.0	26.8	25.2	25.5	24.6
CEMAC	18.7	26.7	24.0	25.3	29.2	30.3	29.5	26.2	27.0	24.8
WAEMU	21.3	22.7	21.7	23.4	22.5	23.8	24.1	24.4	24.5	24.4
COMESA (SSA members)	20.1	19.7	21.5	21.0	20.8	21.5	21.8	22.6	22.6	22.2
EAC-5	19.6	20.9	22.3	21.4	21.6	22.1	22.5	23.6	23.9	23.1
ECOWAS	18.1	18.9	18.3	19.1	16.6	16.2	15.4	14.7	13.7	13.8
SACU	27.4	32.5	32.0	31.4	31.6	32.0	32.5	34.3	34.2	34.0
SADC	27.4	31.3	30.9	30.7	31.1	31.1	31.6	30.1	29.7	29.5

See sources and footnotes on page 82.

Table SA12. Government Debt
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	27.8	22.7	44.3	33.8	29.5	32.9	40.7	62.3	70.1	68.7
Benin	24.4	25.6	28.7	29.9	26.8	25.4	30.9	37.5	39.5	40.6
Botswana	7.7	17.6	19.4	20.3	18.9	17.6	17.9	17.8	15.6	11.8
Burkina Faso	32.6	28.5	29.3	29.8	28.3	28.7	28.6	31.0	32.6	33.0
Burundi	134.4	25.7	40.3	39.1	39.9	37.0	32.6	38.4	39.5	37.0
Cabo Verde	73.8	65.2	72.4	78.8	91.1	100.5	111.3	119.3	121.7	122.2
Cameroon	30.1	10.1	11.5	13.2	15.4	18.7	28.0	33.5	38.0	41.3
Central African Rep.	79.4	32.3	32.3	32.9	34.5	54.2	68.3	65.0	58.5	52.1
Chad	24.8	31.7	30.1	29.5	28.2	30.1	36.7	39.3	43.1	38.5
Comoros	65.1	53.5	50.3	46.1	42.5	18.1	22.3	26.7	29.2	29.6
Congo, Dem. Rep. of	105.0	93.2	31.9	26.3	23.2	19.1	16.8	18.8	19.8	22.2
Congo, Rep. of	114.4	61.6	22.9	33.1	34.1	38.2	47.5	64.9	78.8	69.0
Côte d'Ivoire	76.6	64.2	63.0	93.3	44.8	39.9	36.6	34.7	33.0	31.5
Equatorial Guinea	2.1	6.4	10.1	7.4	9.1	7.9	12.0	20.1	24.6	27.2
Eritrea	146.3	144.6	143.8	133.0	127.6	128.4	126.5	127.1	125.6	127.5
Ethiopia[1]	70.8	36.0	39.6	38.2	32.8	36.9	40.7	48.6	55.4	59.0
Gabon	41.2	23.1	20.5	17.9	19.7	29.2	32.2	43.9	49.6	49.5
Gambia, The	107.3	62.6	69.6	77.3	77.0	83.3	101.1	91.6	96.9	99.2
Ghana	39.3	36.1	46.3	42.6	49.1	56.2	69.0	73.3	74.1	72.2
Guinea	117.9	89.3	99.6	79.4	35.4	40.3	42.9	48.4	48.4	44.7
Guinea-Bissau	197.4	159.2	67.5	49.5	52.1	53.6	55.0	57.7	48.6	45.8
Kenya	45.2	41.1	44.4	43.0	41.7	41.6	47.0	52.7	55.2	55.0
Lesotho	57.5	37.6	35.2	38.0	40.3	43.4	49.5	60.0	61.4	58.5
Liberia	548.8	173.9	33.4	29.6	27.0	27.5	33.3	40.0	45.0	47.7
Madagascar	56.6	33.7	31.8	32.6	33.7	34.0	34.7	35.6	39.2	38.1
Malawi	62.2	42.6	52.9	79.3	77.5	95.6	100.4	83.4	73.0	67.4
Mali	29.0	21.0	25.4	25.1	25.0	25.7	30.8	36.3	35.2	36.1
Mauritius	49.5	52.3	52.0	52.3	51.5	53.9	56.1	58.1	58.3	57.6
Mozambique	49.7	41.8	43.2	37.9	39.9	50.9	57.0	74.8	87.4	82.0
Namibia	23.7	16.3	15.9	24.3	24.6	24.2	25.0	27.2	30.9	31.8
Niger	43.3	27.7	24.3	27.8	26.8	27.2	32.9	43.5	46.9	47.9
Nigeria	16.0	9.6	9.6	10.2	10.4	10.5	10.6	11.5	13.3	14.0
Rwanda	47.1	22.4	22.6	23.1	20.1	26.5	29.0	34.6	41.5	43.3
São Tomé & Príncipe	207.2	68.0	75.3	71.7	78.3	71.3	68.9	82.5	91.9	93.8
Senegal	32.5	34.2	35.5	40.7	42.8	46.9	54.2	56.8	57.3	56.2
Seychelles	140.1	121.3	81.9	77.3	82.5	68.8	68.6	68.1	64.8	58.5
Sierra Leone	94.1	48.1	46.8	44.9	36.9	30.8	35.9	46.1	52.5	52.1
South Africa	30.5	30.1	34.7	38.2	40.9	44.2	47.1	50.1	51.4	52.1
South Sudan	...	...	...	0.0	4.5	12.7	20.7	56.9	40.5	30.5
Swaziland	14.6	10.3	13.5	13.9	14.4	14.8	13.7	17.4	20.1	22.8
Tanzania	33.5	24.4	27.3	27.8	29.2	30.9	35.2	40.5	42.4	42.6
Togo	97.4	73.4	49.9	49.3	49.0	51.2	57.5	61.9	61.1	63.1
Uganda	34.8	19.2	22.9	23.6	24.2	27.7	31.2	35.4	37.9	40.2
Zambia	20.4	20.5	18.9	20.8	24.9	26.5	35.1	52.9	57.9	58.6
Zimbabwe[2]	50.6	68.3	63.2	51.8	56.7	54.8	51.1	53.0	55.0	54.9
Sub-Saharan Africa	**33.3**	**27.3**	**28.1**	**28.6**	**27.9**	**29.1**	**31.2**	**36.4**	**37.2**	**36.8**
Median	49.6	35.1	35.0	33.8	34.1	34.0	36.6	48.4	48.6	47.9
Excluding Nigeria and South Africa	46.8	35.6	36.4	34.6	32.4	34.8	39.5	48.1	50.8	50.7
Oil-exporting countries	**21.7**	**14.1**	**16.1**	**15.0**	**14.7**	**15.8**	**17.7**	**22.4**	**23.2**	**23.0**
Excluding Nigeria	34.0	22.7	31.7	24.6	24.2	27.7	35.3	52.6	57.8	56.4
Oil-importing countries	**40.6**	**35.8**	**36.5**	**38.9**	**38.4**	**40.6**	**43.7**	**47.9**	**49.6**	**50.0**
Excluding South Africa	52.0	40.9	38.4	39.7	36.3	38.0	41.4	46.5	48.7	48.9
Middle-income countries	**28.1**	**23.8**	**26.3**	**27.5**	**26.8**	**27.7**	**29.5**	**34.3**	**34.5**	**33.9**
Excluding South Africa	38.8	31.0	36.3	35.4	32.2	34.9	40.7	51.6	54.8	53.9
Low-income countries	**57.6**	**41.5**	**36.6**	**33.5**	**32.7**	**34.6**	**38.2**	**44.1**	**46.6**	**47.3**
Excluding low-income fragile countries	42.7	29.6	31.6	32.0	31.1	34.5	38.8	45.6	49.7	50.8
Fragile countries	**81.9**	**61.8**	**46.0**	**44.6**	**36.7**	**36.0**	**38.0**	**41.7**	**41.9**	**41.0**
CFA franc zone	45.6	33.7	29.9	34.4	28.0	29.8	34.5	39.8	42.0	41.8
CEMAC	39.7	23.0	18.0	18.9	20.0	23.7	31.0	39.2	44.7	44.6
WAEMU	52.0	43.6	42.0	51.5	36.5	35.8	37.8	40.3	40.0	39.7
COMESA (SSA members)	56.5	43.3	38.0	37.4	36.0	37.1	40.3	45.8	48.9	50.4
EAC-5	41.2	30.0	33.3	33.0	32.9	34.5	39.0	44.5	47.1	47.5
ECOWAS	28.1	20.0	18.3	19.8	17.5	18.0	18.3	20.2	21.4	21.4
SACU	29.5	29.1	33.4	37.0	39.3	42.2	44.8	47.7	48.8	49.2
SADC	33.5	31.7	35.2	36.1	36.8	39.1	42.5	49.2	51.0	50.9

See sources and footnotes on page 82.

Table SA13. Broad Money
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	21.9	42.5	35.3	37.6	35.0	36.5	41.0	46.4	50.0	47.0
Benin	30.4	38.7	41.9	42.8	41.5	44.8	49.7	50.7	54.1	58.3
Botswana	46.7	52.7	46.6	43.4	47.8	46.6	45.3	50.0	51.1	52.3
Burkina Faso	23.9	28.0	29.7	29.7	30.5	31.9	34.8	39.4	41.1	44.7
Burundi	22.3	24.3	25.3	23.8	22.1	21.1	20.2	20.2	20.2	20.2
Cabo Verde	75.1	77.5	80.1	78.5	82.1	89.9	95.3	94.1	95.7	97.5
Cameroon	19.4	22.3	23.4	24.2	22.7	23.3	24.1	25.4	25.8	26.0
Central African Rep.	15.9	16.1	17.8	19.2	18.3	28.1	28.7	28.8	28.8	28.8
Chad	9.0	11.1	11.5	12.1	12.4	13.3	15.7	15.7	18.0	17.6
Comoros	25.6	30.4	34.1	34.9	38.3	36.9	38.4	43.4	41.5	41.5
Congo, Dem. Rep. of	6.6	10.2	10.5	10.7	11.6	11.5	11.9	11.6	11.6	12.2
Congo, Rep. of	16.0	22.5	23.8	28.0	33.0	34.8	39.2	44.2	49.5	46.1
Côte d'Ivoire	11.3	14.1	15.7	18.9	15.1	15.0	15.7	16.6	17.3	18.1
Equatorial Guinea	7.3	15.4	15.8	13.2	18.4	21.4	20.3	26.3	30.8	32.1
Eritrea	130.2	121.6	123.2	114.7	114.1	118.3	119.9	118.6	119.9	122.8
Ethiopia[1]	44.7	24.8	27.0	27.6	25.3	27.1	28.1	29.9	30.9	31.5
Gabon	17.0	20.3	19.5	20.5	23.2	24.8	24.4	25.8	27.2	26.1
Gambia, The	39.0	48.7	49.9	55.7	54.5	56.6	59.2	52.8	52.6	53.9
Ghana	22.8	28.0	29.9	30.4	30.0	28.8	32.5	34.7	34.2	33.4
Guinea	20.2	26.9	38.2	34.3	28.9	30.9	31.2	35.2	34.7	34.7
Guinea-Bissau	19.1	24.6	29.7	33.2	32.0	39.3	44.5	48.9	50.0	56.8
Kenya	35.7	36.5	40.1	40.6	40.5	42.2	43.5	43.8	45.5	47.7
Lesotho	32.6	39.1	39.9	36.2	36.1	39.4	37.4	35.9	36.4	36.7
Liberia	19.5	31.4	35.5	42.0	36.3	34.8	34.6	34.8	34.4	34.1
Madagascar	23.6	24.5	24.7	26.1	25.7	25.2	25.4	26.2	26.7	26.8
Malawi	15.8	19.8	22.1	25.1	25.7	26.0	24.5	23.8	23.1	23.2
Mali	25.6	24.7	24.5	24.4	27.0	28.2	27.7	29.0	30.8	32.3
Mauritius	98.5	99.5	100.4	98.9	100.5	99.8	102.8	104.6	106.4	106.0
Mozambique	17.0	24.2	24.7	27.7	30.6	33.4	38.5	41.7	41.1	41.9
Namibia	44.5	65.8	64.4	67.2	59.6	56.1	52.7	52.7	52.7	52.7
Niger	15.6	18.5	20.3	20.2	22.6	23.3	27.2	29.9	32.0	30.5
Nigeria	16.5	27.1	20.8	18.8	21.3	19.3	20.9	20.9	21.5	21.7
Rwanda	16.7	17.5	18.5	20.3	20.1	21.1	22.7	23.8	24.7	25.6
São Tomé & Príncipe	33.2	34.9	36.6	34.9	38.0	38.3	40.0	40.2	40.2	40.5
Senegal	34.7	36.9	39.7	40.0	39.9	42.6	46.0	48.9	48.4	47.9
Seychelles	84.6	55.5	62.1	60.2	52.0	58.9	68.3	67.0	67.0	67.0
Sierra Leone	16.7	22.6	23.5	23.2	22.0	20.0	22.3	24.9	25.2	25.6
South Africa	72.5	77.7	75.8	74.6	72.7	71.1	71.0	74.6	74.1	73.8
South Sudan	...	...	...	9.5	19.8	14.3	19.1	29.2	42.4	30.7
Swaziland	19.8	25.4	25.0	24.4	23.9	25.4	24.3	24.7	24.2	24.0
Tanzania	21.8	23.3	25.1	24.7	23.8	22.7	23.4	24.6	24.5	24.9
Togo	33.3	41.3	45.6	46.9	45.3	46.5	48.2	51.8	52.3	52.8
Uganda	16.5	17.9	21.7	19.8	19.7	20.0	21.4	21.3	22.3	24.2
Zambia	18.0	17.8	18.4	19.1	19.6	20.5	20.9	25.5	24.3	24.5
Zimbabwe[2]	10.7	16.9	24.7	28.3	29.8	28.8	30.8	32.5	33.9	34.9
Sub-Saharan Africa	**35.5**	**40.3**	**37.7**	**36.6**	**36.8**	**35.8**	**36.7**	**38.3**	**38.8**	**38.7**
Median	21.8	25.1	26.2	28.0	29.8	28.8	31.2	34.7	34.4	34.1
Excluding Nigeria and South Africa	25.6	29.2	29.8	29.9	29.8	30.4	32.0	34.1	35.3	35.3
Oil-exporting countries	**16.9**	**28.0**	**22.4**	**21.0**	**23.1**	**21.9**	**23.8**	**25.0**	**26.3**	**25.8**
Excluding Nigeria	17.9	30.3	27.1	26.6	27.8	28.8	31.7	36.0	39.5	37.2
Oil-importing countries	**47.1**	**48.9**	**48.8**	**48.2**	**46.8**	**46.0**	**46.4**	**48.2**	**48.0**	**47.9**
Excluding South Africa	28.0	28.8	30.7	31.0	30.5	30.9	32.1	33.5	34.0	34.8
Middle-income countries	**38.5**	**44.7**	**41.0**	**40.0**	**40.0**	**38.7**	**39.5**	**41.2**	**41.5**	**41.2**
Excluding South Africa	26.6	33.8	33.1	34.2	33.5	34.2	36.1	38.7	40.1	39.7
Low-income countries	**24.6**	**24.1**	**26.2**	**25.5**	**25.9**	**26.4**	**27.8**	**29.4**	**30.5**	**31.0**
Excluding low-income fragile countries	27.1	24.7	26.9	26.9	26.3	27.2	29.0	30.6	31.3	32.2
Fragile countries	**18.5**	**21.2**	**23.1**	**22.9**	**24.0**	**23.8**	**24.9**	**26.5**	**28.1**	**27.7**
CFA franc zone	18.6	22.4	23.6	24.7	25.0	26.4	27.9	30.1	31.8	32.2
CEMAC	14.8	19.0	19.6	20.4	21.9	23.5	24.6	26.9	29.2	28.6
WAEMU	22.1	25.3	27.2	28.7	27.8	29.0	30.8	32.8	33.8	34.9
COMESA (SSA members)	31.3	28.6	30.7	30.9	30.5	31.2	32.1	33.1	33.9	34.9
EAC-5	26.0	26.7	29.6	29.3	28.9	29.2	30.2	30.8	31.6	33.0
ECOWAS	18.3	27.0	22.9	21.7	23.4	22.0	23.7	24.3	25.0	25.3
SACU	69.8	75.5	73.4	72.2	70.4	68.8	68.5	71.8	71.4	71.1
SADC	53.4	58.6	56.5	55.9	54.3	53.1	53.4	56.2	56.0	55.3

See sources and footnotes on page 82.

Table SA14. Broad Money Growth
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	64.6	21.5	5.3	37.1	4.9	14.1	16.2	11.8	20.7	15.2
Benin	15.6	6.2	11.6	9.1	9.0	17.3	16.7	7.9	14.0	15.5
Botswana	17.4	–1.3	12.4	4.3	17.6	8.5	11.3	6.5	12.5	11.7
Burkina Faso	6.9	18.2	19.1	13.8	15.9	10.6	11.3	19.7	12.5	17.3
Burundi	21.1	19.8	19.4	6.1	10.9	11.9	8.4	1.1	11.3	9.6
Cabo Verde	12.5	3.5	5.4	4.6	6.3	11.4	7.4	1.0	5.5	7.0
Cameroon	10.5	6.9	11.3	10.6	1.4	10.8	10.5	13.5	8.2	7.5
Central African Rep.	7.5	11.7	16.1	13.8	1.6	5.6	14.6	11.2	12.7	12.8
Chad	23.6	–4.6	25.3	14.2	13.4	8.6	26.5	–6.4	6.3	8.2
Comoros	8.1	13.3	19.4	9.6	16.0	2.8	8.1	16.5	0.8	5.7
Congo, Dem. Rep. of	52.5	50.4	30.8	23.2	21.1	18.1	14.2	6.2	6.8	12.2
Congo, Rep. of	28.7	5.0	38.9	34.5	21.1	0.7	13.1	–11.5	5.4	4.8
Côte d'Ivoire	12.0	24.4	19.3	17.2	–7.6	9.7	13.8	17.3	15.7	14.9
Equatorial Guinea	30.7	29.9	33.5	7.7	57.8	7.3	–14.1	–6.2	–1.8	8.9
Eritrea	11.2	15.7	15.6	14.6	17.9	17.5	17.2	13.9	16.0	15.7
Ethiopia[1]	8.4	19.9	24.4	36.5	32.9	24.2	26.9	24.2	18.7	18.9
Gabon	14.2	2.2	19.2	26.5	15.7	6.1	1.6	–0.1	3.8	5.2
Gambia, The	16.5	19.4	13.7	11.0	7.8	15.1	11.2	–0.9	10.1	13.5
Ghana	31.3	26.0	34.4	32.2	24.3	19.1	36.8	26.1	15.1	13.7
Guinea	35.5	25.9	74.4	9.4	1.0	14.1	12.3	20.3	11.1	15.6
Guinea-Bissau	25.7	4.4	29.6	39.1	–6.0	22.5	22.4	25.1	11.7	21.2
Kenya	14.9	16.0	21.6	19.1	14.1	15.6	16.7	13.7	17.4	17.7
Lesotho	16.8	17.7	14.5	1.6	7.0	21.2	4.0	3.2	10.6	11.2
Liberia	33.6	30.6	28.0	41.3	–2.1	7.6	2.1	1.7	2.1	6.7
Madagascar	17.2	10.2	9.6	16.4	6.9	5.3	11.1	14.5	13.3	12.3
Malawi	27.6	23.9	33.9	35.7	22.9	35.1	20.7	21.0	18.6	18.1
Mali	5.6	16.0	9.0	15.3	15.2	7.4	7.1	13.2	15.3	11.6
Mauritius	13.0	2.4	6.9	6.4	8.2	5.8	8.7	7.1	8.0	6.0
Mozambique	22.2	34.6	17.6	23.9	25.6	21.2	27.3	21.7	10.9	14.9
Namibia	30.4	7.0	7.5	13.8	5.3	8.5	7.6	16.0	9.6	12.1
Niger	15.7	18.3	22.0	6.2	31.2	10.1	25.7	13.8	14.5	3.2
Nigeria	37.2	17.1	6.9	4.0	29.1	1.0	20.4	5.9	14.2	16.5
Rwanda	23.6	13.0	16.9	26.7	14.0	15.5	19.0	15.8	14.7	16.1
São Tomé & Príncipe	29.8	8.2	25.1	10.4	20.3	13.9	16.8	13.1	11.6	6.3
Senegal	9.5	10.9	14.1	6.7	6.8	8.0	11.4	13.4	7.4	7.4
Seychelles	7.9	7.0	13.5	4.5	–0.6	23.7	25.8	4.3	5.6	6.2
Sierra Leone	24.5	31.3	28.5	22.6	22.5	16.7	16.6	11.3	13.3	14.0
South Africa	18.9	1.8	6.9	8.3	5.2	5.9	7.3	10.3	6.0	7.1
South Sudan	...	...	...	...	33.9	–1.6	21.2	62.4	188.0	31.6
Swaziland	15.7	26.8	7.9	5.5	10.0	15.9	3.9	9.1	3.5	4.6
Tanzania	22.0	17.7	25.4	18.2	12.5	10.0	15.6	18.0	12.5	13.4
Togo	15.7	16.2	16.3	15.9	8.9	10.3	9.8	16.2	8.7	8.6
Uganda	19.1	16.6	41.5	10.5	14.9	9.5	15.2	11.7	18.4	20.0
Zambia	25.6	7.7	29.9	21.7	17.9	20.8	12.6	38.7	19.6	16.9
Zimbabwe[2]	1.4	340.0	68.6	33.1	19.9	4.6	12.6	6.0	7.1	8.0
Sub-Saharan Africa	**25.1**	**14.3**	**13.4**	**12.6**	**16.7**	**7.8**	**15.5**	**11.2**	**13.0**	**13.3**
Median	17.3	16.1	19.2	14.0	14.0	10.6	13.1	13.1	11.6	12.2
Excluding Nigeria and South Africa	22.0	19.7	21.6	21.2	14.8	13.3	16.2	15.0	15.2	14.0
Oil-exporting countries	**36.8**	**16.3**	**8.7**	**9.3**	**24.3**	**3.3**	**18.1**	**6.7**	**15.3**	**15.3**
Excluding Nigeria	36.3	14.4	13.9	26.0	12.2	9.9	12.2	8.8	18.5	12.0
Oil-importing countries	**18.3**	**12.9**	**16.9**	**15.1**	**11.5**	**11.2**	**13.7**	**14.6**	**11.3**	**12.0**
Excluding South Africa	17.9	21.4	24.1	19.8	15.6	14.5	17.6	17.0	14.2	14.6
Middle-income countries	**27.4**	**11.8**	**10.2**	**10.6**	**16.4**	**6.1**	**14.9**	**9.6**	**12.0**	**12.9**
Excluding South Africa	26.4	15.9	18.0	22.3	11.9	13.2	14.9	14.0	14.4	13.2
Low-income countries	**17.3**	**24.0**	**25.6**	**20.1**	**17.9**	**13.5**	**17.6**	**16.1**	**16.0**	**14.8**
Excluding low-income fragile countries	15.4	17.8	24.6	20.0	19.2	14.8	19.3	18.1	14.9	15.6
Fragile countries	**19.1**	**30.7**	**26.7**	**20.7**	**11.5**	**10.2**	**14.4**	**11.6**	**16.8**	**12.9**
CFA franc zone	14.3	12.9	19.0	14.8	11.2	8.9	10.5	8.6	9.8	10.0
CEMAC	18.4	8.3	22.3	16.5	16.7	7.5	7.5	1.1	5.5	7.0
WAEMU	10.7	17.1	16.1	13.2	6.3	10.1	13.2	15.2	13.3	12.4
COMESA (SSA members)	17.3	24.6	26.2	22.0	18.7	16.4	17.2	16.8	15.5	16.1
EAC-5	18.6	16.7	26.7	16.9	13.6	12.2	15.9	14.7	15.5	16.3
ECOWAS	31.1	17.9	10.9	7.5	24.3	4.0	20.2	8.9	14.0	15.5
SACU	19.0	2.2	7.2	8.2	5.8	6.3	7.4	10.3	6.4	7.4
SADC	23.8	11.2	11.6	14.7	8.3	9.4	10.7	12.5	9.9	10.2

See sources and footnotes on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015
Angola	71.9	60.5	19.2	28.8	24.2	15.0	1.1	17.6
Benin	16.4	11.9	8.5	11.5	9.4	10.6	6.0	–1.8
Botswana	21.2	10.3	11.1	21.8	21.5	13.8	13.7	7.8
Burkina Faso	14.4	1.7	14.7	23.5	24.1	26.3	18.9	7.0
Burundi	8.4	25.5	30.2	39.3	12.4	8.3	9.1	–2.9
Cabo Verde	20.4	11.8	9.0	13.3	–0.6	2.0	–0.9	0.2
Cameroon	8.2	9.1	8.2	28.3	2.6	14.9	14.4	7.0
Central African Rep.	8.7	8.7	30.2	19.2	31.0	–18.1	5.4	5.3
Chad	17.3	21.0	30.2	24.4	32.1	6.1	37.8	8.0
Comoros	11.4	44.1	25.9	8.9	22.4	12.6	10.0	13.0
Congo, Dem. Rep. of	91.1	41.1	19.0	16.7	25.6	26.5	22.7	66.3
Congo, Rep. of	26.6	30.4	49.3	42.3	44.3	17.0	25.6	9.2
Côte d'Ivoire	9.3	10.8	8.7	0.4	12.2	22.9	21.7	26.7
Equatorial Guinea	50.1	13.8	30.6	30.7	–13.6	34.3	18.4	13.9
Eritrea	6.3	1.2	1.6	14.6	–1.5	4.4	7.3	7.5
Ethiopia[1]	24.9	14.5	28.1	25.0	37.7	10.8	19.9	26.3
Gabon	10.0	–7.9	1.9	42.0	24.1	23.6	–2.0	–5.2
Gambia, The	13.2	10.3	14.8	8.8	4.3	20.5	–7.6	13.0
Ghana	44.1	16.2	24.8	29.0	32.9	29.0	42.0	24.7
Guinea	19.2	15.8	43.8	93.4	–3.2	35.0	44.0	27.1
Guinea-Bissau	50.9	24.9	58.2	46.7	27.2	3.6	–8.2	11.3
Kenya	19.9	13.9	20.3	30.9	10.4	20.1	22.2	18.0
Lesotho	29.2	20.7	26.9	25.1	42.2	10.3	11.8	9.2
Liberia	36.0	31.5	40.1	32.4	11.2	27.2	5.6	8.1
Madagascar	24.8	6.5	11.2	7.0	4.8	16.2	18.4	16.5
Malawi	41.2	39.5	52.4	20.5	25.4	14.4	20.0	43.0
Mali	7.2	11.0	13.5	24.1	4.8	11.7	18.7	19.9
Mauritius	15.4	0.5	12.5	12.3	17.4	14.2	–2.2	8.7
Mozambique	27.5	58.6	18.3	19.4	16.0	17.5	18.2	17.6
Namibia	16.9	10.0	11.1	9.3	16.9	14.5	16.5	11.0
Niger	26.1	18.4	11.7	16.0	24.2	4.0	10.4	15.9
Nigeria	47.0	22.0	–5.6	2.6	6.6	9.4	18.0	4.4
Rwanda	30.2	5.7	9.9	27.6	35.0	11.1	19.6	24.6
São Tomé & Príncipe	53.5	39.3	35.8	15.4	11.0	–3.3	–1.4	3.5
Senegal	13.1	3.8	10.1	19.0	10.0	12.6	6.4	7.1
Seychelles	21.9	–9.2	23.6	5.2	8.5	4.5	25.7	6.9
Sierra Leone	35.5	45.4	31.5	21.8	–6.9	11.9	5.4	3.2
South Africa	17.8	3.0	3.3	5.7	9.3	6.6	7.2	8.3
South Sudan	...	...	...	–34.0	125.7	45.4	49.8	–35.6
Swaziland	21.4	13.1	–0.5	26.0	–1.7	20.2	9.8	5.5
Tanzania	35.8	9.6	20.0	27.2	18.2	15.3	19.4	24.8
Togo	8.4	21.3	21.6	41.1	18.9	13.5	11.6	15.6
Uganda	27.5	17.3	41.8	28.3	11.8	6.2	14.1	15.3
Zambia	43.2	–5.7	15.4	28.2	37.0	12.6	26.4	12.2
Zimbabwe[2]	5.8	388.2	143.3	62.8	27.1	3.7	4.7	–2.4
Sub-Saharan Africa	**29.9**	**16.6**	**8.2**	**12.6**	**13.4**	**12.1**	**15.4**	**11.2**
Median	21.3	13.8	19.1	23.5	16.9	13.5	14.1	9.2
Excluding Nigeria and South Africa	28.0	20.9	21.4	23.5	20.2	16.6	17.4	17.1
Oil-exporting countries	**44.1**	**24.8**	**0.4**	**7.6**	**10.5**	**11.7**	**16.1**	**5.3**
Excluding Nigeria	37.8	32.7	19.4	21.6	21.8	18.2	11.1	8.0
Oil-importing countries	**21.8**	**11.2**	**14.1**	**16.5**	**15.5**	**12.4**	**14.8**	**15.7**
Excluding South Africa	25.1	17.3	22.0	24.1	19.6	16.1	19.5	20.1
Middle-income countries	**31.3**	**15.1**	**3.7**	**10.2**	**11.0**	**11.5**	**14.5**	**8.9**
Excluding South Africa	30.6	19.7	17.4	25.9	18.7	19.0	16.6	15.4
Low-income countries	**25.2**	**22.2**	**25.9**	**21.0**	**21.7**	**14.1**	**18.3**	**18.9**
Excluding low-income fragile countries	25.9	13.9	22.8	24.2	22.1	12.4	16.6	19.4
Fragile countries	**21.2**	**31.8**	**28.2**	**15.1**	**21.0**	**18.0**	**21.6**	**18.8**
CFA franc zone	14.9	10.5	15.5	22.7	13.1	16.9	15.8	11.1
CEMAC	12.2	9.8	11.7	14.7	13.3	16.4	15.0	15.4
WAEMU	18.1	11.3	19.9	32.1	12.8	17.5	16.7	6.0
COMESA (SSA members)	26.7	12.9	24.3	29.1	14.6	14.7	19.1	19.7
EAC-5	26.4	15.2	11.0	13.7	14.8	10.6	9.8	14.1
ECOWAS	18.0	3.7	3.9	6.8	10.0	7.4	7.8	8.3
SACU	26.9	20.7	26.6	25.8	21.4	13.9	18.3	21.8
SADC	38.8	19.5	–0.2	7.2	9.2	12.2	19.2	7.8

See sources and footnotes on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015
Angola	8.5	21.5	20.2	20.2	22.3	23.4	22.9	27.2
Benin	16.3	20.8	22.0	22.9	22.3	22.7	22.9	21.3
Botswana	22.1	28.9	25.3	27.5	31.3	32.0	31.8	35.5
Burkina Faso	16.7	17.0	17.3	18.8	20.7	24.8	28.8	29.2
Burundi	14.1	13.7	15.5	19.2	18.1	16.7	16.0	15.4
Cabo Verde	41.4	58.0	61.9	65.7	64.3	64.5	63.1	61.8
Cameroon	9.5	10.8	11.0	13.1	12.5	13.3	14.2	14.1
Central African Rep.	6.9	7.2	8.9	10.1	12.3	14.7	13.8	13.1
Chad	2.6	3.9	4.2	4.8	5.8	6.1	7.8	9.0
Comoros	8.9	14.8	17.5	17.8	20.6	21.7	23.0	25.2
Congo, Dem. Rep. of	2.1	4.4	4.2	4.0	4.5	4.8	5.4	8.2
Congo, Rep. of	2.6	4.8	5.5	6.8	9.6	11.7	14.6	20.4
Côte d'Ivoire	14.3	16.4	16.6	17.1	16.6	18.4	20.6	23.6
Equatorial Guinea	3.1	8.6	8.6	8.7	6.6	9.7	12.6	19.9
Eritrea	24.5	16.6	14.8	13.7	11.4	10.5	9.8	9.1
Ethiopia[1]	11.5	9.3	10.4	9.8	9.3	8.8	8.7	9.4
Gabon	9.1	10.1	8.3	9.8	11.9	14.8	14.0	14.1
Gambia, The	12.6	15.4	15.9	17.4	16.5	17.9	15.6	15.8
Ghana	11.7	15.5	15.4	15.3	16.1	16.8	19.7	20.8
Guinea	5.8	5.2	6.0	9.6	7.8	9.8	12.7	15.1
Guinea-Bissau	2.3	5.6	8.2	9.7	12.6	13.1	11.1	10.9
Kenya	23.5	25.8	28.0	31.2	30.1	32.6	35.2	36.8
Lesotho	9.4	12.5	14.1	15.8	20.9	20.8	21.2	21.5
Liberia	6.9	12.0	14.8	16.4	16.1	18.3	18.8	20.1
Madagascar	10.1	11.3	11.5	11.2	10.8	11.7	12.6	13.2
Malawi	6.7	10.9	13.8	13.9	14.6	12.5	11.7	13.4
Mali	15.9	15.5	16.0	17.1	17.3	18.8	20.4	22.6
Mauritius	75.1	82.7	87.9	91.4	100.8	108.1	100.1	103.5
Mozambique	12.4	23.8	24.5	26.4	27.0	28.5	30.6	31.9
Namibia	48.6	48.6	49.2	49.3	48.6	48.3	49.1	47.0
Niger	8.4	12.2	12.3	13.3	14.1	13.7	14.1	15.7
Nigeria	12.4	23.5	15.9	14.2	13.3	13.0	13.8	13.7
Rwanda	10.0	11.9	11.9	13.1	15.3	15.6	16.8	19.0
São Tomé & Príncipe	24.9	32.8	37.4	37.3	37.4	32.0	28.3	26.0
Senegal	22.5	24.7	25.6	28.8	29.5	32.9	33.9	34.1
Seychelles	25.1	20.1	24.4	23.9	22.5	21.5	24.9	25.0
Sierra Leone	4.0	7.2	7.7	7.5	5.4	4.7	4.8	4.9
South Africa	71.4	74.6	70.4	67.6	68.4	67.4	67.2	69.3
South Sudan	...	...	...	0.2	0.6	0.7	1.1	0.7
Swaziland	18.7	20.6	18.7	21.7	19.1	21.0	21.2	20.9
Tanzania	10.4	13.2	13.7	14.4	14.7	14.6	15.6	17.3
Togo	18.0	19.8	22.8	28.6	30.1	31.8	33.5	35.8
Uganda	8.2	10.6	12.9	13.7	13.2	13.0	13.8	14.2
Zambia	8.8	10.0	9.2	10.0	12.0	11.7	13.4	13.2
Zimbabwe[2]	3.8	8.4	17.6	24.7	27.6	26.5	26.4	25.6
Sub-Saharan Africa	**28.5**	**32.7**	**29.2**	**28.0**	**28.1**	**27.9**	**28.1**	**29.1**
Median	11.0	14.2	15.5	15.8	16.1	16.8	16.8	20.1
Excluding Nigeria and South Africa	13.5	16.7	17.2	17.8	18.6	19.4	20.3	21.9
Oil-exporting countries	**10.9**	**21.1**	**15.4**	**13.9**	**13.8**	**13.9**	**14.6**	**15.3**
Excluding Nigeria	7.3	14.7	14.0	13.1	15.0	16.3	16.8	19.8
Oil-importing countries	**39.5**	**40.9**	**39.3**	**38.4**	**38.5**	**38.1**	**38.2**	**39.2**
Excluding South Africa	15.4	17.4	18.3	19.4	19.7	20.4	21.4	22.5
Middle-income countries	**33.5**	**38.4**	**33.7**	**32.3**	**32.2**	**32.0**	**32.1**	**33.2**
Excluding South Africa	16.1	20.8	20.8	22.0	22.8	24.3	25.4	27.6
Low-income countries	**10.5**	**12.3**	**13.3**	**13.5**	**14.1**	**14.4**	**15.1**	**16.1**
Excluding low-income fragile countries	12.1	13.9	14.8	15.4	15.5	15.9	16.6	17.4
Fragile countries	**8.9**	**10.5**	**11.5**	**11.4**	**12.5**	**13.0**	**14.1**	**16.1**
CFA franc zone	11.4	13.4	13.6	15.0	15.4	17.3	18.9	20.7
CEMAC	15.9	17.8	18.4	20.0	20.3	22.2	23.9	25.4
WAEMU	6.3	8.4	8.3	9.6	10.0	11.7	13.0	15.0
COMESA (SSA members)	15.1	17.2	18.8	20.5	20.2	21.0	22.5	23.8
EAC-5	48.1	50.8	48.2	46.7	47.5	46.7	46.2	47.9
ECOWAS	67.9	71.1	66.9	64.5	65.4	64.3	64.1	66.1
SACU	15.5	16.6	18.1	19.3	19.4	19.9	20.3	21.1
SADC	12.9	21.7	16.2	15.2	14.6	14.8	15.9	16.2

See sources and footnotes on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	77.3	54.9	62.4	65.4	62.3	55.7	48.0	33.9	34.0	36.6
Benin	13.7	14.3	17.9	16.0	13.8	16.2	16.4	18.0	17.1	18.4
Botswana	50.9	40.5	40.6	50.0	48.4	61.9	62.2	54.3	58.0	59.1
Burkina Faso	10.6	12.6	21.0	26.2	23.5	25.9	25.7	25.7	25.5	25.2
Burundi	7.8	6.7	8.9	10.1	9.4	8.9	7.3	6.7	8.3	8.2
Cabo Verde	35.8	33.2	38.3	42.2	45.0	47.2	48.3	48.3	48.4	50.5
Cameroon	27.8	22.0	24.4	28.1	27.9	27.2	27.2	23.9	20.0	20.1
Central African Rep.	13.2	10.7	11.8	13.5	12.5	14.3	12.9	12.5	13.4	14.3
Chad	45.7	35.4	37.9	40.7	38.3	33.5	31.5	26.3	19.6	22.3
Comoros	14.8	14.5	15.7	16.6	14.9	15.6	16.5	17.5	17.7	17.8
Congo, Dem. Rep. of	29.5	27.4	43.0	41.6	32.8	32.3	33.8	25.8	24.2	28.7
Congo, Rep. of	79.1	67.4	76.7	81.5	78.6	75.9	73.3	64.6	60.4	65.4
Côte d'Ivoire	48.5	50.7	50.5	53.8	48.4	41.8	41.3	40.9	39.6	39.8
Equatorial Guinea	94.5	97.4	94.6	93.4	96.8	92.6	95.6	98.0	95.5	93.9
Eritrea	5.8	4.5	4.8	14.4	19.1	17.0	18.0	13.2	15.8	17.6
Ethiopia[1]	14.6	10.6	15.5	18.2	13.9	12.4	11.6	9.8	9.6	10.1
Gabon	59.1	52.0	59.2	61.3	64.5	60.4	53.7	43.0	32.0	32.1
Gambia, The	30.6	25.4	23.8	26.5	30.9	29.4	29.6	24.7	32.0	35.8
Ghana	23.8	29.3	29.3	36.9	40.1	33.9	39.5	43.7	41.1	42.5
Guinea	32.6	27.8	32.3	34.9	36.8	22.9	21.9	21.0	23.1	23.4
Guinea-Bissau	16.0	18.9	20.1	25.6	15.4	18.6	18.8	26.0	25.6	24.8
Kenya	23.5	19.9	22.5	23.6	21.9	19.6	18.2	18.3	17.5	17.7
Lesotho	52.1	46.8	43.8	44.5	41.9	37.1	37.7	39.9	44.5	46.7
Liberia	57.3	40.2	42.1	46.3	50.0	47.0	39.7	30.9	27.8	23.3
Madagascar	26.9	22.4	24.1	26.8	29.0	30.0	32.8	31.8	33.1	32.7
Malawi	17.1	17.0	19.6	17.6	23.8	30.5	28.8	25.3	32.4	33.6
Mali	24.2	20.8	22.8	21.6	26.9	24.9	22.4	22.3	20.5	19.8
Mauritius	55.6	47.0	50.9	51.8	52.9	47.3	49.8	52.9	53.9	54.1
Mozambique	29.0	24.5	24.7	26.5	30.6	29.8	27.5	27.4	33.2	36.3
Namibia	38.5	42.8	41.7	41.4	42.0	43.5	42.9	38.8	45.3	48.6
Niger	17.6	20.3	22.2	20.9	21.9	22.6	19.4	17.8	16.9	17.9
Nigeria	29.0	21.6	21.7	23.8	21.0	18.7	14.7	10.2	7.3	7.7
Rwanda	11.4	11.2	10.9	14.2	14.1	15.6	16.9	15.8	16.5	16.8
São Tomé & Príncipe	11.2	9.8	11.7	11.6	12.7	16.1	26.1	28.9	27.3	27.7
Senegal	26.3	24.4	24.9	26.4	27.9	28.3	28.3	29.1	25.5	25.6
Seychelles	85.8	108.0	93.8	100.2	99.3	91.7	87.6	86.0	81.9	80.4
Sierra Leone	15.0	15.0	16.2	18.4	32.5	36.3	31.8	18.4	29.3	30.9
South Africa	29.6	27.9	28.6	30.4	29.7	31.0	31.3	30.9	35.4	35.0
South Sudan	...	...	...	72.4	9.3	27.3	37.7	108.5	48.2	41.5
Swaziland	59.9	49.4	45.4	44.4	44.1	45.8	47.4	47.1	51.5	52.0
Tanzania	18.2	18.9	20.6	22.4	20.9	19.4	18.9	20.7	20.9	20.9
Togo	37.3	37.8	40.9	44.9	44.7	45.7	40.3	39.6	40.2	41.2
Uganda	14.6	18.1	17.2	20.4	20.0	20.8	17.2	20.5	21.4	21.1
Zambia	35.1	32.0	39.7	40.1	41.2	41.4	40.8	37.6	39.2	42.3
Zimbabwe[2]	27.3	22.1	36.7	42.8	32.7	29.4	27.2	24.9	22.6	22.3
Sub-Saharan Africa	**32.9**	**28.7**	**30.3**	**33.5**	**31.1**	**29.5**	**27.0**	**23.5**	**21.9**	**22.0**
Median	28.4	24.5	24.8	28.1	30.6	29.8	29.6	26.3	27.8	28.7
Excluding Nigeria and South Africa	38.3	33.2	37.7	42.0	38.9	36.5	34.4	29.7	28.3	29.3
Oil-exporting countries	**40.3**	**31.9**	**32.5**	**36.8**	**32.6**	**29.3**	**24.5**	**17.8**	**13.5**	**13.9**
Excluding Nigeria	64.5	51.8	58.4	62.8	58.0	53.2	48.7	38.6	35.0	36.6
Oil-importing countries	**28.7**	**26.6**	**28.8**	**31.0**	**29.9**	**29.7**	**29.3**	**28.2**	**29.4**	**29.7**
Excluding South Africa	28.0	25.5	29.0	31.5	30.0	28.8	28.0	26.5	26.3	27.1
Middle-income countries	**35.2**	**31.0**	**31.6**	**34.5**	**32.8**	**30.9**	**28.0**	**24.1**	**22.3**	**22.2**
Excluding South Africa	50.2	43.7	47.5	51.6	50.3	46.2	43.6	37.0	35.7	37.0
Low-income countries	**22.2**	**19.6**	**23.9**	**29.0**	**23.7**	**23.8**	**23.1**	**21.4**	**20.6**	**21.5**
Excluding low-income fragile countries	18.0	16.9	19.2	21.5	20.1	19.7	18.4	18.2	18.1	18.4
Fragile countries	**37.0**	**33.6**	**39.4**	**44.8**	**36.7**	**35.3**	**35.2**	**31.3**	**29.5**	**31.1**
CFA franc zone	42.4	38.5	42.7	45.7	45.3	42.2	40.0	35.6	31.5	32.0
CEMAC	54.0	47.1	52.7	56.9	57.5	53.4	50.5	42.1	35.0	35.7
WAEMU	30.5	30.6	32.5	33.4	32.5	31.1	30.1	30.3	29.0	29.3
COMESA (SSA members)	26.0	22.0	27.4	29.4	26.5	25.6	24.5	22.1	21.6	22.5
EAC-5	19.1	18.5	19.8	21.7	20.5	19.3	18.0	19.1	19.0	19.1
ECOWAS	28.9	24.0	24.0	26.4	24.3	21.8	18.5	15.4	12.7	12.9
SACU	31.0	29.1	29.7	31.6	31.0	32.7	33.1	32.3	37.0	36.9
SADC	35.4	32.4	34.7	37.2	36.4	36.5	35.3	31.6	34.2	35.0

See sources and footnotes on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	48.3	55.4	42.9	42.2	39.7	39.4	42.2	36.1	38.4	37.5
Benin	24.9	27.0	29.2	26.1	27.2	30.4	31.0	33.9	33.8	34.9
Botswana	40.3	52.7	47.7	53.7	60.2	61.8	55.2	54.1	61.9	61.5
Burkina Faso	25.4	23.2	28.5	33.0	34.7	39.0	34.7	32.4	31.0	31.1
Burundi	34.3	28.2	43.4	43.5	46.7	42.0	37.7	33.8	28.2	27.3
Cabo Verde	64.5	63.4	66.8	73.8	68.1	63.1	65.5	67.6	67.3	68.0
Cameroon	28.4	26.9	27.5	30.9	30.8	29.9	30.6	27.6	24.4	24.2
Central African Rep.	22.1	23.2	26.5	24.4	23.9	24.7	37.1	34.8	32.8	32.5
Chad	44.4	47.9	49.1	48.0	49.0	43.2	44.1	43.1	40.5	37.8
Comoros	39.5	47.9	49.9	50.3	54.3	52.0	49.8	57.1	54.7	54.7
Congo, Dem. Rep. of	34.9	36.9	51.9	48.0	39.9	38.0	41.8	36.8	35.6	37.2
Congo, Rep. of	52.6	69.2	58.6	55.5	54.4	59.6	64.7	62.7	67.7	58.3
Côte d'Ivoire	41.2	39.8	43.2	37.3	44.2	38.8	38.5	38.6	37.7	38.9
Equatorial Guinea	38.4	69.6	74.8	48.6	55.7	50.0	54.2	56.3	57.9	54.3
Eritrea	41.6	23.4	23.3	23.2	22.8	22.1	21.8	19.5	18.9	20.0
Ethiopia[1]	36.3	27.9	33.1	36.5	32.8	28.8	29.2	31.7	30.1	28.8
Gabon	27.5	34.6	29.5	30.6	36.9	37.5	38.9	39.2	31.8	30.3
Gambia, The	45.5	41.9	42.7	41.1	44.3	41.1	49.1	50.6	51.9	57.4
Ghana	40.0	42.3	43.5	49.3	52.5	47.1	49.8	56.1	52.2	51.2
Guinea	36.0	30.8	36.7	59.1	57.9	46.9	45.7	40.6	37.8	49.9
Guinea-Bissau	27.8	35.3	35.3	34.3	28.5	29.3	31.2	32.1	31.1	32.6
Kenya	31.9	30.5	33.8	39.0	35.5	33.6	33.7	31.9	31.0	29.8
Lesotho	117.6	123.3	110.5	104.7	107.3	97.7	95.4	88.5	95.2	93.5
Liberia	191.2	135.9	134.7	132.1	119.8	108.4	126.3	112.5	105.1	82.7
Madagascar	43.4	46.0	37.5	38.0	38.7	38.7	37.2	35.6	37.9	38.7
Malawi	35.0	31.7	34.9	28.0	38.1	42.6	39.4	36.1	44.7	44.1
Mali	32.1	27.5	35.0	29.6	31.8	39.9	38.6	35.3	33.9	33.0
Mauritius	64.2	57.5	63.0	65.6	66.0	61.6	62.2	64.2	65.2	65.2
Mozambique	38.6	39.7	45.2	58.0	81.7	77.3	68.9	72.9	79.9	108.3
Namibia	41.8	56.0	52.1	50.6	55.7	59.2	63.0	59.8	68.4	64.1
Niger	31.2	46.7	49.0	47.8	39.4	39.1	38.2	38.4	35.7	36.9
Nigeria	18.1	18.3	18.1	20.6	16.6	14.2	15.0	13.7	12.1	11.2
Rwanda	26.3	29.1	29.0	34.6	34.4	32.5	33.8	33.6	34.7	31.7
São Tomé & Príncipe	55.2	51.4	57.8	58.0	52.5	63.4	71.1	64.9	65.6	66.0
Senegal	45.1	41.3	40.3	44.7	48.9	49.1	47.5	45.9	41.0	40.5
Seychelles	95.4	117.0	108.1	116.6	117.1	99.6	103.7	93.1	88.5	86.4
Sierra Leone	24.4	30.5	43.9	84.7	65.9	46.6	60.6	44.8	45.0	47.3
South Africa	30.6	27.5	27.4	29.6	31.0	33.2	33.1	31.9	36.9	36.9
South Sudan	...	...	...	30.4	34.1	26.5	31.2	115.0	66.4	52.0
Swaziland	69.2	62.9	57.8	56.7	54.4	52.4	52.9	54.3	57.3	56.1
Tanzania	26.8	28.4	29.5	34.2	33.0	30.2	28.4	28.8	27.7	27.4
Togo	54.7	53.4	57.6	66.4	58.6	65.8	59.5	58.8	57.1	58.0
Uganda	24.2	28.1	30.6	35.3	31.5	30.3	28.4	32.0	32.2	31.3
Zambia	30.4	26.7	27.6	32.2	36.3	39.3	37.7	40.5	41.4	41.4
Zimbabwe[2]	36.5	76.1	61.5	78.4	62.9	59.3	52.5	50.4	47.6	47.2
Sub-Saharan Africa	**30.5**	**31.5**	**30.4**	**32.6**	**31.8**	**30.6**	**30.6**	**29.6**	**28.9**	**28.0**
Median	37.4	39.8	43.1	43.5	44.2	41.1	41.8	40.5	40.5	40.5
Excluding Nigeria and South Africa	38.3	41.4	41.3	42.7	42.9	41.0	41.2	40.1	39.3	39.0
Oil-exporting countries	**25.3**	**29.2**	**25.6**	**27.3**	**24.2**	**21.9**	**22.8**	**20.4**	**18.0**	**16.7**
Excluding Nigeria	40.7	50.3	43.6	40.6	40.9	39.4	41.9	39.0	38.3	36.8
Oil-importing countries	**33.8**	**32.9**	**33.8**	**36.7**	**37.8**	**38.1**	**37.8**	**37.2**	**38.7**	**38.8**
Excluding South Africa	37.4	37.7	40.3	43.8	43.8	41.7	40.8	40.5	39.6	39.7
Middle-income countries	**29.7**	**30.5**	**28.7**	**30.6**	**29.7**	**28.6**	**28.7**	**27.3**	**26.8**	**25.4**
Excluding South Africa	41.1	46.1	43.2	43.5	44.2	42.6	43.7	41.8	41.9	40.9
Low-income countries	**34.5**	**35.2**	**38.6**	**41.6**	**41.0**	**38.8**	**38.1**	**38.2**	**36.5**	**37.1**
Excluding low-income fragile countries	31.5	30.9	33.6	38.1	38.6	36.5	34.6	35.8	34.4	35.1
Fragile countries	**40.7**	**44.1**	**47.0**	**45.4**	**45.4**	**42.9**	**43.9**	**42.6**	**40.9**	**41.0**
CFA franc zone	36.0	39.8	41.6	39.1	41.7	41.1	41.3	39.5	37.0	36.4
CEMAC	35.0	43.7	43.8	40.3	42.9	41.2	43.1	40.2	36.9	34.8
WAEMU	37.1	36.2	39.4	37.9	40.4	41.0	39.6	38.9	37.1	37.6
COMESA (SSA members)	36.3	35.7	38.8	42.2	39.1	37.3	36.8	36.4	35.6	34.9
EAC-5	28.4	29.3	31.7	36.5	34.1	31.9	31.1	31.1	30.3	29.4
ECOWAS	24.2	24.2	23.8	26.4	23.5	21.1	21.3	20.7	18.7	17.8
SACU	32.1	30.0	29.5	31.7	33.4	35.7	35.6	34.4	39.8	39.7
SADC	34.5	35.8	33.7	35.9	37.2	38.4	38.6	36.7	40.1	40.6

See sources and footnotes on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	50.4	24.1	41.1	45.2	41.1	33.5	24.1	12.8	11.8	14.9
Benin	–10.7	–9.9	–10.2	–9.9	–13.0	–12.1	–10.1	–11.4	–12.5	–11.8
Botswana	9.5	–12.7	–7.3	–4.6	–13.5	–2.3	3.4	–4.4	–8.9	–7.1
Burkina Faso	–9.5	–5.8	–1.5	0.0	–4.1	–5.5	–2.1	–0.1	0.7	0.2
Burundi	–16.4	–14.5	–30.2	–29.0	–32.2	–29.4	–24.7	–20.6	–15.8	–15.7
Cabo Verde	–39.0	–39.6	–40.9	–45.1	–36.6	–33.7	–32.2	–36.4	–37.3	–37.2
Cameroon	1.9	–1.8	–0.9	–2.5	–1.0	–0.7	–1.4	–2.1	–3.0	–2.9
Central African Rep.	–4.0	–7.8	–8.8	–5.7	–6.2	–7.3	–18.3	–16.7	–14.3	–13.5
Chad	24.5	4.8	8.0	10.9	7.7	6.6	2.8	0.1	–5.7	–0.4
Comoros	–22.9	–28.2	–28.8	–28.6	–33.4	–31.8	–29.2	–30.3	–27.8	–28.9
Congo, Dem. Rep. of	0.2	–3.2	2.1	2.3	0.2	0.9	–0.1	–3.6	–4.1	–1.2
Congo, Rep. of	49.1	25.7	42.3	48.0	43.4	34.6	27.1	21.7	13.4	25.8
Côte d'Ivoire	15.0	17.5	14.5	23.5	11.3	9.6	10.4	10.8	10.6	8.6
Equatorial Guinea	68.6	51.3	39.7	59.6	58.0	58.3	59.8	61.9	62.6	62.8
Eritrea	–33.9	–19.9	–19.6	–10.3	–4.6	–5.7	–4.2	–6.4	–3.1	–2.2
Ethiopia[1]	–20.6	–15.8	–16.3	–16.6	–16.9	–17.6	–18.9	–21.8	–20.9	–19.5
Gabon	41.7	29.8	38.7	40.2	39.9	34.2	27.9	17.4	11.4	12.3
Gambia, The	–21.3	–22.4	–22.8	–21.2	–22.0	–19.1	–25.7	–29.5	–25.9	–29.5
Ghana	–14.9	–8.5	–9.2	–7.7	–10.0	–8.0	–3.6	–9.5	–7.5	–5.2
Guinea	3.2	2.6	2.6	–12.7	–4.6	–13.7	–15.3	–11.5	–6.7	–13.2
Guinea-Bissau	–6.0	–9.8	–8.3	–3.7	–8.0	–6.0	–7.8	–1.3	–0.9	–3.0
Kenya	–12.1	–13.4	–15.6	–20.0	–18.5	–18.6	–18.8	–16.9	–17.0	–15.7
Lesotho	–43.1	–54.8	–48.4	–43.0	–49.3	–46.2	–44.1	–36.1	–38.2	–34.2
Liberia	–33.1	–30.8	–30.1	–33.3	–26.9	–23.5	–36.7	–40.5	–39.7	–35.6
Madagascar	–13.4	–19.5	–12.3	–10.1	–11.2	–8.0	–5.1	–3.4	–4.8	–6.1
Malawi	–12.8	–10.3	–10.7	–7.9	–11.0	–8.1	–7.4	–7.5	–7.4	–6.2
Mali	–2.7	–2.1	–6.2	–2.6	0.9	–1.9	–3.0	–0.5	–1.0	–1.3
Mauritius	–15.2	–17.5	–19.5	–20.9	–21.5	–19.0	–17.9	–16.5	–17.1	–17.1
Mozambique	–5.5	–11.3	–11.3	–17.1	–26.7	–27.2	–23.9	–28.0	–38.7	–57.1
Namibia	–4.0	–14.1	–9.9	–8.8	–16.4	–15.6	–19.5	–21.2	–21.7	–14.6
Niger	–6.9	–14.7	–14.2	–14.4	–6.6	–5.6	–10.3	–12.5	–10.7	–10.1
Nigeria	15.6	9.4	8.4	8.3	9.1	8.4	3.7	–0.2	–2.1	–1.1
Rwanda	–10.4	–14.4	–13.8	–17.4	–19.1	–15.3	–16.1	–15.6	–16.8	–14.8
São Tomé & Príncipe	–35.4	–37.3	–40.9	–41.3	–37.2	–38.2	–37.7	–29.0	–30.9	–30.8
Senegal	–18.4	–15.9	–14.9	–17.5	–20.2	–20.0	–18.3	–16.0	–14.7	–14.1
Seychelles	–29.8	–37.6	–39.3	–43.0	–44.4	–33.9	–40.2	–40.2	–37.5	–37.2
Sierra Leone	–7.5	–14.3	–20.2	–57.1	–24.2	–0.6	–7.1	–19.5	–7.6	–7.5
South Africa	–0.6	1.1	2.2	1.7	–1.0	–1.9	–1.8	–0.9	–1.1	–1.6
South Sudan	...	...	...	49.1	–19.6	4.4	13.2	16.9	–4.7	0.6
Swaziland	–3.6	–3.7	–3.3	–0.8	1.6	3.7	2.6	2.8	4.8	6.8
Tanzania	–9.8	–10.0	–9.5	–12.2	–13.0	–12.2	–11.2	–10.3	–9.2	–9.1
Togo	–14.2	–13.0	–14.1	–22.4	–14.2	–20.5	–19.6	–19.6	–17.3	–17.3
Uganda	–8.0	–8.1	–10.9	–11.7	–10.0	–8.4	–8.6	–8.8	–8.5	–8.3
Zambia	4.7	6.3	13.7	9.8	6.3	5.9	6.0	–0.3	0.5	3.2
Zimbabwe[2]	–7.2	–47.1	–20.3	–28.7	–23.3	–23.1	–19.2	–19.0	–18.4	–18.6
Sub-Saharan Africa	**6.2**	**2.4**	**4.6**	**5.7**	**3.7**	**3.1**	**0.8**	**–2.5**	**–3.8**	**–3.0**
Median	–7.7	–10.8	–10.5	–10.1	–11.2	–8.0	–8.6	–10.3	–8.5	–8.3
Excluding Nigeria and South Africa	5.8	–0.7	3.5	6.7	2.7	1.8	–0.1	–5.0	–6.2	–5.1
Oil-exporting countries	**23.2**	**13.4**	**15.4**	**18.4**	**16.3**	**14.3**	**8.8**	**3.4**	**0.6**	**1.9**
Excluding Nigeria	39.5	21.1	32.2	38.4	32.2	27.7	21.6	13.1	10.1	12.7
Oil-importing countries	**–4.0**	**–4.7**	**–3.1**	**–3.8**	**–6.4**	**–6.7**	**–6.6**	**–7.3**	**–7.7**	**–7.6**
Excluding South Africa	–7.5	–9.7	–8.5	–9.4	–11.1	–10.2	–9.8	–11.4	–11.0	–10.5
Middle-income countries	**9.3**	**5.9**	**7.6**	**8.6**	**7.3**	**6.4**	**3.6**	**0.1**	**–1.3**	**–0.4**
Excluding South Africa	16.1	7.7	13.1	17.0	13.7	11.2	8.1	1.5	–0.3	1.6
Low-income countries	**–8.2**	**–11.6**	**–9.8**	**–7.3**	**–12.0**	**–10.5**	**–10.3**	**–12.3**	**–12.2**	**–11.9**
Excluding low-income fragile countries	–12.0	–12.1	–11.9	–13.4	–14.8	–14.4	–14.1	–15.4	–15.2	–15.5
Fragile countries	**5.6**	**–1.6**	**2.3**	**8.4**	**–0.2**	**0.7**	**0.3**	**–2.4**	**–2.8**	**–1.6**
CFA franc zone	14.3	7.7	10.0	14.8	12.3	9.6	7.6	4.8	2.7	3.4
CEMAC	30.1	16.8	21.4	27.6	26.4	23.0	18.7	12.8	8.2	10.5
WAEMU	–1.8	–0.6	–1.5	0.7	–2.7	–3.6	–2.8	–1.8	–1.3	–1.8
COMESA (SSA members)	–9.7	–12.5	–10.0	–11.5	–11.9	–11.2	–11.6	–13.1	–13.2	–11.9
EAC-5	–10.5	–11.4	–12.9	–15.9	–15.3	–14.6	–14.4	–13.4	–13.1	–12.3
ECOWAS	9.4	5.6	5.2	5.1	5.5	5.1	1.9	–1.4	–2.6	–1.8
SACU	–0.6	–0.1	1.2	0.9	–2.1	–2.6	–2.4	–1.9	–2.3	–2.5
SADC	3.8	1.2	5.2	5.8	3.3	2.4	1.0	–1.6	–2.6	–2.3

See sources and footnotes on page 82.

Table SA20. External Current Account[1]
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	14.7	–10.0	9.1	12.6	12.0	6.7	–2.9	–8.5	–11.6	–8.8
Benin	–6.7	–8.3	–8.2	–7.3	–9.5	–9.5	–9.3	–11.1	–11.1	–10.6
Botswana	10.7	–6.3	–2.6	3.1	0.3	8.9	15.7	9.3	2.2	2.9
Burkina Faso	–10.4	–4.7	–2.2	–1.5	–7.2	–11.0	–8.0	–5.6	–5.3	–4.6
Burundi	–7.8	1.7	–12.2	–14.4	–18.6	–19.5	–18.8	–15.4	–8.9	–6.4
Cabo Verde	–9.5	–14.6	–12.4	–16.3	–12.6	–4.9	–8.0	–9.2	–9.9	–9.6
Cameroon	–1.0	–3.5	–2.8	–3.0	–3.6	–3.9	–4.4	–5.8	–5.7	–5.5
Central African Rep.	–5.5	–9.1	–10.2	–7.6	–4.6	–3.0	–5.5	–12.8	–10.9	–10.2
Chad	0.5	–9.2	–9.0	–5.6	–8.7	–9.2	–8.9	–12.8	–13.0	–8.8
Comoros	–12.0	–15.4	–5.8	–14.0	–17.6	–15.9	–10.7	–10.2	–15.2	–15.7
Congo, Dem. Rep. of	–0.2	–6.1	–10.5	–5.2	–4.6	–10.6	–9.6	–12.2	–14.2	–12.3
Congo, Rep. of	–2.9	–14.1	7.5	4.9	–2.4	–4.5	–9.4	–14.2	–23.1	–10.8
Côte d'Ivoire	1.1	6.6	1.9	10.5	–1.2	–1.4	–0.7	–1.7	–1.8	–2.7
Equatorial Guinea	22.4	–23.1	–34.4	–0.1	–2.2	–4.0	–9.6	–6.6	–8.3	–6.0
Eritrea	–3.1	–7.6	–5.6	0.6	2.3	–0.1	0.6	–2.2	0.2	0.9
Ethiopia[2]	–8.4	–6.7	–1.4	–2.5	–6.9	–5.9	–7.9	–12.8	–10.7	–9.7
Gabon	17.3	4.4	14.9	15.2	15.9	11.6	8.1	–2.8	–7.2	–5.8
Gambia, The	–8.5	–12.5	–16.3	–12.3	–7.9	–10.2	–10.9	–15.2	–10.5	–10.3
Ghana	–8.1	–5.4	–8.6	–9.0	–11.7	–11.9	–9.6	–8.3	–7.2	–5.4
Guinea	–5.9	–8.2	–9.3	–25.1	–26.0	–26.8	–25.7	–22.4	–13.5	–25.5
Guinea-Bissau	–1.2	–5.4	–8.7	–4.2	–11.8	–7.4	–3.4	–0.9	1.8	–1.0
Kenya	–2.5	–4.6	–5.9	–9.1	–8.4	–8.9	–10.4	–8.2	–8.3	–6.9
Lesotho	17.3	3.9	–10.0	–14.7	–9.8	–10.3	–7.9	–2.6	–13.9	–9.7
Liberia	–14.0	–23.2	–32.0	–27.5	–21.5	–28.4	–31.6	–39.3	–39.8	–39.4
Madagascar	–12.0	–21.1	–9.7	–6.9	–6.9	–5.9	–0.3	–2.2	–3.0	–4.4
Malawi	–12.9	–10.2	–8.6	–8.6	–9.3	–8.7	–8.2	–8.9	–11.1	–9.3
Mali	–7.1	–6.4	–11.1	–5.1	–2.2	–2.8	–4.6	–2.8	–4.0	–4.4
Mauritius	–6.3	–7.4	–10.3	–13.8	–7.3	–6.3	–5.6	–5.1	–4.5	–4.6
Mozambique	–8.9	–10.9	–16.1	–25.3	–44.7	–39.1	–34.4	–41.3	–43.0	–70.3
Namibia	6.7	–1.5	–3.5	–3.0	–5.7	–4.0	–8.5	–9.8	–14.5	–7.9
Niger	–9.2	–24.4	–19.8	–22.3	–14.7	–15.0	–16.0	–18.0	–17.3	–18.2
Nigeria	14.4	5.1	3.9	3.0	4.4	3.9	0.2	–2.4	–2.8	–1.8
Rwanda	–3.3	–7.1	–7.3	–7.5	–11.4	–7.4	–11.5	–13.8	–14.2	–12.5
São Tomé & Príncipe	–27.1	–23.2	–21.7	–25.5	–21.3	–23.4	–27.5	–11.3	–9.4	–9.8
Senegal	–9.9	–6.7	–4.4	–8.1	–10.8	–10.4	–8.9	–7.6	–6.0	–5.8
Seychelles	–13.8	–14.8	–19.1	–22.6	–21.3	–12.3	–22.2	–14.2	–13.3	–12.9
Sierra Leone	–6.9	–13.3	–22.7	–65.3	–31.9	–17.6	–19.2	–13.8	–9.7	–12.8
South Africa	–4.3	–2.7	–1.5	–2.2	–5.0	–5.8	–5.4	–4.4	–4.4	–4.9
South Sudan	...	...	...	18.4	–15.9	–1.2	2.1	–12.6	–6.1	–6.5
Swaziland	–3.2	–11.6	–8.6	–6.8	3.1	5.1	3.3	0.5	–1.8	–0.8
Tanzania	–6.5	–7.6	–7.7	–10.8	–11.6	–10.6	–9.5	–8.7	–7.7	–7.4
Togo	–8.8	–5.6	–6.3	–8.0	–7.5	–13.0	–12.8	–12.6	–10.1	–10.1
Uganda	–2.6	–5.7	–8.0	–10.0	–6.8	–7.0	–9.5	–8.9	–8.4	–8.5
Zambia	–1.1	6.0	7.5	4.7	5.4	–0.6	2.1	–3.5	–3.8	–1.7
Zimbabwe[3]	–8.5	–47.1	–16.0	–30.8	–24.5	–23.9	–18.6	–17.3	–16.3	–16.4
Sub-Saharan Africa	**2.1**	**–2.8**	**–0.8**	**–0.6**	**–1.8**	**–2.4**	**–4.1**	**–5.9**	**–6.2**	**–5.5**
Median	–6.1	–7.5	–8.6	–7.5	–7.9	–7.4	–8.9	–8.9	–9.4	–8.5
Excluding Nigeria and South Africa	–0.1	–7.3	–3.6	–2.1	–4.3	–5.3	–6.8	–9.2	–9.6	–8.9
Oil-exporting countries	**13.1**	**0.4**	**3.6**	**4.9**	**4.8**	**3.6**	**–0.8**	**–3.9**	**–4.5**	**–3.0**
Excluding Nigeria	10.1	–8.9	2.9	8.7	5.6	2.8	–3.2	–8.1	–10.5	–7.8
Oil-importing countries	**–4.3**	**–4.8**	**–3.9**	**–4.8**	**–7.1**	**–7.6**	**–7.3**	**–7.6**	**–7.6**	**–7.8**
Excluding South Africa	–4.3	–6.7	–6.4	–7.5	–9.0	–9.0	–8.5	–9.6	–9.3	–9.2
Middle-income countries	**4.0**	**–1.0**	**0.8**	**1.1**	**0.4**	**–0.3**	**–2.5**	**–4.2**	**–4.7**	**–3.7**
Excluding South Africa	4.5	–5.3	–0.1	2.6	1.2	–0.8	–3.8	–6.4	–7.8	–6.0
Low-income countries	**–6.4**	**–9.9**	**–8.5**	**–8.5**	**–11.8**	**–11.1**	**–10.5**	**–12.4**	**–11.4**	**–11.8**
Excluding low-income fragile countries	–7.1	–7.9	–6.9	–9.4	–12.3	–11.4	–11.4	–12.9	–11.5	–12.4
Fragile countries	**–3.8**	**–9.1**	**–6.7**	**–3.3**	**–8.5**	**–8.6**	**–7.8**	**–9.8**	**–9.9**	**–9.2**
CFA franc zone	0.7	–5.4	–4.4	0.1	–3.0	–4.3	–5.2	–6.6	–7.2	–6.3
CEMAC	6.5	–7.5	–4.2	2.0	–0.1	–1.8	–4.3	–7.5	–9.4	–6.9
WAEMU	–5.2	–3.3	–4.7	–2.0	–6.1	–6.8	–6.1	–5.9	–5.6	–5.9
COMESA (SSA members)	–4.6	–7.9	–5.7	–7.3	–6.6	–7.7	–8.0	–9.7	–9.5	–8.5
EAC-5	–3.9	–5.8	–7.1	–9.8	–9.5	–9.2	–10.2	–8.9	–8.5	–7.7
ECOWAS	8.4	2.3	1.3	0.6	1.1	0.7	–1.7	–3.7	–3.7	–2.9
SACU	–3.3	–2.9	–1.7	–2.1	–4.7	–5.1	–4.6	–4.0	–4.5	–4.6
SADC	–1.8	–5.5	–1.4	–1.5	–3.3	–4.6	–5.7	–6.9	–7.8	–7.9

See sources and footnotes on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	–0.6	2.9	–5.5	–4.9	–8.4	–10.5	–3.2	5.6	2.6	0.3
Benin	2.1	1.5	2.8	1.3	2.6	3.3	3.6	3.6	3.8	4.0
Botswana	4.2	1.9	1.6	9.0	5.8	5.4	2.5	2.9	3.0	3.2
Burkina Faso	1.6	1.1	0.4	0.4	2.3	3.5	2.3	2.3	2.3	2.3
Burundi	0.1	0.0	0.0	0.2	0.0	2.7	2.5	1.6	1.7	1.7
Cabo Verde	9.4	7.0	6.7	5.6	3.8	3.5	6.1	7.1	7.2	7.2
Cameroon	1.8	2.1	1.8	1.8	3.1	2.9	2.9	2.1	1.8	1.6
Central African Rep.	3.3	2.1	3.1	1.7	3.2	0.1	0.1	0.3	1.5	1.8
Chad	3.5	2.7	2.0	1.5	3.4	2.8	–3.4	4.3	7.0	3.6
Comoros	0.6	2.6	1.5	3.8	1.7	1.4	1.3	1.3	1.3	1.3
Congo, Dem. Rep. of	5.3	–1.5	13.3	6.5	10.5	5.2	4.8	4.7	4.5	5.0
Congo, Rep. of	22.8	20.2	18.2	21.1	16.4	18.7	19.6	15.4	16.1	9.4
Côte d'Ivoire	1.8	1.6	1.3	1.1	1.2	1.3	1.9	2.1	2.9	3.3
Equatorial Guinea	8.9	–9.5	–5.4	–2.7	–5.5	–4.3	–2.1	–2.7	–2.9	–2.7
Eritrea	1.4	4.9	4.3	1.5	1.3	1.3	1.1	1.1	1.0	0.9
Ethiopia[1]	1.4	0.7	1.0	2.0	0.6	2.6	2.6	3.6	4.1	4.5
Gabon	4.2	5.2	3.5	4.0	3.6	4.4	5.6	4.3	4.9	4.8
Gambia, The	9.6	8.1	9.0	6.7	11.2	9.5	9.3	8.2	10.1	9.4
Ghana	2.9	11.1	7.9	8.1	7.9	6.7	8.7	8.0	7.7	7.5
Guinea	5.1	3.0	2.2	5.6	11.4	2.2	0.9	1.3	5.1	18.9
Guinea-Bissau	1.9	2.1	3.3	2.2	0.7	1.9	1.9	1.7	1.6	1.9
Kenya	0.5	0.2	0.4	0.8	0.5	0.9	1.7	1.7	2.3	2.2
Lesotho	–2.7	–4.6	–1.7	–2.4	–2.3	–2.2	–2.0	–2.4	–2.4	–2.1
Liberia	5.8	13.4	22.7	22.8	19.2	22.0	11.2	13.7	11.3	13.0
Madagascar	3.6	8.1	3.9	7.8	7.8	5.2	2.9	4.5	4.8	4.8
Malawi	1.8	0.9	2.3	0.8	1.4	1.7	0.8	2.8	3.5	3.4
Mali	1.8	7.3	3.7	4.2	3.1	2.3	1.3	1.2	1.1	1.1
Mauritius	1.6	2.5	127.6	–9.0	49.5	10.1	4.4	5.4	5.9	6.3
Mozambique	3.8	8.0	9.8	27.1	37.1	38.6	29.1	24.8	24.4	58.1
Namibia	6.3	5.7	7.0	7.0	8.6	6.5	4.6	2.2	7.9	5.8
Niger	2.3	13.4	17.5	16.5	12.1	8.1	9.1	8.2	9.1	10.4
Nigeria	2.2	2.6	1.4	1.9	1.2	0.8	0.5	0.6	0.7	0.8
Rwanda	1.2	2.2	0.7	1.7	2.2	3.4	3.4	4.0	4.1	4.1
São Tomé & Príncipe	16.6	7.6	24.2	12.4	8.3	3.4	6.5	5.3	6.6	7.9
Senegal	1.6	2.0	2.0	2.0	1.5	1.9	2.0	2.3	2.4	2.5
Seychelles	11.8	19.7	16.4	13.8	40.7	10.1	14.9	9.2	12.1	13.8
Sierra Leone	3.9	4.5	9.2	32.4	19.1	7.4	8.0	7.4	3.3	10.7
South Africa	1.1	2.1	1.0	1.1	0.4	0.5	–0.5	–1.1	–0.4	–0.3
South Sudan	...	...	...	–0.4	–0.5	–3.7	–0.2	–4.9	0.7	3.6
Swaziland	1.9	1.6	2.9	2.1	2.0	0.6	0.6	0.8	0.6	0.6
Tanzania	3.5	3.7	4.0	4.5	4.4	4.5	4.4	4.3	4.0	4.0
Togo	3.1	0.4	1.5	–14.3	–7.6	4.7	–3.7	4.0	4.0	4.0
Uganda	4.2	4.4	2.5	4.3	4.7	4.5	4.2	3.9	3.8	4.1
Zambia	5.9	2.8	3.1	4.7	9.5	6.0	11.8	7.9	7.6	7.6
Zimbabwe[2]	0.7	1.3	1.3	3.4	2.8	2.9	3.2	2.9	2.9	3.1
Sub-Saharan Africa	**2.1**	**2.8**	**2.7**	**2.1**	**2.1**	**1.3**	**1.5**	**2.0**	**2.2**	**2.4**
Median	2.6	2.6	2.8	2.2	3.1	3.3	2.6	3.6	3.8	4.0
Excluding Nigeria and South Africa	2.9	3.3	4.7	2.9	3.6	2.2	3.3	4.6	4.3	4.7
Oil-exporting countries	**2.5**	**2.8**	**0.6**	**1.1**	**–0.1**	**–0.7**	**0.3**	**1.7**	**1.3**	**1.0**
Excluding Nigeria	3.4	3.2	–1.2	–0.6	–3.1	–4.3	–0.1	4.8	3.4	1.7
Oil-importing countries	**1.9**	**2.8**	**4.1**	**2.9**	**3.8**	**3.2**	**2.7**	**2.3**	**2.9**	**3.7**
Excluding South Africa	2.9	3.3	7.3	4.7	6.8	5.1	4.8	4.5	4.6	5.7
Middle-income countries	**1.9**	**2.7**	**2.3**	**1.5**	**1.2**	**0.4**	**0.9**	**1.3**	**1.4**	**1.3**
Excluding South Africa	3.0	3.4	5.0	1.4	1.9	–0.2	2.5	4.4	4.0	3.2
Low-income countries	**2.9**	**3.1**	**4.3**	**4.9**	**5.9**	**5.3**	**4.3**	**4.7**	**4.7**	**6.3**
Excluding low-income fragile countries	2.7	3.3	3.5	5.6	6.2	6.7	5.8	5.5	5.3	7.3
Fragile countries	**4.7**	**4.0**	**6.0**	**5.1**	**5.7**	**4.0**	**3.4**	**3.9**	**4.3**	**4.7**
CFA franc zone	4.2	3.4	3.3	3.4	2.9	3.4	3.2	3.2	3.6	3.2
CEMAC	6.5	3.6	3.6	4.4	3.5	4.1	4.0	3.8	4.3	3.0
WAEMU	1.9	3.2	3.1	2.2	2.3	2.7	2.4	2.7	3.1	3.4
COMESA (SSA members)	2.6	1.7	9.8	2.6	6.3	3.6	3.9	3.7	3.9	4.1
EAC-5	2.3	2.2	2.0	2.7	2.7	2.9	3.1	3.1	3.2	3.2
ECOWAS	2.3	3.4	2.2	2.7	2.1	1.7	1.3	1.4	1.6	1.8
SACU	1.3	2.2	1.2	1.5	0.8	0.8	–0.2	–0.9	0.1	0.1
SADC	1.5	2.5	3.2	1.4	2.0	0.6	1.2	2.3	2.3	2.8

See sources and footnotes on page 82.

Table SA22. Real Effective Exchange Rates[1]
(Annual average; index, 2000 = 100)

	2004-08	2009	2010	2011	2012	2013	2014	2015
Angola	179.2	249.4	235.1	242.6	268.4	285.6	297.7	300.1
Benin	119.4	123.2	115.2	114.4	112.4	114.1	112.8	100.3
Botswana	98.2	100.4	108.8	108.0	104.2	99.6	94.5	94.8
Burkina Faso	111.7	120.4	110.4	112.3	111.5	113.5	118.2	111.1
Burundi	71.3	80.4	82.5	82.0	84.3	84.4	87.9	99.2
Cabo Verde	97.1	101.6	99.0	101.0	98.6	102.0	101.9	99.0
Cameroon	110.1	116.0	108.6	108.8	105.0	108.1	109.6	106.8
Central African Rep.	112.4	124.3	118.5	117.3	117.5	121.2	151.2	197.1
Chad	118.6	133.6	123.6	116.2	125.7	125.8	127.5	124.8
Comoros	119.3	121.4	115.6	115.8	110.3	114.4	113.3	94.4
Congo, Dem. Rep. of	...	...	...	...	...	...	...	...
Congo, Rep. of	118.4	128.7	124.8	124.0	120.8	129.7	129.2	125.6
Côte d'Ivoire	117.2	122.1	114.7	117.0	112.2	117.2	118.4	113.3
Equatorial Guinea	153.6	176.0	177.7	187.9	185.5	199.3	208.4	200.3
Eritrea	107.2	164.9	182.4	190.4	211.2	230.1	251.1	301.8
Ethiopia	100.1	115.1	98.4	103.4	122.7	124.2	130.0	156.9
Gabon	106.1	111.5	107.3	105.8	103.5	105.4	110.3	106.7
Gambia, The	56.2	56.7	55.0	50.9	49.6	45.9	41.9	41.7
Ghana	108.9	99.6	106.3	101.0	94.5	95.2	73.8	74.8
Guinea	72.8	81.9	75.9	73.3	81.6	91.6	99.4	111.8
Guinea-Bissau	112.5	119.3	115.7	118.1	115.3	117.6	116.1	113.2
Kenya	120.6	133.2	131.4	125.7	142.7	147.6	152.6	158.9
Lesotho	65.9	64.1	73.1	73.5	69.2	61.9	57.8	53.9
Liberia	85.1	91.4	92.9	92.7	101.2	100.0	100.2	122.4
Madagascar	91.1	106.6	106.3	111.9	110.6	114.6	110.8	107.9
Malawi	71.6	78.4	73.7	71.3	58.2	49.2	53.6	61.4
Mali	109.6	117.6	111.4	111.8	112.4	113.0	115.1	111.2
Mauritius	89.1	91.7	94.6	100.5	102.0	101.9	105.0	103.8
Mozambique	84.4	84.7	71.9	86.3	92.4	91.3	90.0	82.6
Namibia	105.0	101.9	114.4	112.5	108.1	98.7	92.9	91.3
Niger	111.3	118.1	110.1	110.1	104.2	108.1	107.7	101.3
Nigeria	126.2	131.9	143.1	143.6	159.4	170.0	181.9	180.3
Rwanda	77.0	90.7	88.5	85.3	87.1	85.8	81.5	88.3
São Tomé & Príncipe	94.2	117.5	114.2	127.6	134.0	146.6	156.9	158.0
Senegal	107.3	108.9	102.1	103.2	99.3	101.6	100.8	94.6
Seychelles	81.8	60.3	63.0	58.3	57.7	68.0	65.8	73.3
Sierra Leone	72.3	78.8	76.1	76.5	89.2	96.5	99.5	108.2
South Africa	100.0	94.1	108.6	106.4	100.6	90.0	84.3	83.8
South Sudan	...	...	...	...	...	...	...	...
Swaziland	106.7	105.3	113.6	113.7	113.7	106.9	102.7	101.6
Tanzania	69.0	72.3	68.5	63.9	74.5	80.3	82.3	78.5
Togo	112.2	118.8	111.5	112.3	107.8	110.2	111.5	103.6
Uganda	89.6	92.9	86.6	82.9	94.4	96.0	99.0	91.4
Zambia	149.5	155.6	164.7	160.4	165.6	171.7	164.8	149.7
Zimbabwe	...	...	...	...	...	...	...	...
Sub-Saharan Africa	**109.5**	**113.7**	**118.7**	**118.1**	**123.2**	**124.2**	**125.1**	**124.8**
Median	106.4	110.2	108.7	109.4	106.4	107.5	108.6	105.2
Excluding Nigeria and South Africa	107.5	118.0	113.5	113.2	118.9	122.1	121.9	122.5
Oil-exporting countries	**129.1**	**140.7**	**147.5**	**148.4**	**162.1**	**172.2**	**182.5**	**180.8**
Excluding Nigeria	137.2	167.2	158.9	161.1	168.2	176.5	182.1	180.1
Oil-importing countries	**99.7**	**100.2**	**104.3**	**102.9**	**103.7**	**100.5**	**97.3**	**97.6**
Excluding South Africa	99.8	105.6	102.1	101.2	106.5	108.6	107.4	108.4
Middle-income countries	**114.7**	**117.7**	**126.7**	**125.9**	**130.2**	**130.6**	**131.0**	**130.0**
Excluding South Africa	123.1	136.1	135.2	134.5	137.8	141.9	138.9	137.8
Low-income countries	**90.7**	**98.6**	**91.3**	**91.2**	**98.7**	**101.1**	**103.4**	**105.4**
Excluding low-income fragile countries	89.2	95.5	87.0	87.0	96.5	99.2	101.4	103.0
Fragile countries	**101.8**	**112.5**	**107.8**	**108.0**	**107.6**	**110.3**	**112.5**	**113.0**
CFA franc zone	115.0	122.7	116.1	116.6	114.3	117.9	119.8	114.9
CEMAC	117.0	127.2	121.7	121.4	120.2	124.6	127.6	124.6
WAEMU	113.3	118.8	111.3	112.5	109.4	112.3	113.3	107.0
COMESA (SSA members)	104.1	114.8	110.0	109.6	120.1	121.8	124.5	131.0
EAC-5	91.2	98.3	94.5	89.7	102.1	106.4	109.1	107.9
ECOWAS	119.9	124.3	131.2	131.1	140.7	148.6	153.5	151.6
SACU	99.8	94.4	108.5	106.4	100.8	90.6	85.0	84.4
SADC	101.9	103.6	111.9	110.7	110.0	104.5	101.1	99.8

See sources and footnote on page 82.

Table SA23. Nominal Effective Exchange Rates[1]
(Annual average; index, 2000 = 100)

	2004-08	2009	2010	2011	2012	2013	2014	2015
Angola	8.8	9.2	7.7	7.3	7.5	7.5	7.4	6.9
Benin	116.4	118.3	111.8	113.1	107.5	111.4	114.3	104.1
Botswana	77.8	64.4	67.3	64.2	59.2	54.8	50.8	50.0
Burkina Faso	119.8	134.5	130.1	135.6	135.3	143.6	158.4	157.3
Burundi	57.0	52.1	52.6	50.5	46.2	44.4	45.8	50.9
Cabo Verde	105.1	105.8	103.3	104.4	102.3	106.2	107.9	106.2
Cameroon	110.6	115.3	110.2	111.5	108.1	112.1	113.9	109.7
Central African Rep.	108.4	111.3	106.7	107.5	104.3	108.0	109.9	105.2
Chad	114.3	119.6	116.1	117.5	114.7	117.0	118.6	114.4
Comoros	115.2	120.8	115.6	119.0	115.7	121.6	123.4	114.8
Congo, Dem. Rep. of	...	...	...	...	...	...	...	...
Congo, Rep. of	117.5	121.5	115.5	116.8	113.4	117.8	119.5	112.2
Côte d'Ivoire	114.8	118.8	113.0	113.7	110.6	115.3	118.3	113.7
Equatorial Guinea	122.9	130.1	124.3	126.7	120.4	123.6	123.4	112.1
Eritrea	48.9	49.5	50.4	49.8	51.8	52.5	53.2	59.5
Ethiopia	78.7	58.7	48.0	39.3	39.1	37.6	37.6	42.3
Gabon	109.1	111.2	107.4	107.7	105.0	108.2	109.6	106.2
Gambia, The	40.7	39.7	37.7	34.6	33.2	29.8	26.2	25.0
Ghana	45.2	29.4	29.1	26.4	23.4	21.6	14.9	13.0
Guinea	39.6	28.7	23.7	19.5	19.4	19.9	20.2	21.4
Guinea-Bissau	117.0	120.0	115.9	116.4	113.9	116.7	118.1	114.3
Kenya	93.3	89.0	86.9	77.3	84.0	84.7	84.4	84.3
Lesotho	99.4	82.9	93.0	91.9	83.6	72.7	65.8	60.0
Liberia	56.4	47.5	45.9	43.6	45.8	42.9	39.6	45.3
Madagascar	58.9	55.8	52.1	51.9	49.9	49.9	46.3	42.4
Malawi	40.3	38.5	34.9	32.9	23.6	15.8	14.4	14.1
Mali	112.9	117.9	113.5	114.9	112.7	116.8	120.2	116.8
Mauritius	74.2	68.5	70.7	73.0	73.5	72.7	74.1	73.4
Mozambique	53.6	48.0	37.3	41.9	45.1	44.3	44.5	40.8
Namibia	86.3	74.7	82.5	80.5	74.9	66.8	61.3	59.5
Niger	115.4	121.4	115.7	116.8	113.5	118.2	121.5	116.6
Nigeria	67.4	57.9	56.9	53.5	54.5	55.0	55.7	51.8
Rwanda	61.1	60.5	59.4	57.7	58.3	56.9	54.6	59.2
São Tomé & Príncipe	52.7	38.4	33.6	33.9	33.1	34.1	34.6	33.5
Senegal	112.0	116.7	111.4	112.9	110.4	114.9	117.8	113.1
Seychelles	80.5	36.6	40.1	37.5	35.6	41.1	39.8	43.5
Sierra Leone	55.6	47.5	39.8	35.0	36.8	37.1	36.0	36.4
South Africa	84.0	67.1	76.1	73.3	67.2	58.0	52.1	50.0
South Sudan	...	...	...	...	...	...	...	...
Swaziland	90.9	80.6	86.0	84.5	80.8	75.0	70.9	69.0
Tanzania	59.2	53.4	48.8	42.7	44.2	45.3	45.0	41.7
Togo	120.6	126.1	120.3	122.3	118.6	123.1	127.9	120.0
Uganda	82.3	72.6	67.0	57.2	59.4	59.2	60.3	54.3
Zambia	65.7	54.8	55.0	52.2	52.1	52.0	47.7	40.6
Zimbabwe	...	...	...	...	...	...	...	...
Sub-Saharan Africa	**72.2**	**62.8**	**62.4**	**58.9**	**57.9**	**55.9**	**54.1**	**51.4**
Median	83.2	70.6	73.4	73.2	70.3	63.0	60.8	59.5
Excluding Nigeria and South Africa	68.9	63.8	59.3	55.7	55.2	54.7	53.0	51.0
Oil-exporting countries	**61.1**	**55.3**	**53.1**	**50.5**	**51.1**	**51.7**	**52.2**	**48.7**
Excluding Nigeria	47.6	49.6	44.7	43.7	43.5	44.2	44.2	41.6
Oil-importing countries	**79.6**	**67.4**	**68.6**	**64.6**	**61.9**	**57.9**	**54.1**	**52.2**
Excluding South Africa	76.4	67.8	63.8	59.1	58.4	57.5	55.1	53.3
Middle-income countries	**71.4**	**61.3**	**62.3**	**59.3**	**58.0**	**55.7**	**53.3**	**50.2**
Excluding South Africa	64.0	59.8	57.0	54.3	53.6	53.2	50.0	47.0
Low-income countries	**75.6**	**69.2**	**62.6**	**57.6**	**57.3**	**56.9**	**57.1**	**56.3**
Excluding low-income fragile countries	77.9	69.6	62.2	56.1	56.8	56.9	57.3	56.7
Fragile countries	**84.9**	**84.0**	**79.1**	**77.7**	**74.4**	**74.0**	**73.9**	**71.8**
CFA franc zone	114.5	119.6	114.5	115.9	112.7	116.9	119.9	114.8
CEMAC	113.6	118.3	113.4	114.7	111.1	114.6	116.0	110.6
WAEMU	115.2	120.6	115.3	116.9	114.1	119.0	123.4	118.5
COMESA (SSA members)	75.6	66.3	61.9	55.4	55.9	54.4	53.5	53.5
EAC-5	75.7	69.9	66.0	58.2	61.1	61.7	61.6	59.0
ECOWAS	72.2	62.8	61.3	58.1	58.1	58.5	57.7	53.8
SACU	83.9	67.5	76.1	73.3	67.3	58.4	52.6	50.5
SADC	65.7	55.9	58.1	55.6	52.7	48.0	44.5	42.1

See source and footnote on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	28.2	20.2	20.6	19.5	18.8	23.6	27.4	33.1	46.8	49.5
Benin	20.2	15.0	17.0	15.8	15.7	17.3	18.6	20.6	20.9	20.6
Botswana	3.5	12.7	10.5	10.9	12.4	12.0	10.3	10.0	9.8	8.7
Burkina Faso	29.4	25.6	26.2	22.8	23.1	22.1	20.2	23.8	23.2	22.7
Burundi	120.2	21.2	22.4	21.8	21.7	21.1	17.5	16.4	15.8	13.6
Cabo Verde	46.0	45.5	51.2	53.2	70.0	79.1	78.4	88.5	91.0	89.7
Cameroon	19.6	5.5	6.2	7.0	9.0	12.1	17.8	22.1	24.7	26.5
Central African Rep.	63.7	20.6	20.0	18.3	21.1	34.9	32.8	33.9	29.8	26.2
Chad	23.5	27.5	24.6	20.7	20.5	21.9	27.1	25.1	25.4	21.6
Comoros	73.0	51.9	48.9	44.9	40.7	18.5	19.7	24.1	26.5	27.1
Congo, Dem. Rep. of	88.9	74.8	24.2	20.7	18.3	15.0	13.0	15.2	16.6	19.4
Congo, Rep. of	95.5	57.2	20.2	22.2	26.2	33.0	33.8	45.4	52.6	50.6
Côte d'Ivoire	67.1	53.6	46.5	49.5	28.6	27.1	25.6	30.7	34.1	31.9
Equatorial Guinea	2.2	6.6	10.2	6.9	9.3	8.2	6.6	10.5	13.5	16.6
Eritrea	60.0	49.1	45.8	35.8	29.1	25.2	22.1	21.5	19.2	19.3
Ethiopia[1]	39.9	13.0	18.0	21.8	17.7	19.8	21.3	25.6	29.0	31.2
Gabon	30.2	10.3	9.8	8.8	6.9	8.6	25.3	34.5	39.4	39.2
Gambia, The	83.7	41.0	39.7	43.0	41.3	43.8	49.9	43.5	35.6	42.4
Ghana	24.1	19.3	19.4	19.3	21.8	24.0	36.0	43.4	44.7	44.0
Guinea	91.4	69.6	66.6	72.8	23.3	24.5	24.4	30.3	38.3	43.4
Guinea-Bissau	161.7	128.8	37.8	24.4	27.1	26.2	24.7	26.7	25.0	24.4
Kenya	25.2	20.9	21.5	22.2	19.0	19.4	23.3	27.4	30.9	31.0
Lesotho	44.6	39.4	32.8	30.2	33.6	36.9	41.3	46.6	55.4	53.0
Liberia	511.9	148.0	10.7	10.7	10.3	11.7	17.9	26.4	32.1	35.8
Madagascar	46.0	26.0	23.6	22.0	23.4	22.6	22.1	24.6	28.7	29.8
Malawi	42.2	12.9	12.4	11.4	20.1	26.8	29.9	33.1	40.4	38.5
Mali	27.6	19.9	21.4	20.1	21.8	21.5	22.7	28.5	28.6	29.0
Mauritius	12.4	10.1	11.8	13.0	13.5	16.1	15.7	16.2	16.0	15.3
Mozambique	46.6	36.7	38.2	33.6	33.1	42.4	45.4	55.5	69.9	75.3
Namibia	4.7	4.9	4.3	6.4	7.8	7.9	8.1	8.0	11.6	12.1
Niger	31.2	19.6	16.9	15.5	17.1	18.2	20.5	29.4	32.8	34.1
Nigeria	9.1	1.5	1.4	1.4	1.4	1.7	1.7	2.2	2.9	2.9
Rwanda	36.8	13.9	13.6	15.7	14.2	20.7	22.3	27.1	34.4	36.8
São Tomé & Príncipe	207.2	68.0	75.3	71.7	78.3	71.3	68.9	82.5	91.9	93.8
Senegal	28.7	28.2	27.2	27.8	31.2	33.6	37.3	40.2	41.6	40.3
Seychelles	62.0	87.6	49.3	48.1	48.3	39.6	37.1	35.1	34.9	33.3
Sierra Leone	71.4	28.2	30.4	32.6	25.9	21.5	23.8	31.7	35.3	35.6
South Africa	7.9	7.2	9.6	9.4	11.4	11.9	13.2	13.4	16.3	16.5
South Sudan	...	...	...	...	...	...	...	...	...	...
Swaziland	12.7	9.9	7.9	7.1	6.9	7.5	7.3	7.6	8.2	8.3
Tanzania	26.7	17.4	19.3	21.1	21.7	22.8	24.8	30.9	33.7	34.5
Togo	75.9	55.1	19.8	15.2	17.9	20.8	25.0	29.5	30.1	30.6
Uganda	23.4	11.1	11.7	12.4	12.6	14.1	14.1	20.0	24.5	26.9
Zambia	41.6	9.0	7.3	8.0	13.2	12.4	17.2	28.5	38.6	43.7
Zimbabwe[2]	56.1	66.5	62.2	52.0	48.4	46.6	45.5	47.8	48.4	48.4
Sub-Saharan Africa	**19.7**	**13.7**	**11.9**	**11.7**	**11.8**	**12.7**	**14.0**	**16.7**	**19.0**	**19.1**
Median	40.7	21.1	20.4	20.7	20.8	21.5	23.0	28.0	30.5	31.1
Excluding Nigeria and South Africa	36.2	24.6	20.9	20.4	19.4	21.2	24.0	28.8	33.0	33.9
Oil-exporting countries	**15.4**	**7.4**	**5.9**	**5.9**	**5.9**	**7.1**	**8.1**	**9.6**	**10.8**	**10.8**
Excluding Nigeria	29.0	18.9	16.8	15.9	16.3	20.1	24.7	30.3	38.9	40.4
Oil-importing countries	**22.6**	**17.7**	**16.1**	**15.9**	**16.4**	**17.6**	**19.5**	**22.5**	**26.2**	**26.9**
Excluding South Africa	39.1	26.9	22.6	22.5	20.8	21.7	23.6	28.2	31.3	32.0
Middle-income countries	**14.1**	**9.8**	**9.3**	**9.3**	**9.6**	**10.4**	**11.6**	**13.6**	**15.7**	**15.5**
Excluding South Africa	29.3	20.9	18.6	18.4	17.6	19.9	23.9	29.4	35.3	35.9
Low-income countries	**45.5**	**29.3**	**24.1**	**23.3**	**22.0**	**23.0**	**24.0**	**28.0**	**30.6**	**31.8**
Excluding low-income fragile countries	31.5	18.6	20.3	21.3	20.6	22.9	24.3	29.4	32.6	34.0
Fragile countries	**68.5**	**49.3**	**32.4**	**30.2**	**25.3**	**24.9**	**24.8**	**27.9**	**30.1**	**30.3**
CFA franc zone	37.7	26.9	21.7	20.5	18.7	20.1	23.3	28.3	30.8	30.4
CEMAC	30.8	17.5	12.7	11.9	13.2	15.5	21.3	26.6	29.8	30.2
WAEMU	44.9	35.7	30.8	29.9	24.6	24.7	25.2	29.8	31.5	30.6
COMESA (SSA members)	40.1	24.9	19.8	19.7	18.8	19.2	20.6	24.8	28.2	29.6
EAC-5	27.8	17.4	18.4	19.5	18.3	19.6	21.9	27.0	30.6	31.4
ECOWAS	20.1	10.9	8.1	7.9	6.7	7.1	7.4	9.3	10.1	9.7
SACU	7.9	7.5	9.6	9.5	11.4	11.9	13.0	13.2	16.0	16.1
SADC	16.5	14.6	13.7	13.3	15.0	16.7	18.5	20.9	25.7	26.8

See sources and footnotes on page 82

Table SA25. Terms of Trade on Goods
(Index, 2000 = 100)

	2004-08	2009	2010	2012	2013	2014	2015	2016	2017
Angola	131.2	120.2	143.4	188.1	184.9	168.9	98.5	74.6	86.0
Benin	155.1	289.4	368.5	273.7	234.5	224.1	218.2	212.6	201.4
Botswana	90.5	83.6	86.0	122.4	158.3	172.1	164.3	175.1	178.0
Burkina Faso	63.4	56.0	39.9	47.7	43.1	35.7	34.1	35.6	35.4
Burundi	116.0	111.2	168.9	122.2	109.9	138.0	160.4	163.0	160.7
Cabo Verde	136.8	118.6	136.4	145.2	127.9	120.2	78.2	65.7	68.7
Cameroon	115.6	92.8	105.2	116.2	114.6	106.1	97.6	90.5	91.3
Central African Rep.	62.4	67.7	67.7	69.4	82.9	89.7	113.7	114.4	105.8
Chad	176.3	186.5	237.8	276.4	298.8	285.7	151.3	122.7	135.7
Comoros	105.9	91.8	96.8	137.7	112.9	105.0	117.7	134.6	137.1
Congo, Dem. Rep. of	620.8	578.3	681.0	570.6	535.7	584.9	593.1	604.1	592.5
Congo, Rep. of	125.9	86.3	131.0	143.7	149.0	136.3	104.3	92.9	119.9
Côte d'Ivoire	89.3	95.7	103.2	104.7	99.3	97.0	101.4	102.3	102.0
Equatorial Guinea	133.3	120.5	151.5	183.9	183.2	158.9	129.5	152.0	172.1
Eritrea	50.7	38.1	38.3	38.6	38.8	38.8	38.8	38.8	38.8
Ethiopia[1]	57.7	70.4	91.7	120.6	98.9	103.3	105.6	104.4	102.6
Gabon	130.5	123.0	143.4	167.2	162.5	149.9	92.7	73.1	84.9
Gambia, The	102.8	76.2	65.0	76.8	89.1	78.0	62.5	87.9	86.1
Ghana	148.1	203.2	247.7	290.9	270.5	252.6	224.8	207.4	200.8
Guinea	78.6	72.2	81.2	96.6	75.5	79.9	104.1	122.2	123.8
Guinea-Bissau	82.3	57.4	71.6	74.0	55.0	74.1	114.0	128.4	122.2
Kenya	82.7	95.7	94.9	74.7	75.2	73.3	83.9	86.3	86.0
Lesotho	63.8	49.6	49.6	48.6	47.2	46.6	53.0	54.9	58.4
Liberia	156.3	144.0	219.6	170.3	171.6	152.4	136.8	164.3	168.0
Madagascar	142.1	152.5	143.7	155.7	171.7	193.3	184.3	179.8	172.5
Malawi	76.6	86.1	93.1	80.4	77.9	78.8	80.5	82.8	76.9
Mali	156.5	180.3	218.7	308.9	257.3	273.7	315.2	326.8	327.0
Mauritius	109.1	97.5	102.0	98.9	98.1	96.5	107.2	106.1	105.9
Mozambique	104.8	102.6	114.5	107.0	106.3	104.9	104.4	104.5	101.4
Namibia	103.3	115.6	128.8	140.3	145.4	153.8	142.1	136.3	136.3
Niger	120.6	164.6	189.9	179.0	173.4	153.1	151.9	140.4	131.8
Nigeria	128.8	123.1	134.7	151.5	151.9	147.9	111.1	92.4	101.0
Rwanda	94.4	108.4	125.8	118.3	141.1	136.4	146.9	142.3	155.9
São Tomé & Príncipe	119.6	79.2	86.9	117.1	87.7	98.8	137.1	124.5	140.3
Senegal	105.9	126.5	126.3	120.2	111.1	113.2	120.1	119.8	119.8
Seychelles	83.7	82.2	76.9	72.0	72.0	73.4	83.9	94.5	90.0
Sierra Leone	103.7	98.2	104.9	104.6	99.3	83.4	68.1	71.5	67.2
South Africa	118.2	138.2	148.2	145.8	137.3	133.8	131.4	129.2	124.8
South Sudan	...	...	...	...	...	...	...	...	...
Swaziland	102.8	116.1	102.8	110.2	125.4	125.6	130.1	132.5	130.6
Tanzania	59.8	83.7	89.5	92.4	89.9	92.2	101.5	106.8	104.6
Togo	78.0	86.4	82.8	120.5	93.7	105.9	116.1	121.5	123.1
Uganda	79.0	84.8	82.1	83.8	82.3	92.4	102.2	102.0	99.5
Zambia	184.0	170.2	232.2	211.5	198.6	192.9	185.5	171.1	162.8
Zimbabwe[2]	80.0	96.8	101.9	104.1	102.3	100.6	104.9	104.2	106.4
Sub-Saharan Africa	**126.4**	**131.6**	**147.3**	**157.0**	**153.6**	**149.8**	**131.9**	**123.3**	**125.0**
Median	105.3	97.9	105.1	120.3	112.0	109.7	112.4	117.1	119.8
Excluding Nigeria and South Africa	130.9	132.4	155.6	167.6	163.1	158.9	147.1	145.8	145.7
Oil-exporting countries	**129.8**	**121.3**	**137.4**	**159.8**	**159.5**	**152.1**	**109.0**	**90.9**	**100.1**
Excluding Nigeria	131.8	117.9	143.8	179.0	177.9	163.0	103.1	85.8	96.7
Oil-importing countries	**124.2**	**138.2**	**154.3**	**154.8**	**148.5**	**147.8**	**150.5**	**151.8**	**148.5**
Excluding South Africa	130.3	138.3	160.6	162.6	156.8	157.2	162.4	163.5	160.1
Middle-income countries	**122.3**	**127.1**	**141.5**	**153.3**	**150.6**	**144.0**	**119.0**	**106.4**	**109.9**
Excluding South Africa	120.0	119.0	141.5	163.3	160.8	147.2	118.9	110.7	113.8
Low-income countries	**146.0**	**149.6**	**175.3**	**173.7**	**166.4**	**173.9**	**179.2**	**182.7**	**179.0**
Excluding low-income fragile countries	82.7	100.1	111.4	112.1	103.8	104.8	109.3	109.4	107.5
Fragile countries	**195.5**	**189.7**	**225.2**	**229.9**	**224.6**	**237.2**	**244.7**	**250.4**	**246.6**
CFA franc zone	118.3	123.3	144.3	158.7	150.7	143.8	128.1	124.8	127.4
CEMAC	129.6	113.9	142.2	164.6	166.8	153.7	109.8	99.1	108.6
WAEMU	106.6	131.9	146.4	152.3	134.7	134.5	143.0	143.9	141.3
COMESA (SSA members)	160.6	151.9	179.0	167.5	163.8	171.2	179.6	180.9	176.8
EAC-5	76.0	90.8	93.9	85.5	85.7	87.7	97.9	100.1	99.6
ECOWAS	125.3	129.4	143.3	160.4	156.8	150.4	121.7	106.3	111.8
SACU	116.3	135.1	144.5	143.9	137.7	135.4	132.5	131.0	127.3
SADC	134.3	144.6	160.1	165.0	162.3	162.5	154.0	156.4	154.9

See sources and footnotes on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	3.1	4.4	5.0	7.1	7.7	7.2	9.0	9.4	6.3	5.5
Benin	6.5	7.4	7.2	6.5	3.8	2.9	2.9	2.8	2.4	2.3
Botswana	20.7	15.9	11.5	10.9	10.0	10.6	14.4	11.4	11.7	12.2
Burkina Faso	4.9	6.0	3.6	3.1	2.5	3.6	5.2	3.5	2.9	1.9
Burundi	3.6	4.4	4.1	3.3	3.5	3.5	3.9	2.1	1.3	2.7
Cabo Verde	3.2	4.1	3.4	3.7	4.0	4.5	6.2	4.9	4.7	4.6
Cameroon	3.6	6.9	5.3	4.7	4.5	4.2	4.8	5.1	4.6	4.0
Central African Rep.	4.2	4.6	4.1	4.3	5.4	3.7	6.0	4.8	3.6	2.6
Chad	2.0	1.4	1.3	1.9	2.5	2.3	2.7	1.1	0.6	0.6
Comoros	6.3	6.4	5.7	6.3	6.7	5.8	6.8	6.6	5.5	5.4
Congo, Dem. Rep. of	0.3	1.1	1.3	1.4	1.6	1.4	1.3	1.0	0.8	0.7
Congo, Rep. of	3.7	6.3	6.7	9.8	8.1	7.0	11.8	5.0	3.4	3.1
Côte d'Ivoire	2.6	3.6	4.6	3.5	2.5	2.4	3.1	2.7	2.8	2.8
Equatorial Guinea	6.8	4.1	3.4	3.7	6.2	6.5	6.6	3.3	2.6	2.5
Eritrea	1.0	2.2	2.4	2.8	4.1	4.0	4.7	3.5	3.7	4.6
Ethiopia[1]	2.3	1.9	2.0	2.6	2.0	1.8	1.5	1.9	1.8	1.3
Gabon	4.5	5.4	3.7	4.4	4.2	4.9	5.8	5.1	4.1	3.9
Gambia, The	3.7	5.3	5.1	5.1	6.0	4.8	3.0	2.0	1.3	2.4
Ghana	2.7	2.7	2.9	2.9	2.9	2.9	2.6	2.7	2.8	3.3
Guinea	0.5	2.4	1.2	3.2	2.7	2.8	3.3	2.2	2.2	2.0
Guinea-Bissau	5.3	7.0	5.0	9.3	6.4	6.0	10.7	14.0	17.3	20.1
Kenya	2.9	3.4	2.9	2.8	3.7	3.8	4.8	4.5	4.5	4.4
Lesotho	4.7	5.4	4.0	3.6	4.9	5.2	6.2	6.4	5.5	4.5
Liberia	0.4	2.2	2.3	2.3	2.2	1.9	2.2	2.4	2.9	3.1
Madagascar	2.5	3.6	2.6	3.6	3.1	2.3	2.7	2.8	2.8	2.9
Malawi	1.4	0.6	1.5	1.0	1.1	2.0	3.0	2.4	3.2	3.1
Mali	4.6	5.1	4.2	4.2	3.0	2.8	2.5	2.6	2.6	2.7
Mauritius	3.8	4.5	4.3	4.5	5.0	5.3	6.3	6.6	6.8	6.8
Mozambique	4.2	5.0	3.4	2.3	2.7	3.3	3.4	3.1	2.6	2.3
Namibia	2.0	3.9	3.0	2.9	2.8	2.2	1.9	2.6	2.1	2.2
Niger	3.2	2.8	3.0	2.2	3.1	3.4	4.9	4.1	3.9	3.8
Nigeria	10.7	7.5	4.5	5.1	7.2	6.0	6.1	5.2	3.7	3.2
Rwanda	3.5	6.5	5.2	6.5	5.6	5.1	4.3	3.6	3.3	3.5
São Tomé & Príncipe	4.6	6.6	3.9	4.6	3.2	3.2	3.7	3.8	3.7	4.5
Senegal	3.5	4.9	3.8	3.4	3.4	3.7	4.5	4.9	4.7	4.7
Seychelles	0.8	2.2	2.6	2.7	2.8	3.6	4.3	5.1	4.9	4.9
Sierra Leone	3.8	3.4	1.6	1.8	2.2	2.0	3.6	3.9	3.7	3.5
South Africa	3.5	4.6	4.3	4.8	5.0	5.3	6.3	6.3	6.2	6.0
South Sudan	...	...	...	6.3	3.9	2.7	1.7	1.7	2.6	5.3
Swaziland	2.5	4.0	2.9	2.3	3.3	3.9	3.7	3.5	3.2	2.9
Tanzania	4.8	4.6	4.1	3.5	3.6	3.9	4.1	4.2	4.3	4.5
Togo	3.2	4.6	3.4	4.4	1.8	2.1	2.8	2.3	2.1	2.0
Uganda	5.6	4.9	3.9	3.7	4.5	4.8	4.9	4.2	4.1	4.2
Zambia	1.8	4.1	3.3	3.0	3.3	3.1	4.2	4.5	3.9	3.6
Zimbabwe[2]	0.2	0.9	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.7
Sub-Saharan Africa	**5.1**	**5.2**	**4.2**	**4.6**	**5.3**	**5.0**	**5.6**	**5.1**	**4.2**	**3.9**
Median	3.5	4.4	3.7	3.6	3.5	3.6	4.2	3.6	3.4	3.3
Excluding Nigeria and South Africa	3.8	4.2	3.9	4.3	4.3	4.1	4.9	4.4	3.7	3.6
Oil-exporting countries	**7.3**	**6.6**	**4.6**	**5.4**	**6.9**	**6.0**	**6.5**	**5.7**	**4.0**	**3.5**
Excluding Nigeria	3.7	4.8	4.7	6.1	6.4	6.0	7.4	7.2	5.0	4.5
Oil-importing countries	**3.6**	**4.3**	**3.9**	**4.1**	**4.1**	**4.1**	**4.8**	**4.5**	**4.3**	**4.2**
Excluding South Africa	3.8	4.0	3.5	3.4	3.3	3.3	3.7	3.4	3.3	3.3
Middle-income countries	**5.5**	**5.6**	**4.4**	**5.0**	**5.9**	**5.5**	**6.3**	**5.7**	**4.6**	**4.2**
Excluding South Africa	4.2	4.7	4.5	5.1	5.3	5.1	6.4	5.9	4.7	4.5
Low-income countries	**3.2**	**3.6**	**3.0**	**3.2**	**2.9**	**2.8**	**3.0**	**2.8**	**2.6**	**2.6**
Excluding low-income fragile countries	4.2	4.3	3.7	3.4	3.3	3.4	3.5	3.3	3.1	3.0
Fragile countries	**2.2**	**3.1**	**3.0**	**3.7**	**2.9**	**2.5**	**3.1**	**2.2**	**2.1**	**2.3**
CFA franc zone	4.0	5.0	4.3	4.4	4.0	3.9	4.8	3.8	3.4	3.2
CEMAC	4.1	5.3	4.3	4.9	5.1	4.9	6.0	4.2	3.6	3.2
WAEMU	3.8	4.7	4.4	3.8	2.9	3.0	3.7	3.4	3.3	3.2
COMESA (SSA members)	2.5	3.1	2.7	2.8	3.0	3.0	3.3	3.1	2.9	2.8
EAC-5	4.1	4.3	3.7	3.4	4.0	4.1	4.6	4.2	4.3	4.3
ECOWAS	7.7	6.5	4.3	4.7	6.2	5.3	5.6	4.8	3.6	3.2
SACU	4.0	5.0	4.5	4.9	5.1	5.4	6.5	6.4	6.2	6.1
SADC	3.7	4.5	4.2	4.8	5.0	5.1	6.1	6.0	5.3	5.0

See sources and footnotes on page 82.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015
Angola	27.6	58.4	57.4	57.2	56.4	57.7	60.5	72.7
Benin	33.4	44.7	49.4	53.2	54.8	59.6	65.0	69.9
Botswana	51.4	64.2	56.6	53.2	56.7	55.0	53.4	64.5
Burkina Faso	28.7	33.4	36.7	38.9	40.1	46.1	52.9	58.4
Burundi	28.8	31.5	33.6	33.4	31.2	30.7	31.4	...
Cabo Verde	90.0	98.5	103.0	111.2	120.6	135.1	136.6	141.3
Cameroon	22.7	26.1	28.7	29.7	28.3	29.9	30.6	...
Central African Rep.	12.6	15.8	17.3	19.1	19.2	25.4	25.1	24.4
Chad	7.3	9.4	10.0	10.4	11.1	11.8	14.7	...
Comoros	25.1	34.4	37.6	41.5	44.5	42.5	43.1	47.5
Congo, Dem. Rep. of	6.7	12.3	11.4	12.2	14.0	14.0	14.3	14.6
Congo, Rep. of	11.5	16.5	18.8	23.7	28.0	30.8	35.5	...
Côte d'Ivoire	25.9	28.7	31.5	37.2	35.8	36.8	41.3	46.5
Equatorial Guinea	10.2	20.9	20.7	17.5	22.4	25.9	30.2	...
Eritrea	143.7	126.0	124.7	113.2	104.5	110.4	...	...
Ethiopia	...	...	...	...	...	...	...	...
Gabon	23.6	26.5	23.4	25.5	28.8	32.3	29.9	...
Gambia, The	48.3	61.7	66.8	70.5	70.6	73.6	82.0	...
Ghana	29.7	40.1	39.5	38.1	37.3	39.6	46.4	...
Guinea	...	...	...	...	...	...	...	...
Guinea-Bissau	11.8	20.3	24.5	27.2	26.8	29.9	27.7	31.6
Kenya	57.4	54.1	56.0	57.6	58.1	60.9	64.2	65.5
Lesotho	42.7	50.1	50.3	46.4	45.4	53.6	52.6	55.2
Liberia	...	...	...	...	...	...	...	...
Madagascar	23.8	25.6	25.5	26.2	26.3	24.8	25.0	25.3
Malawi	15.3	23.5	27.3	29.8	31.8	31.6	30.2	...
Mali	30.9	33.5	35.3	33.9	34.3	38.5	45.8	50.1
Mauritius[1]	284.6	316.8	369.9	378.2	377.4	365.1	352.2	346.8
Mozambique	33.2	46.5	52.7	53.7	61.0	63.7	71.8	79.2
Namibia	66.4	94.9	92.1	93.7	87.8	84.9	80.7	...
Niger	16.2	20.9	23.3	23.6	24.9	26.3	29.0	30.3
Nigeria	28.3	43.5	31.2	30.4	29.2	30.1	30.5	...
Rwanda	…	...	...	...	...	...	...	...
São Tomé & Príncipe	62.7	75.5	76.7	72.2	81.7	81.8	81.9	...
Senegal	43.6	47.3	50.4	52.6	53.1	59.8	65.8	72.3
Seychelles	118.8	100.0	109.3	113.0	102.2	118.6	115.3	92.5
Sierra Leone	16.2	25.9	24.9	24.6	23.0	21.4	23.2	25.4
South Africa	116.4	120.9	116.3	115.3	114.8	111.6	113.3	124.2
South Sudan	...	...	...	6.7	14.7	13.0	21.0	70.2
Swaziland	28.1	34.8	33.9	34.3	32.2	34.0	33.2	35.0
Tanzania	24.2	27.7	30.0	28.8	29.0	28.8	29.5	...
Togo	41.3	53.4	62.5	63.7	68.0	70.4	75.6	80.7
Uganda	21.4	23.1	26.6	26.1	26.9	28.2	29.6	...
Zambia	24.9	25.9	25.5	25.8	27.6	29.2	31.9	36.7
Zimbabwe	…	...	...	...	...	...	...	...
Sub-Saharan Africa	**44.5**	**51.6**	**54.1**	**53.7**	**54.5**	**56.6**	**57.0**	**70.4**
Median	28.3	34.4	35.3	35.7	35.1	37.6	41.3	58.4
Excluding Nigeria and South Africa	43.0	50.0	53.1	52.7	53.6	55.8	56.2	68.2
Oil-exporting countries	**18.8**	**28.7**	**27.2**	**25.1**	**27.4**	**29.0**	**31.6**	**71.4**
Excluding Nigeria	17.2	26.3	26.5	24.4	27.1	28.8	31.8	71.4
Oil-importing countries	**50.1**	**56.6**	**60.0**	**60.9**	**61.3**	**63.5**	**63.5**	**70.3**
Excluding South Africa	48.0	54.6	58.2	59.1	59.6	62.0	61.9	67.9
Middle-income countries	**59.1**	**68.2**	**70.6**	**71.6**	**72.1**	**74.4**	**74.7**	**98.3**
Excluding South Africa	55.9	65.3	68.0	69.2	69.8	72.3	72.6	95.7
Low-income countries	**30.6**	**35.8**	**38.5**	**37.6**	**38.6**	**40.5**	**40.1**	**48.6**
Excluding low-income fragile countries	31.1	38.2	42.0	43.4	45.1	48.3	53.2	62.0
Fragile countries	**30.9**	**35.5**	**37.4**	**35.9**	**37.2**	**38.4**	**35.7**	**41.6**

See source and footnote on page 82.

Table SA28. Banking Sector: Loan-to-Deposit Ratio[1]
(Percent of deposits)

	2004-08	2009	2010	2011	2012	2013	2014	2015
Angola	42.6	55.8	72.5	79.3	89.1	85.8	75.0	67.2
Benin	58.4	54.5	53.3	51.5	48.6	45.6	40.9	34.7
Botswana	55.8	55.4	55.4	67.5	74.0	79.1	82.5	76.4
Burkina Faso	92.2	78.4	69.0	69.3	71.8	77.4	74.3	68.1
Burundi	67.7	59.3	63.5	80.1	81.1	73.8	73.5	...
Cabo Verde	54.8	72.5	74.2	80.2	73.9	64.7	59.2	57.2
Cameroon	69.3	68.3	69.4	70.3	80.1	81.4	82.3	...
Central African Rep.	118.0	98.2	103.7	99.6	109.1	108.3	108.2	99.1
Chad	82.7	85.5	73.4	73.5	77.5	80.2	80.9	...
Comoros	49.5	54.2	57.6	55.1	56.5	64.7	67.9	70.0
Congo, Dem. Rep. of	49.7	58.6	57.5	68.8	68.0	68.7	71.4	73.3
Congo, Rep. of	36.4	38.7	39.5	38.3	49.8	59.6	55.3	...
Côte d'Ivoire	78.8	80.0	73.3	63.9	63.0	66.6	65.1	66.7
Equatorial Guinea	43.0	56.6	59.0	68.1	38.0	48.1	54.1	...
Eritrea	24.6	25.3	23.8	24.0	24.7	23.3	...	...
Ethiopia	...	...	...	...	...	...	...	...
Gabon	62.5	59.6	62.7	62.9	65.1	77.7	81.4	...
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	...
Guinea	...	...	...	...	...	...	...	...
Guinea-Bissau	30.8	42.7	38.9	66.7	72.9	69.7	56.9	45.1
Kenya	76.6	72.5	72.6	77.8	76.9	80.5	83.7	87.0
Lesotho	26.4	34.9	36.6	37.2	50.9	45.3	47.9	45.7
Liberia	...	...	...	...	...	...	...	...
Madagascar	...	...	...	...	...	...	...	...
Malawi	...	...	...	...	...	...	...	...
Mali	82.0	74.3	71.5	82.0	78.9	72.8	64.6	62.8
Mauritius	65.5	67.7	68.2	80.9	77.2	72.6	74.9	68.0
Mozambique	53.3	67.7	74.4	74.4	71.1	74.4	73.5	61.7
Namibia	112.3	74.0	75.9	75.5	77.5	82.8	88.8	...
Niger	73.1	83.0	78.0	84.3	84.2	76.6	68.9	74.4
Nigeria	76.3	79.1	64.0	56.2	54.8	57.4	65.3	...
Rwanda	…	...	...	...	...	...	...	...
São Tomé & Príncipe	66.7	74.9	108.3	110.5	82.4	75.4	58.5	...
Senegal	77.3	78.3	76.7	78.4	80.0	79.5	75.1	68.7
Seychelles	30.9	30.7	35.9	33.9	34.7	28.9	31.8	42.4
Sierra Leone	38.7	47.2	47.5	46.5	40.5	37.0	34.0	31.4
South Africa	122.8	120.1	120.7	113.2	119.0	118.7	117.3	118.1
South Sudan	...	...	...	9.8	11.8	15.2	11.3	7.7
Swaziland	96.7	79.6	74.4	85.8	79.8	81.7	86.2	79.3
Tanzania	52.0	64.6	62.1	67.1	69.9	71.2	75.6	...
Togo	67.5	60.6	59.0	67.1	64.3	66.1	61.8	61.9
Uganda	58.8	71.4	77.2	85.5	79.5	80.0	74.6	...
Zambia	50.5	60.1	52.9	56.5	65.2	61.1	65.7	60.1
Zimbabwe	…	...	...	...	...	...	...	...
Sub-Saharan Africa	**63.7**	**64.9**	**65.2**	**66.8**	**67.0**	**67.3**	**67.3**	**63.6**
Median	62.5	67.7	65.5	68.5	71.5	71.9	70.6	67.0
Excluding Nigeria and South Africa	61.6	62.9	63.6	65.8	65.9	66.2	65.9	61.3
Oil-exporting countries	**59.0**	**63.4**	**62.9**	**57.3**	**58.3**	**63.2**	**63.2**	**37.4**
Excluding Nigeria	56.1	60.8	62.8	57.4	58.8	64.0	62.9	37.4
Oil-importing countries	**64.8**	**65.2**	**65.7**	**69.4**	**69.3**	**68.4**	**68.4**	**66.0**
Excluding South Africa	62.8	63.3	63.8	67.9	67.6	66.7	66.7	63.5
Middle-income countries	**65.3**	**66.0**	**67.4**	**69.2**	**69.2**	**70.4**	**70.8**	**69.8**
Excluding South Africa	62.1	63.0	64.5	66.8	66.4	67.7	68.2	65.0
Low-income countries	**61.9**	**63.7**	**62.8**	**64.4**	**64.8**	**64.3**	**63.6**	**58.4**
Excluding low-income fragile countries	62.9	67.5	66.8	68.9	68.1	67.8	64.2	61.5
Fragile countries	**61.0**	**61.5**	**62.9**	**63.3**	**62.9**	**63.0**	**62.3**	**57.6**

See source and footnote on page 82.

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BOOKS AND MONOGRAPHS

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DEPARTMENTAL PAPERS

16/2

Trade Integration and Global Value Chains in Sub-Saharan Africa : In Pursuit of the Missing Link

Céline Allard, 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 V 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, and 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 Moheeput, 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, Ermal Hitaj, Douglas J. Shapiro

13/6
West African Economic and Monetary Union: Financial Depth and Macrostability
Imam, Patrick A., and Christina Kolerus

13/5
Senegal: Financial Depth and Macrostability
Imam, Patrick A., and Christina Kolerus

13/4
Senegal: Achieving High and Inclusive Growth While Preserving Fiscal Sustainability
Kireyev, Alexei, and 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, and 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, and Borislava Mircheva

11/07
Macroeconomic Vulnerabilities Stemming from the Global Economic Crisis: The Case of Swaziland
Basdevant, Olivier, Chikako Baba, Borislava Mircheva

11/06
What Do Fast Job Creators Look Like? Some Stylized Facts and Perspectives on South Africa
Zhan, Zaijin

11/04
South Africa: Macro Policy Mix and Its Effects on Growth and the Real Exchange Rate—Empirical Evidence and GIMF Simulations
Canales-Kriljenko, Jorge Iván

11/02
Measuring the Potential Output of South Africa
Klein, Nir

11/01
In the Wake of the Global Economic Crisis: Adjusting to Lower Revenue of the Southern African Customs Union in Botswana, Lesotho, Namibia, and Swaziland
Mongardini, Joannes, Dalmacio Benicio, Thomson Fontaine, Gonzalo C. Pastor, Geneviève Verdier

10/03
Zimbabwe: Challenges and Policy Options after Hyperinflation
Kramarenko, Vitaliy, Lars H. Engstrom, Geneviève Verdier, Gilda Fernandez, Stefan E. Oppers, Richard Hughes, James McHugh, Warren L. Coats

10/02
Expenditure Composition and Economic Developments in Benin
Pani, Marco, and Mohamed El Harrak

10/01
Wage Policy and Fiscal Sustainability in Benin
Lundgren, Charlotte J.

09/04
The Global Financial Crisis and Adjustments to Shocks in Kenya, Tanzania, and Uganda: A Balance Sheet Analysis Perspective
Masha, Iyabo

09/03
Impact of the Global Financial Crisis on Exchange Rates and Policies in Sub-Saharan Africa
Ben Ltaifa, Nabil, Stella Kaendera, and Shiv Dixit

09/02
Spillover Effects and the East African Community: Explaining the Slowdown and the Recovery
Drummond, Paulo, and Gustavo Ramirez

09/01
Foreign Exchange Reserve Adequacy in East African Community Countries
Drummond, Paulo, Aristide Mrema, Stéphane Roudet, Mika Saito

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.

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, and Nicola Spatafora

09/20
The International Financial Crisis and Global Recession: Impact on the CEMAC Region and Policy Considerations
Wakeman-Linn, John, Rafael A. Portillo, Plamen Iossifov, Dimitre Milkov

09/16
The Global Financial Crisis: Impact on WAEMU Member Countries and Policy Options
Mueller, Johannes, Irene Yackovlev, Hans Weisfeld

09/14
The Southern African Development Community's Macroeconomic Convergence Program: Initial Performance
Burgess, Robert

09/10
Fiscal Policy in Sub-Saharan Africa in Response to the Impact of the Global Crisis
Berg, Andrew, Norbert Funke, Alejandro Hajdenberg, Victor Duarte Lledo, Rolando Ossowski, Martin Schindler, Antonio Spilimbergo, Shamsuddin Tareq, Irene Yackovlev

WORKING PAPERS

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 Espaillat, Dirk Muir

15/190
Systemic Risk Assessment in Lo 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
Alun H. Thomas

15/169
Household Financial Acces 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 and 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 int he 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, and 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, Renee Tapsoba, Dmitry Zhdankin, Susan Yang

15/17
Fiscal Policy Implications for Labor Market Outcomes in Middle-Income Countries
Stepanyan, Ara, and Lamin Leigh

15/12
Revisiting teh Concept of Dollarization: The Global Financial Crisis and Dollarization in Low-Income Countries
Mwase, Nkunde, and 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, and 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, and Shu Yu

14/94
Does Openness Matter for Financial Development in Africa?
David, Antonio, Montfort Mlachila, and Ashwin Moheeput

14/51
Surging Investment and Declining Aid: Evaluating Debt Sustainability in Rwanda
Clark, Will, and Birgir Arnason

13/261
Natural Gas, Public Investment and Debt Sustainability in Mozambique
Melina, Giovanni, and Yi Xiong

13/250
Africa's Rising Exposure to China: How Large Are Spillovers Through Trade?
Drummond, Paulo, and 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, and 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, Ermal, and 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, Alun Thomas

13/188
Resource Dependence and Fiscal Effort in Sub-Saharan Africa
Thomas, Alun, and 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, and 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, and Martin Petri

13/53
The Quality of the Recent High-Growth Episode in Sub-Saharan Africa
Mlachila, Montfort, and 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, and 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, Saji Thomas

13/12
Bond Markets in Africa
Mu, Yibin, Peter Phelps, and 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, and Francois Boutin-Dufresne

12/208
Exchange Rate and Foreign Interest Rate Linkages for Sub-Saharan Africa Floaters
Thomas, Alun

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, and 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, and 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, and 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, and Shiv Dixit

12/108
Mobilizing Revenue in Sub-Saharan Africa: Empirical Norms and Key Determinants
Drummond, Paulo,Wendell Daal, Nandini Srivastava, and 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, and 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, and Matthew Gaertner

12/20
Prudential Liquidity Regulation in Developing Countries: A Case Study of Rwanda
Sanya, Sarah, Wayne Mitchell, and 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, and George Tsibouris

11/294
Inflation Differentials in the GCC: Does the Oil Cycle Matter?
Mohaddes, Kamiar, and Oral Williams

11/281
Effectiveness of Capital Controls in Selected Emerging Markets in the 2000s
Baba, Chikako, and Annamaria Kokenyne

11/280
How Costly Are Debt Crises?
Furceri, Davide, and Aleksandra Zdzienicka

11/275
Monetary Policy Transmission in Ghana: Does the Interest Rate Channel Work?
Kovanen, Arto

11/274
Does Money Matter for Inflation in Ghana?
Kovanen, Arto

11/273
On the Stability of Monetary Demand in Ghana: A Bounds Testing Approach
Dagher, Jihad, and Arto Kovanen

11/268
Oil-Price Boom and Real Exchange Rate Appreciation: Is There Dutch Disease in the CEMAC?
Treviño, Juan Pedro

11/266
The Design of Fiscal Adjustment Strategies in Botswana, Lesotho, Namibia, and Swaziland
Basdevant, Olivier, Dalmacio Benicio, Borislava Mircheva, Joannes Mongardini, Geneviève Verdier, Susan Yang, and Luis-Felipe Zanna

11/246
Do Remittances Reduce Aid Dependency?
Kpodar, Kangni, and Maelan Le Goff

11/233
Determinants of Non-oil Growth in the CFA-Zone Oil Producing Countries: How Do They Differ?
Tabova, Alexandra, and Carol L. Baker

11/232
Inflation Dynamics in the CEMAC Region
Caceres, Carlos, Marcos Poplawski-Ribeiro, and Darlena Tartari

11/207
External Sustainability of Oil-Producing Sub-Saharan African Countries
Takebe, Misa, and Robert C. York

11/205
The Cyclicality of Fiscal Policies in the CEMAC Region
Mpatswe, Gaston K., Sampawende J. Tapsoba, and Robert C. York

11/204
South Africa: The Cyclical Behavior of the Markups and Its Implications for Monetary Policy
Klein, Nir

11/202
Burkina Faso—Policies to Protect the Poor from the Impact of Food and Energy Price Increases
Arze del Granado, Javier, and Isabell Adenauer

11/198
De Jure versus De Facto Exchange Rate Regimes in Sub-Saharan Africa
Slavov, Slavi T.

11/196
Financial Deepening, Property Rights and Poverty: Evidence from Sub-Saharan Africa
Singh, Raju Jan, and Yifei Huang

11/178
FDI from BRICs to LICs: Emerging Growth Driver?
Mlachila, Montfort, and Misa Takebe

11/176
Determinants of Interest Rate Pass-Through: Do Macroeconomic Conditions and Financial Market Structure Matter?
Gigineishvili, Nikoloz

11/174
The Quest for Higher Growth in the WAEMU Region: The Role of Accelerations and Decelerations
Kinda, Tidiane, and Montfort Mlachila

11/172
Fiscal Policy Implementation in Sub-Saharan Africa
Lledo, Victor Duarte, and Marcos Poplawski Ribeiro

11/149
Post-Conflict Recovery: Institutions, Aid, or Luck?
David, Antonio, Fabiano Rodrigues Bastos, and Marshall Mills

11/104
Ghana: Will It Be Gifted, or Will It Be Cursed?
Aydin, Burcu

11/102
Oil Spill(over)s: Linkages in Petroleum Product Pricing Policies in West African Countries
David, Antonio, Mohamed El Harrak, Marshall Mills, and Lorraine Ocampos

11/80
Feeling the Elephant's Weight: The Impact of Côte d'Ivoire's Crisis on WAEMU Trade
Egoumé-Bossogo, Philippe, and Ankouvi Nayo

11/73
ICT, Financial Inclusion, and Growth Evidence from African Countries
Andrianaivo, Mihasonirina, and Kangni Kpodar

11/69
Fiscal Sustainability and the Fiscal Reaction Function for South Africa
Burger, Philippe, Alfredo Cuevas, Ian Stuart, and Charl Jooste

11/64
Reviving the Competitive Storage Model: A Holistic Approach to Food Commodity Prices
Miao, Yanliang, Weifeng Wu, and Norbert Funke

11/59
Inflation Uncertainty and Relative Price Variability in WAEMU
Fernandez Valdovinos, Carlos, and Kerstin Gerling

11/57
Modeling Inflation in Chad
Kinda, Tidiane

11/48
Fiscal Expectations under the Stability and Growth Pact: Evidence from Survey Data
Poplawski-Ribeiro, Marcos, and Jan-Christoph Rulke

11/40
Growth in Africa under Peace and Market Reforms
Korbut, Olessia, Gonzalo Salinas, and Cheikh A. Gueye

11/20
Feeling the Elephant's Weight: The Impact of Côte d'Ivoire's Crisis on WAEMU Trade
Egoumé-Bossogo, Philippe, and Nayo Ankouvi

11/9
Capital Flows, Exchange Rate Flexibility, and the Real Exchange Rate
Kinda, Tidiane, Jean-Louis Combes, and Patrick Plane

10/292
Weathering the Global Storm: The Benefits of Monetary Policy Reform in the LA5 Countries
Canales-Kriljenko, Jorge Iván, Luis Ignacio Jácome, Ali Alichi, and Ivan Luis de Oliveira Lima

10/269
Export Tax and Pricing Power: Two Hypotheses on the Cocoa Market in Côte d'Ivoire
Kireyev, Alexei

10/225
What Can International Cricket Teach Us About the Role of Luck in Labor Markets?
Aiyar, Shekhar, and Rodney Ramcharan

10/217
Performance of Fiscal Accounts in South Africa in a Cross-Country Setting
Aydin, Burcu

10/216
Cyclicality of Revenue and Structural Balances in South Africa
Aydin, Burcu

10/210
Mother, Can I Trust the Government? Sustained Financial Deepening—A Political Institutions View
Quintyn, Marc, and Geneviève Verdier

10/195
Islamic Banking: How Has It Diffused?
Imam, Patrick A., and Kangni Kpodar

10/191
A Macro Model of the Credit Channel in a Currency Union Member: The Case of Benin
Samaké, Issouf

10/166
How Do International Financial Flows to Developing Countries Respond to Natural Disasters?
David, Antonio

10/162
Exchange Rate Assessment for Sub-Saharan Economies
Aydin, Burcu

10/148
Balance Sheet Vulnerabilities of Mauritius during a Decade of Shocks
Imam, Patrick A., and Rainer Koehler

10/140
Beyond Aid: How Much Should African Countries Pay to Borrow?
Gueye, Cheikh A., and Amadou N.R. Sy

10/136
Banking Efficiency and Financial Development in Sub-Saharan Africa
Kablan, Sandrine

10/132
FDI Flows to Low-Income Countries: Global Drivers and Growth Implications
Dabla-Norris, Era, Jiro Honda, Amina Lahrèche-Révil, and Geneviève Verdier

10/118
The Linkage between the Oil and Nonoil Sectors—A Panel VAR Approach
Klein, Nir

10/115
Short- versus Long-Term Credit and Economic Performance: Evidence from the WAEMU
Kpodar, Kangni, and Kodzo Gbenyo

10/80
Budget Institutions and Fiscal Performance in Low-Income Countries
Dabla-Norris, Era, Richard Allen, Luis-Felipe Zanna, Tej Prakash, Eteri Kvintradze, Victor Duarte Lledo, Irene Yackovlev, and Sophia Gollwitzer

10/66
ICT Equipment Investment and Growth in Low- and Lower-Middle-Income Countries
Haacker, Markus

10/58
The Real Exchange Rate and Growth Revisited: The Washington Consensus Strikes Back?
Berg, Andrew, and Yanliang Miao

10/49
Firm Productivity, Innovation, and Financial Development
Dabla-Norris, Era, Eramus Kersting, and Geneviève Verdier

09/274
Cyclical Patterns of Government Expenditures in Sub-Saharan Africa: Facts and Factors
Lledo, Victor, Irene Yackovlev, and Lucie Gadenne

09/269
A Framework to Assess the Effectiveness of IMF Technical Assistance in National Accounts
Pastor, Gonzalo C.

09/260
Improving Surveillance Across the CEMAC Region
Iossifov, Plamen, Noriaki Kinoshita, Misa Takebe, Robert C. York, and Zaijin Zhan

09/244
A Rule Based Medium-Term Fiscal Policy Framework for Tanzania
Kim, Daehaeng, and Mika Saito

09/227
Analyzing Fiscal Space Using the MAMS Model: An Application to Burkina Faso
Gottschalk, Jan, Vu Manh Le, Hans Lofgren, and Kofi Nouve

09/216
Determinants and Macroeconomic Impact of Remittances in Sub-Saharan Africa
Singh, Raju Jan, Markus Haacker, and Kyung-woo Lee

09/215
São Tomé and Príncipe: Domestic Tax System and Tax Revenue Potential
Farhan, Nisreen

09/192
The Gambia: Demand for Broad Money and Implications for Monetary Policy Conduct
Sriram, Subramanian S.

09/182
Understanding the Growth of African Markets
Yartey, Charles Amo, and Mihasonirina Andrianaivo

09/180
Credit Growth in Sub-Saharan Africa—Sources, Risks, and Policy Responses
Iossifov, Plamen, and May Y. Khamis

09/155
Spillovers from the Rest of the World into Sub-Saharan African Countries
Drummond, Paulo, Flavio Nacif, and Gustavo Ramirez

09/148
In Search of Successful Inflation Targeting: Evidence from an Inflation Targeting Index
Miao, Yanliang

09/146
Introducing the Euro as Legal Tender—Benefits and Costs of Eurorization for Cape Verde
Imam, Patrick A.

09/115
The Macroeconomics of Scaling Up Aid: The Gleneagles Initiative for Benin
Mongardini, Joannes, and Issouf Samaké

09/114
Sub-Saharan Africa's Integration in the Global Financial Markets
Deléchat, Corinne, Gustavo Ramirez, Smita Wagh, and John Wakeman-Linn

09/113
Financial Deepening in the CFA Franc Zone: The Role of Institutions
Singh, Raju, Kangni Kpodar, and Dhaneshwar Ghura

09/107
Madagascar: A Competitiveness and Exchange Rate Assessment
Eyraud, Luc

09/98
Understanding Inflation Inertia in Angola
Klein, Nir, and Alexander Kyei

09/75
Grants, Remittances, and the Equilibrium Real Exchange Rate in Sub-Saharan African Countries
Mongardini, Joannes, and Brett Rayner

09/37
Dedollarization in Liberia—Lessons from Cross-Country Experience
Erasmus, Lodewyk, Jules Leichter, and Jeta Menkulasi

09/36
The Macroeconomic Impact of Scaled-Up Aid: The Case of Niger
Farah, Abdikarim, Emilio Sacerdoti, and Gonzalo Salinas

09/27
The Value of Institutions for Financial Markets: Evidence from Emerging Markets
Akitoby, Bernardin, and Thomas Stratmann

09/25
Why Isn't South Africa Growing Faster? A Comparative Approach
Eyraud, Luc

09/15
The Determinants of Commercial Bank Profitability in Sub-Saharan Africa
Flamini, Valentina, Calvin A. McDonald, and Liliane Schumacher

09/14
Bank Efficiency in Sub-Saharan African Middle-Income Countries
Chen, Chuling

09/11
How Can Burundi Raise its Growth Rate? The Impact of Civil Conflicts and State Intervention on Burundi's Growth Performance
Basdevant, Olivier

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