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**Sub-Saharan Africa  
Restarting the Growth Engine**



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## Abbreviations

CEMAC	Economic and Monetary Community of Central Africa
BCEAO	Central Bank of West African States
BEAC	Bank of Central African States
CEMAC	Central African Economic and Monetary Community
EAC	East African Community
GDP	gross domestic product
HPIC	Heavily Indebted Poor Countries
IMF	International Monetary Fund
ILO	International Labour Organization
MIMIC	Multiple Indicator-Multiple Cause
OECD	Organisation for Economic Co-operation Development
PMM	Predictive Mean Matching
PPP	purchasing power parity
REO	<i>Regional Economic Outlook</i> (IMF)
SDGs	Sustainable Development Goals
SMEs	small and medium-sized enterprises
SSA	Sub-Saharan Africa
VAT	value-added tax
WAEMU	West African Economic and Monetary Union
WEO	<i>World Economic Outlook</i> (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  $\frac{1}{4}$  of 1 percentage point).





# Executive Summary

## RESTORING THE CONDITIONS FOR STRONG AND SUSTAINABLE GROWTH

**Growth momentum in sub-Saharan Africa remains fragile.** In 2016, growth slowed in about two-thirds of the countries in the region—accounting for 83 percent of regional GDP—and is estimated to have reached just 1½ percent. This marked the region's worst performance in more than two decades. Even the modest rebound to 2½ percent expected in 2017 will be to a large extent driven by one-off factors in the three largest countries—a recovery in oil production in Nigeria, higher public spending ahead of elections in Angola, and the fading of drought effects in South Africa—combined with modest improvements in their terms of trade. This aggregate number masks considerable heterogeneity across the region, with some of the largest western and eastern African countries still expected to grow at 5 percent to 7½ percent. Nonetheless, the underlying regional momentum remains weak, and, at this rate, sub-Saharan African growth will continue to fall well short of past trends and barely exceed population growth.

**The deterioration in the overall outlook partly reflects insufficient policy adjustments.**

- The countries hardest hit by the new environment of low oil prices (Angola, Nigeria, and the Central African Economic and Monetary Community, CEMAC) are still struggling to deal with the resulting budgetary revenue losses and balance of payments pressures. With policy adjustments delayed and still limited in those countries, spillovers from lower oil prices to the non-oil sectors continue to damage their economies, and could generate even deeper difficulties if left unaddressed. Other commodity exporters, such as Ghana, Zambia, and Zimbabwe, are also grappling with larger fiscal deficits.
- In nonresource-intensive countries, such as Côte d'Ivoire, Kenya, and Senegal, fiscal deficits have remained high for a number of years, as governments rightly sought to address social and infrastructure gaps. While growth remains robust, vulnerabilities are starting to emerge—public debt is on the rise, borrowing costs have increased, and, in some cases, arrears are emerging and nonperforming loans in the banking sector are increasing, even in a context of strong growth.

**The outlook is also clouded by the incidence of drought, pests, and security issues that have contributed to about half of sub-Saharan African countries reporting food insecurity.** The impact of the drought that hit most southern African countries in 2016 is fading, but a new bout of drought is affecting parts of eastern Africa, pest infestations are impacting agriculture in a number of southern African countries, and famine has been declared in South Sudan and is looming in northeastern Nigeria as a result of past and ongoing conflicts.

**Meanwhile, the external environment is expected to offer only limited support.** Recent improvements in commodity prices, while providing welcome breathing space, will not be sufficient to address the existing imbalances in resource-intensive countries. The prospect of monetary policy normalization in the United States could further tighten external financing conditions, which places even greater emphasis on appropriate national policy frameworks.

**In that context, policy actions are urgently needed to address macroeconomic imbalances in resource-intensive countries and to preserve the existing momentum elsewhere.**

- For the hardest-hit resource-intensive countries, fiscal consolidation remains urgently needed to halt the decline in international reserves and to offset permanent revenue losses. This is especially the case in the CEMAC countries, where fiscal measures should support binding limits on central bank financing to governments and help contain external pressures. In countries where the exchange rate tool is available

(Angola, Nigeria), greater exchange rate flexibility and the elimination of exchange restrictions that are inflicting serious harm on the real economy should be part of a coherent policy package.

- For other countries, addressing emerging vulnerabilities should become a priority, lest the current growth momentum comes under threat. While the expansionary fiscal stance has so far been appropriate, with debt and borrowing costs having risen, now is the time to shift the fiscal stance toward gradual fiscal consolidation.

## RESTARTING SUB-SAHARAN AFRICA'S GROWTH ENGINE

The second chapter sheds light on how to revive economic activity by examining the region's experience with growth turning points and the extent to which they have led to episodes of sustained growth since 1950.

Growth turning points—defined as growth accelerations (up-breaks), and decelerations (down-breaks)—are common in sub-Saharan Africa, but with substantial variation across time. In particular, the region has experienced relatively fewer down-breaks since 2000. Likewise, there is no shortage of growth spells (that is, periods of sustained growth) in the region, both among resource-intensive and nonresource-intensive countries. In fact, growth spells have become more frequent over the last 15 years. However, compared to other regions, they tend to be shorter, exhibit larger swings, and more often end in “hard landings.”

The chapter finds that sustained periods of growth are fostered by sound domestic policies, including fiscal policy that prevents excessive public debt accumulation, monetary policy geared toward low inflation, outward-oriented trade policies, and structural policies that reduce market distortions. In light of the less supportive external environment, these findings reinforce the call made in the first chapter for a strong domestic policy response to revive growth where it has faltered, and to sustain growth where it remains relatively strong.

## THE INFORMAL ECONOMY IN SUB-SAHARAN AFRICA

The third chapter explores the role of the informal economy in sub-Saharan Africa. The informal economy is an important component of most economies in the region, contributing between 25 and 65 percent of GDP and between 30 and 90 percent of total nonagricultural employment. International experience suggests that the informal economy in sub-Saharan Africa is likely to remain large for many years to come, presenting both opportunities and challenges for policymakers.

On the positive side, informal activity acts as a safety net, providing employment and income to a large and growing working-age population that may otherwise be unemployed in the absence of sufficient opportunities in the formal sector. At the same time, productivity in the informal sector tends to be much lower than in the formal sector: the productivity of informal firms is only one-fifth to one-quarter that of formal firms. The authorities thus need to adopt a balanced approach to policies to formalize the informal sector, by focusing on increasing the productivity of the sector, while working on supporting the expansion of formal firms.

Fortunately, policies designed to create an economic environment that supports the growth of the formal sector also raise the productivity of the informal sector, hence facilitating the transition of resources from the informal to the formal sector and helping sustain growth accelerations. In particular, improving access to finance is found to be a key contributor to expanding the scope of the formal sector. Fostering product-market efficiency can also play a role. In that respect, product-market regulations related to the legal system and trade liberalization appear to be particularly important, as is access to electricity.

# 1. Restoring the Conditions for Strong and Sustainable Growth

The sub-Saharan African economic outlook remains clouded. Growth slowed sharply in 2016, averaging 1.4 percent, the lowest in two decades. About two-thirds of the countries in the region, together accounting for 83 percent of the region's GDP, slowed down—although some countries still continued to expand strongly. A modest rebound in growth to 2.6 percent is expected in 2017, but even that rebound will be to a large extent driven by one-off factors in the three largest countries—a recovery in oil production in Nigeria, higher public spending ahead of the elections in Angola, and the fading of drought effects in South Africa, combined in all three countries with modest improvements in the terms of trade. At this rate, growth for the region as a whole will continue to fall well short of past trends and barely deliver any per capita gains.

Unfortunately, this deteriorated outlook is partly a result of delayed and still limited policy adjustments, with an ensuing increase in public debt, declining international reserves, and pressures on financial systems placing stress on private sector activity:

- The countries hardest hit by the oil price shock (Angola, Nigeria, and the countries of the Central African Economic and Monetary Community, CEMAC) are still struggling to deal with the unusually large terms-of-trade shock and implied budgetary revenue losses. The pains from this shock continue to do damage to these economies, with the risk of generating even deeper difficulties both within and across borders if unaddressed. Some other commodity exporters, such as Ghana, Zambia, and Zimbabwe, are also grappling with larger fiscal deficits in a context of already high debt levels and concerns about growth.
- Elsewhere, nonresource-intensive countries, such as Côte d'Ivoire, Kenya, and Senegal,

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This chapter was prepared by a team led by Maxwell Opoku-Afari, coordinated by Monique Newiak, and comprised of Cleary Haines, Mumtaz Hussain, Nkunde Mwase, and Tim Willems.

have generally maintained high growth rates. However, while budget deficits have remained elevated for a number of years as governments rightly sought to address social and infrastructure gaps, vulnerabilities are now starting to emerge in some of these countries. In particular, public debt is on the rise, and reliance on domestic financing as foreign financing declined, has increased borrowing costs. In some cases, arrears are emerging and nonperforming loans in the banking sector are increasing, even in a context of strong growth.

Furthermore, on the external front, the somewhat improved global outlook comes with significant uncertainties and downside risks. External financial conditions for frontier economies in the region have loosened from the peaks reached in early 2016, but they still remain tighter than conditions for emerging markets in the rest of the world. They could rapidly tighten further against the backdrop of fiscal policy easing and monetary policy normalization in the United States. A faster-than-expected pace of interest rate hikes in the United States could also trigger a more rapid tightening in global financial conditions and a sharp U.S. dollar appreciation.

Importantly, even the recent increase in commodity prices is not expected to provide much relief. Oil prices have recovered somewhat from the trough reached in early 2016, but they are still far below the average price in 2011–13, and are not expected to recover much further. More broadly, even if improvements in commodity prices provide welcome breathing space, they will not be enough to address the current liquidity stress and the large imbalances in the resource-intensive countries.

Additional policy actions are therefore urgently needed to address growing imbalances and ensure macroeconomic stability—both to restore the conditions for strong and sustainable growth in resource-intensive countries and to preserve the existing momentum elsewhere.

- For the hardest-hit resource-intensive countries, fiscal consolidation remains urgent to halt the sharp decline in international reserves and offset revenue losses that the recent firming up of commodity prices will not erase. This is especially the case in CEMAC, where fiscal measures should be complemented by binding limits on central bank financing to governments. In countries where the exchange rate instrument is available (such as Angola and Nigeria), allowing greater exchange rate flexibility, as part of a coherent package of adjustment measures, and lifting exchange rate restrictions would remove distortions that are inflicting serious damage on the real economy. Even if, initially, the required adjustment further dampens activity, additional delays would be even more damaging, risking a sudden stop and ultimately an even sharper adjustment. Additional financing, preferably on concessional terms where appropriate, could usefully complement a credible multi-year plan to restore macroeconomic stability and smooth the impact on overall activity.
- For other countries, reducing emerging vulnerabilities by strengthening fiscal and external buffers should become a priority, lest the current growth momentum comes under threat. While the expansionary fiscal stance has been appropriate so far, with debt and borrowing costs rising, now is the time to shift the fiscal stance toward gradual fiscal consolidation. Delaying this shift would raise the risk of a rapid slowdown in growth down the road. Notably, for the fast-growing West African Economic and Monetary Union (WAEMU) countries, implementation of planned fiscal consolidation at the country level and better policy coordination at the monetary union level are important to preserve external stability. Likewise, fast-growing countries in East Africa need to ensure that the scaling up of public investment, which has led to rapidly rising debt, is steadily trimmed to normal levels consistent with continued fiscal and external sustainability.

While restoring macroeconomic stability is a prerequisite, this rebalancing will only be durable and protect the gains made in the past if further

efforts are simultaneously made to boost domestic revenue mobilization, address structural weaknesses, and provide a social safety net well targeted to the most vulnerable segments of the population. Those efforts would also contribute to making progress toward the authorities' Sustainable Development Goals (SDGs) adopted just two years ago.

The rest of Chapter 1 first documents the increased uncertainty surrounding the global environment and discusses the extent and quality of policy adjustments made to date in the region. It then highlights the implications for private sector activity, including for the financial sector, which is increasingly feeling the pinch from decelerating growth and inappropriate macroeconomic policies. The chapter then discusses the growth outlook and near-term risks. A final section focuses on policies that would foster a stronger recovery.

Chapter 2 sheds further light on how to revive economic activity by looking at the region's experience with growth turning points, examining the extent to which they have led to episodes of durable growth, and identifying factors that have fostered such an environment. Achieving durable and inclusive growth also means bringing everyone on board, and Chapter 3 discusses this through a close evaluation of informality in the region. The analysis recognizes that for the foreseeable future, the informal sector will continue to provide an important pool of jobs for the large and rising sub-Saharan African working-age population. At the same time, by lifting the impediments to the development of formal activities, policymakers can gradually find ways to tap the region's large unexploited growth potential hidden in mostly lower-productivity informal activities.

## LIMITED ROOM FOR MANEUVER

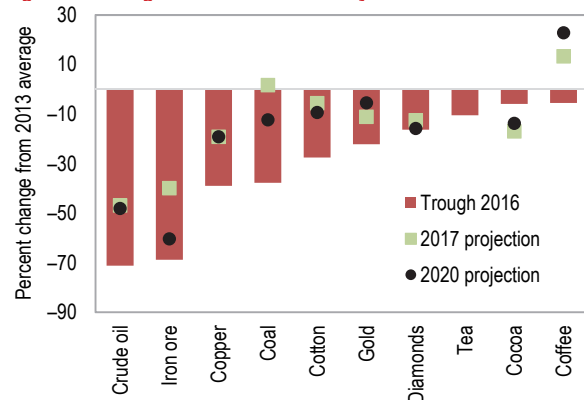
### Mixed signals from the global environment...

The global economic outlook has improved somewhat since the October 2016 *Regional Economic Outlook*. The end of 2016 and early 2017 signaled an uptick in global growth, especially in advanced economies. In addition, China's growth was still strong reflecting continued policy support. But overall, global growth remained modest at 3.1 percent in 2016 (see the April

2017 *World Economic Outlook*). While the overall forecast, ticking up to 3.5 percent in 2017, is expected to be boosted by anticipated fiscal policy easing in the United States and continued strong growth in China, these developments will have mixed implications for the region, as also discussed in Chapter 2 of the April 2017 *World Economic Outlook*:

- On the heels of the slightly improved outlook, in particular for China, and of the deal by the Organization of Petroleum Exporting Countries to cut oil production, commodity prices have picked up from low levels. However, they remain far below the 2013 peaks. Furthermore, they are not expected to change much over the medium term since deeper trends continue to be at play, including China's rebalancing of its growth model from investment to less-commodity-intensive consumption (Figure 1.1).
- While external financial conditions have loosened from the peaks reached about a year ago, financing costs for frontier economies in the region remain higher than for other emerging markets. They could rapidly tighten further against the backdrop of fiscal policy easing and monetary policy normalization in the United States (Figure 1.2). In this context, issuance episodes at much higher yields since early 2016 remind us that countries with delayed adjustments should expect to continue to face higher borrowing costs.

Figure 1.1. Change in Selected Commodity Prices since 2013



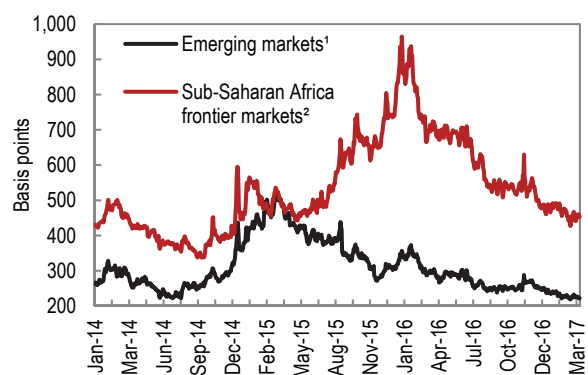
Sources: IMF, Commodity Price System; and IMF Global Assumptions. Note: Besides oil, some of the main export commodities in the region are copper (Democratic Republic of Congo and Zambia), iron ore (Liberia and Sierra Leone), coal (Mozambique and South Africa), gold (Burkina Faso, Ghana, Mali, South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

### ...while 2016 was already a difficult year for sub-Saharan Africa

Meanwhile, sub-Saharan Africa started 2017 from a weak position. Activity decelerated markedly in 2016, with growth estimated to have reached only 1.4 percent (Figure 1.3). The deceleration was broad-based, with about two-thirds of the countries—accounting for 83 percent of the region's GDP—growing more slowly than in 2015, although to different degrees:

- Most oil-exporters were in recession. Economic activity contracted by an estimated 1½ percent in Nigeria, ¾ percent in the CEMAC countries, and as much as 13¾ percent in South Sudan, while Angola's economy stagnated.
- Conditions in many other resource-intensive countries also remained difficult. Continued political uncertainty (South Africa), weak fundamentals (Ghana), and acute droughts (Lesotho, Malawi, Zambia, and Zimbabwe) compounded the effect of still-weak commodity prices in many countries. However, some other countries continued to grow more robustly, supported by domestic factors such as investment spending and accommodative monetary policy (Burkina Faso, Mali, Niger) and strong mining and services growth (Tanzania).

Figure 1.2. Sub-Saharan Africa Frontier and Emerging Market Spreads, 2014–17



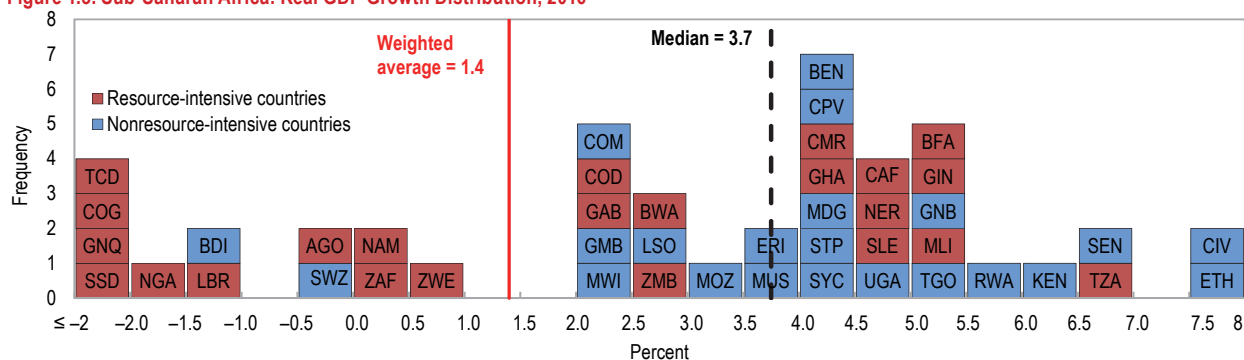
Source: Bloomberg, L.P.

Note: Data as of March 31, 2017.

<sup>1</sup> 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.

<sup>2</sup> The frontier market spread includes the spreads of Côte d'Ivoire, Gabon, Ghana, Kenya, Nigeria, Senegal, Tanzania, and Zambia.

Figure 1.3. Sub-Saharan Africa: Real GDP Growth Distribution, 2016



Source: IMF, World Economic Outlook database.  
 Note: See page 70 for country groupings and page 72 for country abbreviations.

- Conversely, nonresource-intensive countries, such as Côte d'Ivoire, Ethiopia, Kenya, and Senegal, generally continued to grow robustly, benefiting from strong domestic demand and high levels of public spending, though in some cases, growth eased from 2015.

primary deficit), Cameroon, Gabon, and Nigeria (Figure 1.4), and remaining above 15 percent of GDP in the Republic of Congo, Equatorial Guinea, and South Sudan. The picture was a bit more mixed among other countries, where fiscal balances also worsened in 2016 in about half of the countries, in some cases on the back of increased expenditures (The Gambia, Malawi), but also due to revenue shortfalls (Lesotho, Swaziland, and Zimbabwe).

## POLICIES HAVE BEEN EXPANSIONARY

### Lagging Fiscal Adjustment

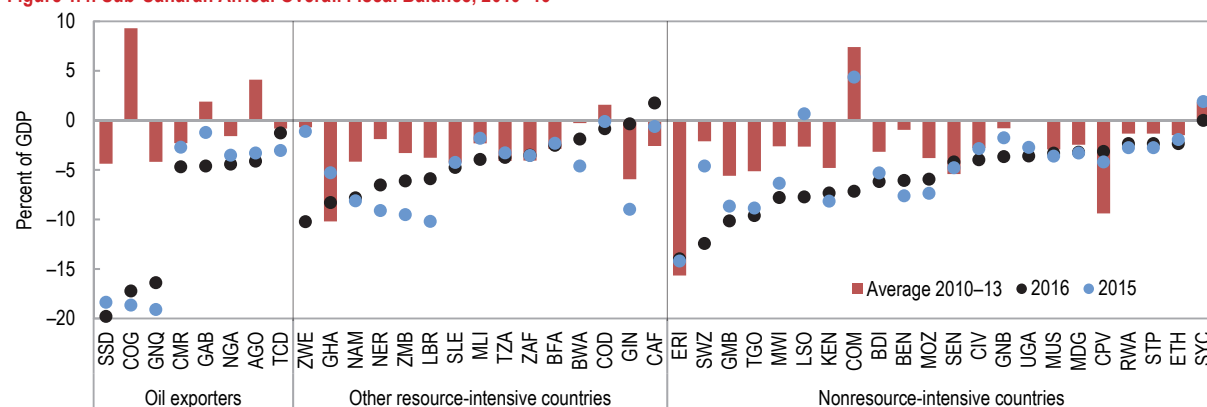
The average fiscal deficit in sub-Saharan Africa continued to widen in 2016, reaching  $-4\frac{1}{2}$  percent of GDP following levels of  $-4.1$  percent in 2015 and  $-3\frac{1}{2}$  percent in 2014. These developments reflected continued pressures on revenues that were generally not fully offset by expenditure cuts.

While most of the hardest-hit countries did implement some fiscal adjustment, they did not offset the loss in revenue and did not emphasize sufficiently new (noncommodity) sources of revenue (Figure 1.5):

This was most obvious among oil exporters, with the fiscal position further deteriorating in 2016 in Angola (despite adjustment in the non-oil

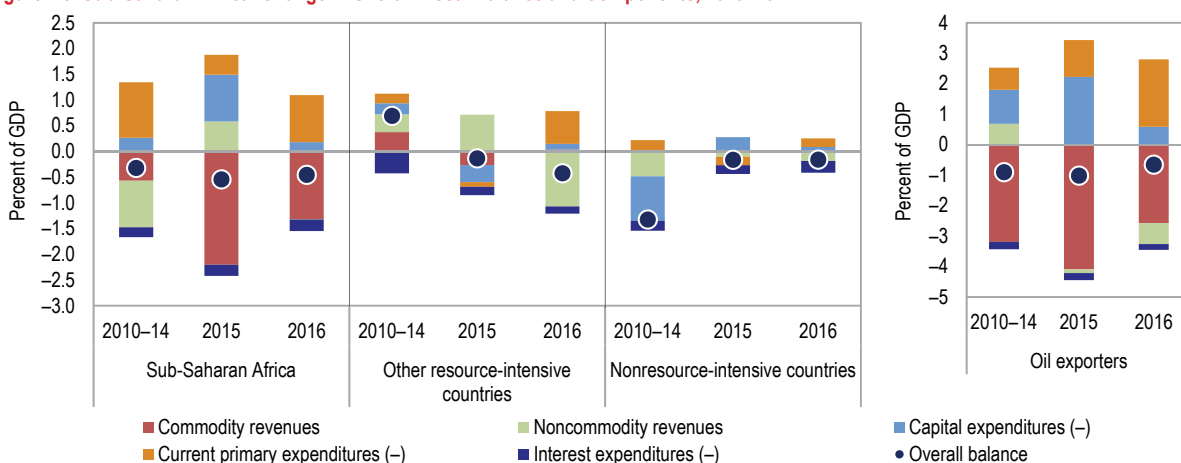
- To the extent that capital expenditures were already sharply cut in 2015, oil exporters, especially Angola and Nigeria, focused most of their 2016 adjustment (about  $2\frac{1}{2}$  percent of GDP) on current spending. However, this

Figure 1.4. Sub-Saharan Africa: Overall Fiscal Balance, 2010–16



Source: IMF, World Economic Outlook, database.  
 Note: See page 70 for country groupings and page 72 for country abbreviations.

Figure 1.5. Sub-Saharan Africa: Change in Overall Fiscal Balance and Components, 2010–16



Source: IMF, World Economic Outlook database.

Note: An increase (decrease) in revenue contributes positively (negatively) to the fiscal position. An increase (decrease) in expenditure contributes negatively (positively) to the change in fiscal position. See page 70 for country groupings.

was not sufficient to arrest the deterioration in the fiscal balance, as further losses in oil income were compounded by declining non-oil revenues, reflecting lower economic activity and emphasizing the need for the authorities to accelerate the implementation of their strategies to widen revenue sources.

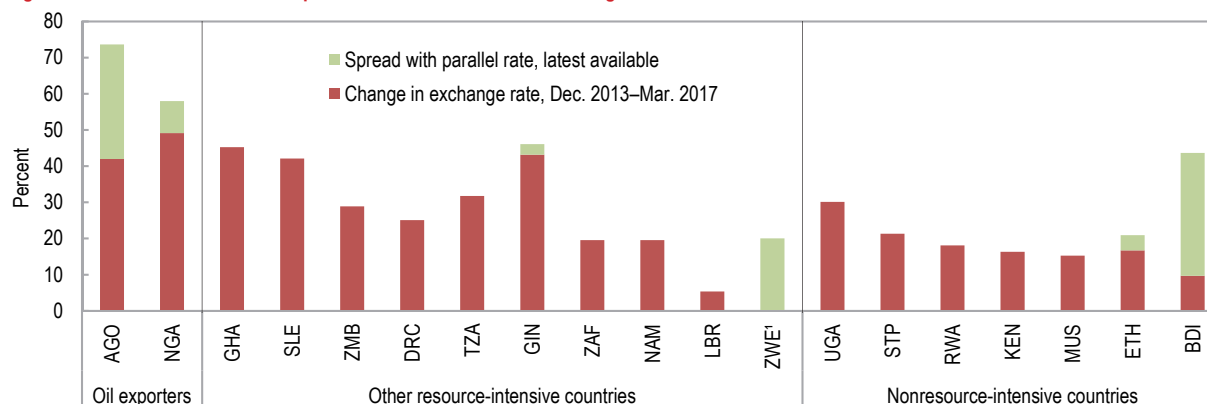
- Fiscal revenue also declined among other resource-intensive countries in a context of weak growth. In response, the authorities cut recurrent spending, and in some cases capital expenditures (Guinea, Namibia, Niger, and Zambia), with only a few countries strengthening revenue collection (for example, by temporarily increasing the value-added tax rate in Guinea and by conducting a campaign against corruption and tax evasion in Tanzania).
- In nonresource-intensive countries, the average fiscal position was broadly stable. However, in many of those countries, the deficit has been elevated (and in some cases rising) for several years now, despite buoyant growth. In the East African Community (EAC), the fiscal deficit reached 5¼ percent of GDP in 2016. It was 4½ percent of GDP among WAEMU countries, and has been constantly rising since 2012 despite consolidation commitments by its member countries.

In this context of incomplete adjustment, one worrisome development has been the relatively

widespread accumulation of domestic arrears (and, in a few cases, external arrears). The proliferation of domestic arrears was particularly marked in oil-exporting countries, with official estimates putting the stock of arrears at the end of 2016 to more than 7½ percent of GDP in Gabon, at least 4 percent in the Republic of Congo, almost 3 percent in Cameroon, 2.2 percent in Nigeria, and at least 2 percent in Angola. But other countries also experienced an increase in the stock of domestic arrears, including other commodity exporters (to more than 9 percent of GDP in Zambia, 4½ percent in Guinea, and potentially up to 3 percent in Ghana) and elsewhere (for example, Mozambique, São Tomé and Príncipe, Swaziland, and Uganda).

### Exchange Rates under Pressure

To respond to the large terms-of-trade shock and tighter external financing conditions, many countries appropriately let their exchange rates depreciate to help absorb external pressures. However, some of the hardest-hit countries also resorted to harmful exchange rate restrictions to stem the depletion of reserves (Angola, Nigeria). These restrictions, now in place in some countries for more than a year, have added to growing policy uncertainties, generated deep economic distortions, and led to a widening of spreads in parallel markets (Figure 1.6). Angola has retained the priority list for foreign exchange access at the official rate, a special tax on service payments, and stricter limits on foreign currency for travel introduced in 2015.

**Figure 1.6. Sub-Saharan Africa: Depreciation of National Currencies Against the U.S. Dollar since December 2013**

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

Note: Positive indicates a depreciation. See page 70 for country groupings and page 72 for country abbreviations.

<sup>1</sup> Unofficial estimates report the spread to be up to 20 percent between cash (U.S. dollars) and domestic bank deposits and bond notes.

The ensuing scarcity of foreign currencies widened the parallel market spread from 5 to 10 percent in mid-2014 to around 130 percent at the end of March 2017. In Nigeria, restrictions, including on the acquisition of foreign exchange in the domestic market for the importation of 40 categories of goods, also remain in place. Meanwhile, rationing of foreign exchange has intensified in Burundi, foreign exchange and import permit restrictions were introduced in Ethiopia, and various current and capital account restrictions in Zimbabwe have resulted in a widening of exchange rate spreads with the parallel market.

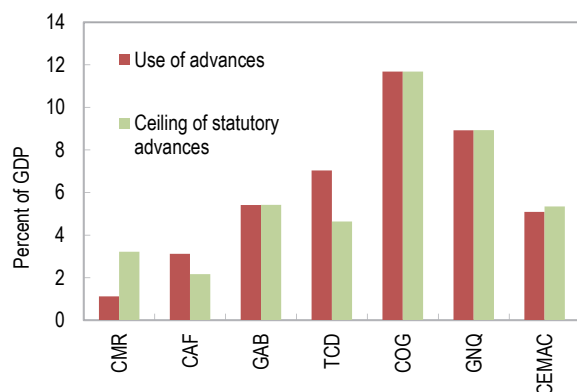
### Diverging Monetary Policy Responses

Mirroring the policy response to external pressures and the pass-through of currency depreciations, inflation continued to rise in 2016 in some of the key commodity exporters. End-of-year inflation reached 42 percent in Angola and 18½ percent in Nigeria, and remains slightly above the upper target band in South Africa, although inflationary pressures eased in Zambia and in Ghana as a result of tight monetary policy over the past year. Some nonresource-intensive countries also experienced an uptick in inflation, although to a lesser extent, as a result of which median inflation in the region accelerated from 4½ percent in 2015 to 5½ percent in 2016, reversing the trend observed over the last decade. In this differentiated context, monetary policy stances have also followed different paths across the region:

- Despite recent tightening as inflationary pressures increased, monetary policy among some resource-intensive countries has tended to remain loose. In particular, policy rates remained very low and negative in real terms in Angola (even after base money growth was tightened and the policy interest rate corridor narrowed in the second half of 2016) and in Nigeria (despite a 3 percentage point increase in the policy rate in early 2016). In the CEMAC, the regional central bank (*Banque des Etats de l'Afrique Centrale*, BEAC) has sought to mitigate liquidity constraints through accommodative monetary policy, in particular via credit to governments (related to the incomplete adjustment on the fiscal front), an increase in the refinancing of banks, and cuts in reserve requirements. However, this policy has reached its limits, with all CEMAC countries except Cameroon reaching or exceeding the statutory limit for advances from the BEAC (Figure 1.7).
- In nonresource-intensive countries, the picture has been mixed. Where underlying inflation pressures were easing until recently, as in the countries of the EAC, the policy stance was, rightly, loosened. Since April 2016, Uganda has reverted 550 basis points of the 600 basis point cumulative policy rate hike introduced when inflation pressures emanated from a large Shilling depreciation, and Tanzania reduced the discount rate in March 2017 by 400 basis points. In Kenya, the policy rate was cut by



**Figure 1.7. Central African Economic and Monetary Community: Stock of Statutory Advances, 2016**



Source: Banque des Etats de l'Afrique Centrale (BEAC).

Note: CEMAC = Central African Economic and Monetary Community. See page 72 for country abbreviations.

150 basis points to 10 percent by end-2016 in an attempt to reverse the ongoing slowdown in private sector credit growth, which had been further compounded by the unwelcome cap on commercial lending rates introduced in the first half of 2016. In a similarly unwelcome stance, inexpensive access to the refinancing window of the regional central bank of the WAEMU (*Banque Centrale des Etats de l'Afrique de l'Ouest*, BCEAO) had led banks in that region to rely on that source of funding to increasingly invest in treasury securities, keeping sovereign financing costs low in the context of fiscal expansion. The December 2016 decision by the BCEAO to increase its credit facility rate by 100 basis points and to tighten access to its refinancing window was an appropriate move to tighten financing conditions for sovereigns at the regional market, but its impact has since been mitigated by a subsequent cut in reserve requirements for banks.

## THE PAIN IS SPREADING WITHIN AND ACROSS COUNTRIES

### Rising External Pressures

As a result of the delayed policy adjustment, external pressures persist throughout much of the region, especially for resource-intensive countries, and this despite some relief from the recent uptick in oil and metal prices.

While estimated to have narrowed to 4 percent of GDP in 2016 from almost 6 percent a year earlier, the current account deficit for the region remains far above the 2 percent or so prevailing prior to the commodity price shock (Figure 1.8, panel 1). Furthermore, for oil exporters, this deficit has not always been matched with equivalent financing, exerting further pressures on reserves. Challenges raised by these large and often growing financing needs were compounded by a contraction in foreign direct investment and decreases in portfolio flows that were broad-based across the region—including investment flows from China, which despite picking up slightly in 2016, were still below the levels reached in 2013 (Figure 1.8, panel 2).

Access to international capital markets remained tight for sub-Saharan African frontier market economies, with only Ghana and Nigeria tapping the market since early 2016. This stands in sharp contrast to both the recent past in the region and increased issuances among emerging markets in 2016 (Figure 1.8, panel 3). More broadly, financing conditions as reflected in secondary market prices continue to be significantly tighter than for peers (Figure 1.9).

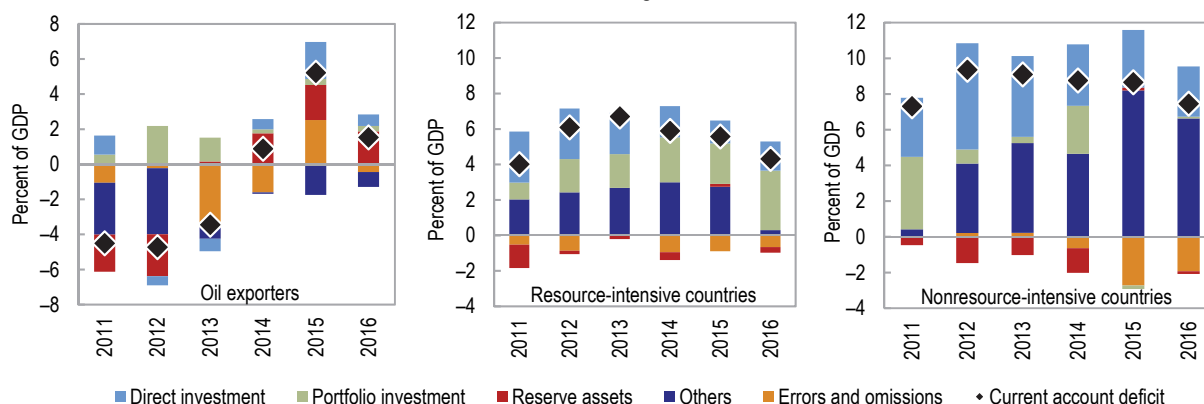
In countries with flexible exchange rates where the authorities resisted depreciations, the level of international reserves continued to fall. Elsewhere, absent the exchange rate instrument, CEMAC countries drew heavily on their pool of international reserves as the insufficient fiscal adjustment continued to exert strong external pressures (Figure 1.8, panel 4).

### Increasing Public Indebtedness

Rising public sector debt is becoming a cause for concern in sub-Saharan Africa as a result of both delayed adjustments in hard-hit countries and expansionary fiscal stances elsewhere. On average, the ratio of public debt to GDP has increased by some 10 percentage points since 2014 to an average of 42 percent of GDP in 2016 (and a median of 51 percent). This is the highest value since many countries received debt relief in the 2000s under the Heavily Indebted Poor Countries/Multilateral Debt Relief Initiative. This trend accelerated sharply after 2014, for all categories of countries in the region (Figure 1.10).

Figure 1.8. Persistent External Pressures

1. Sub-Saharan Africa: Current Account Deficit and Sources of Financing, 2011–16

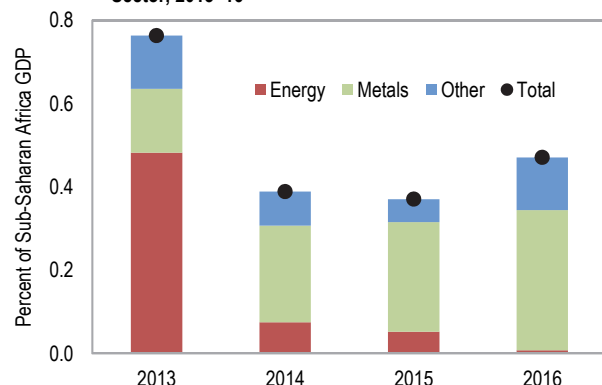


Source: IMF, World Economic Outlook database.

Note: Others includes items such as commercial bank financing from abroad and disbursements of loans to the government.

See page 70 for country groupings.

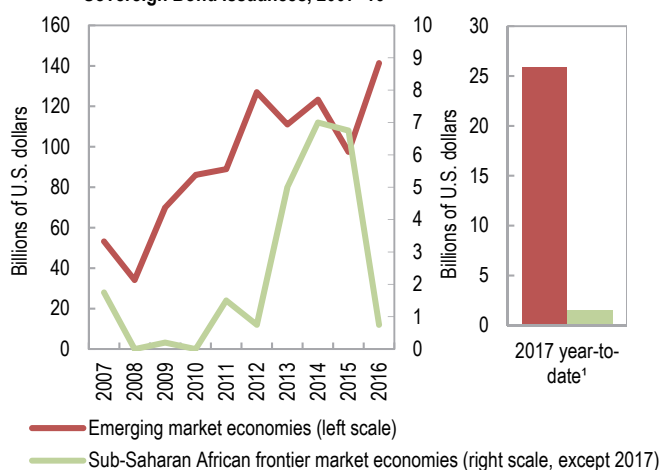
2. Investment Flows from China to Sub-Saharan Africa by Sector, 2013–16



Source: China Global Investment Tracker, American Enterprise Institute.

Note: Data include Angola, Benin, Congo, Rep. of, Côte d'Ivoire, Eritrea, Ethiopia, Guinea-Bissau, Kenya, Madagascar, Malawi, Mozambique, Nigeria, São Tomé and Príncipe, Senegal, and Uganda.

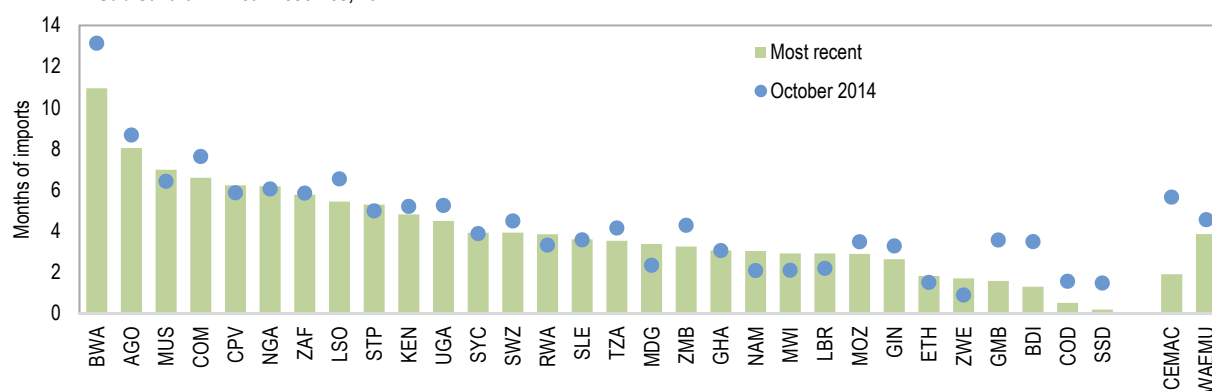
3. Emerging and Frontier Market Economies: International Sovereign Bond Issuances, 2007–16



Sources: Dealogic; and Haver Analytics.

<sup>1</sup> Data are as of March 31, 2017.

4. Sub-Saharan Africa: Reserves, 2014–17

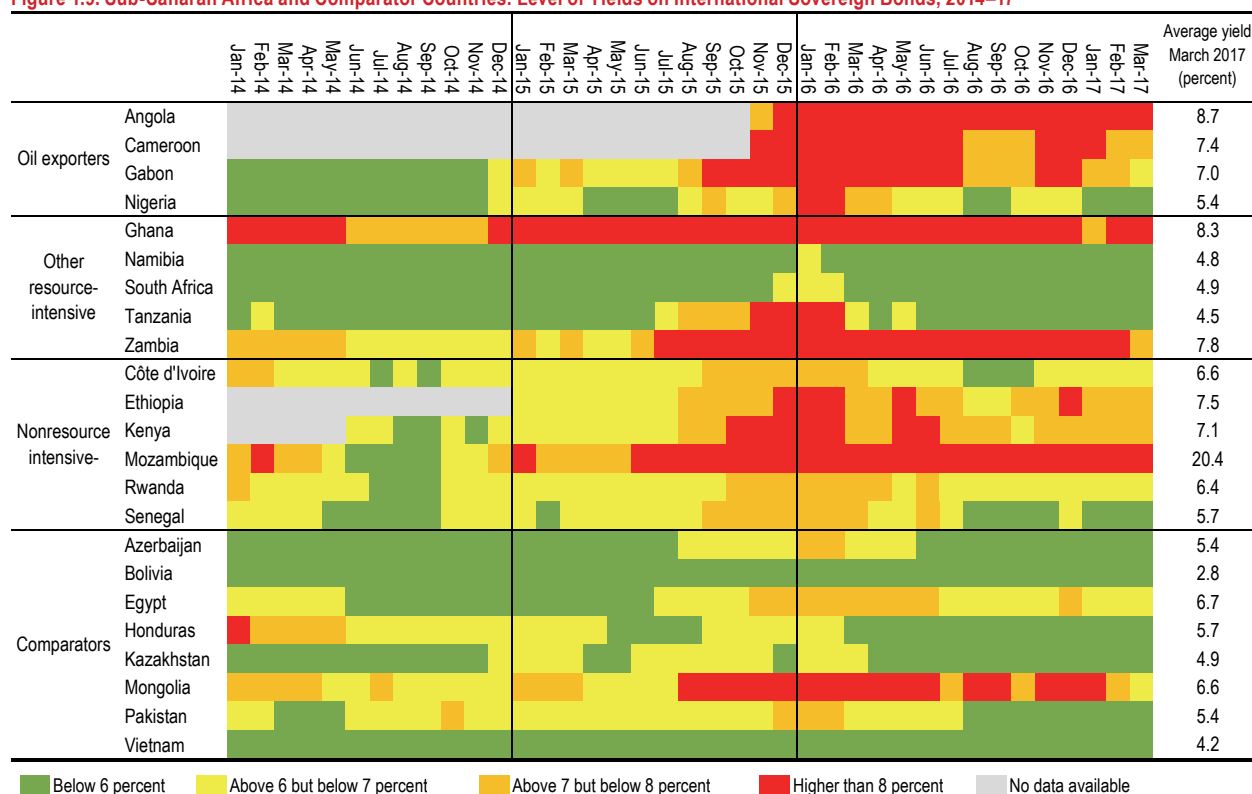


Sources: IMF, World Economic Outlook database; IMF, International Financial Statistics; and country authorities.

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

See page 72 for country abbreviations.

Figure 1.9. Sub-Saharan Africa and Comparator Countries: Level of Yields on International Sovereign Bonds, 2014–17



Source: JP Morgan.

Note: See page 70 for county groupings.

In most oil-exporting countries, a large part of debt accumulation between 2011 and 2013 had been through stock-flow-adjustments, reflecting net acquisition of financial assets (including accumulation of international reserves) during the boom periods prior to 2014. Since then, though, and following the sharp drop in oil prices, most oil-exporters not only drew down their reserves but also ran increasingly large fiscal deficits—a major source of debt accumulation in a context of lagging fiscal adjustment. Exchange rate movements (Angola) and the appreciation of the U.S. dollar against the euro (CEMAC) have also significantly increased the burden of external debt.

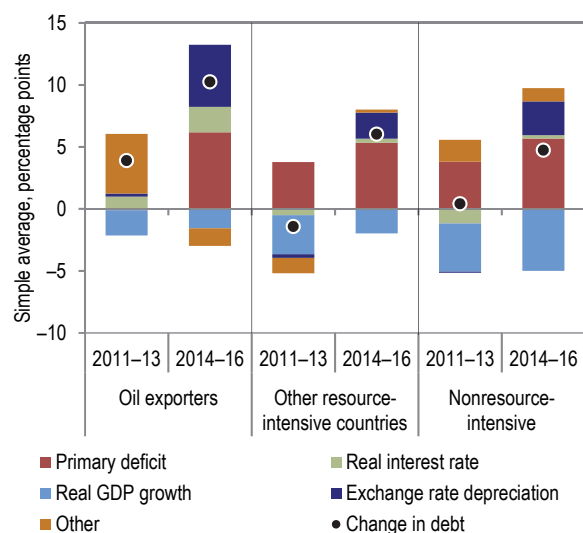
For other countries in the region, debt accumulation continued to be driven by primary deficits. In particular, debt continued to rise at a fast clip among nonresource-intensive countries as a whole, following a period of big increases in public investment, and despite the fact that growth had been buoyant and the oil price shock a tailwind for

those countries. Debt trajectories are now squarely on an upward trend and at around or above 50 percent of GDP in many nonresource-intensive countries (Benin, Cabo Verde, Côte d'Ivoire, Ethiopia, Kenya, Malawi, Mauritius, Mozambique, São Tomé and Príncipe, Senegal, and Togo).

Even in cases where debt levels are still relatively low, tighter financing conditions and increased debt financing have started to worsen debt service burdens, with an upward trend in both the debt-service-to-revenue ratio and the external-debt-service-to-exports ratio (Figure 1.11, panels 1 and 2). The change has been most dramatic for oil exporters, with a seven-fold increase in debt service, from an average of 8 percent of revenues in 2013 to 57 percent in 2016, and has been especially acute in Nigeria (66 percent) and Angola (60 percent).

Accordingly, the risk of debt distress has increased in a number of countries in the region since 2013 (Figure 1.11, panel 3).

**Figure 1.10. Sub-Saharan Africa: Public Sector Debt Accumulation Decomposition, 2010–16<sup>1</sup>**



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

<sup>1</sup> Data may deviate from that in the WEO database due to different publication dates for the Debt Sustainability Analysis database.

Note: Lesotho and South Sudan have been excluded due to data inavailability. The “Other” category comprised debt relief (under the Heavily Indebted Poor Countries and other initiatives), 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. See page 70 for country groupings.

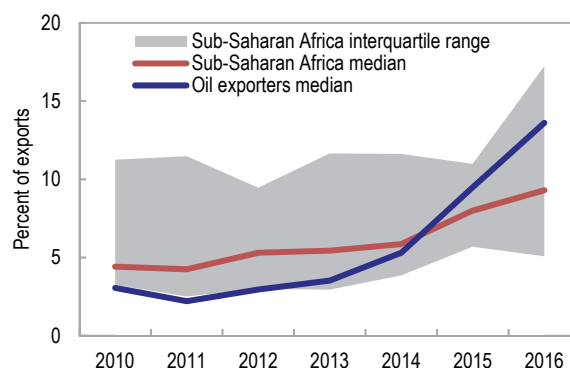
### Mounting Financial Sector Pressures

As delayed adjustments exert pressures on all parts of the economy, financial sectors are beginning to feel the pinch:

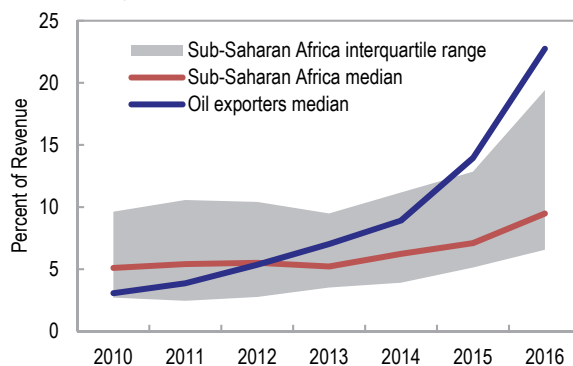
- Weakening commodity exports, the ensuing sharp slowdown in economic activity, and the buildup of government payment arrears to contractors are all restricting private firms’ capacity to service their loans to various degrees across the region. This has resulted in a widespread increase in nonperforming loans, triggering higher provisioning, straining banks’ profits, and weighing on solvency (Figure 1.12, Panel 1).
- In the face of deteriorating asset quality and declining banking system liquidity (CEMAC, Ghana), tighter monetary policy (Ghana, Zambia), weak growth (South Africa), a possible ending of the credit cycle (EAC), and increased exposure to the government (CEMAC, WAEMU, Zambia), commercial

**Figure 1.11. Sub-Saharan Africa: Debt Service Indicators**

#### 1. Sub-Saharan Africa: External Debt Service-to-Exports Ratio, 2010–16

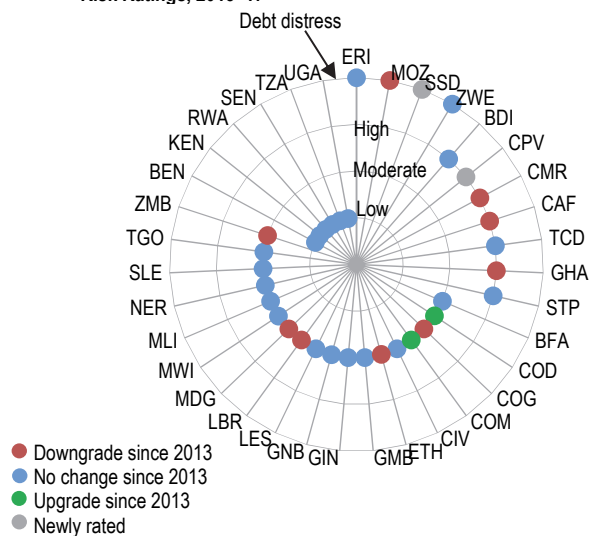


#### 2. Sub-Saharan Africa: Total Debt Service-to-Revenue Ratio, 2010–16



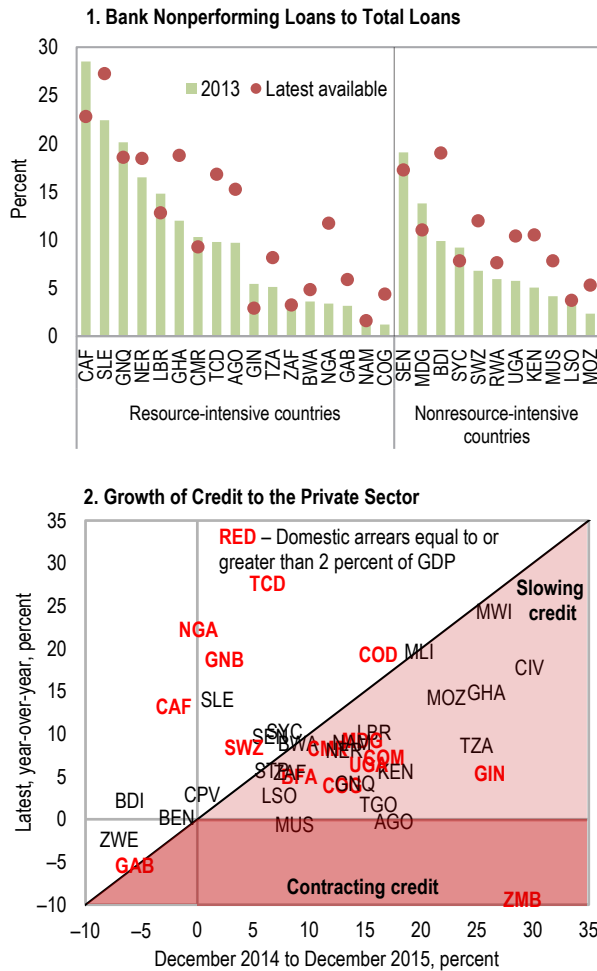
Source: IMF, World Economic Outlook database.

#### 3. Sub-Saharan African Low Income Countries: Debt Risk Ratings, 2013–17



Sources: IMF, Debt Sustainability Analysis database.  
Note: Ratings are based on the latest published IMF, Debt Sustainability Analysis. See page 72 for country abbreviations.

**Figure 1.12. Sub-Saharan Africa: Monetary and Financial Developments**



Sources: Country authorities; and IMF, International Financial Statistics.  
 Note: See page 70 for country groupings and page 72 for country abbreviations.

bank lending to the private sector has declined and in some cases even contracted (Figure 1.12, panel 2). In Kenya, the decision to cap lending rates at 400 basis points above the policy rate has also distorted lending markets, leading commercial banks to cut back on private sector lending and instead invest in government debt.

- Structural factors have compounded those difficulties. Absent alternatives, many banks concentrate heavily on large firms in their loan books, often on the government (Chad, Sierra Leone, Uganda) or in construction

(Benin, Equatorial Guinea, Malawi, São Tomé and Príncipe, Sierra Leone), with substantial risks of large losses in the event that a few of these large firms delay their debt service. Insufficient information about debtors' creditworthiness (in the quasi-absence of credit and collateral registries) and the difficulty to foreclose on them swiftly (due to ineffective collection procedures and slow judiciary systems) are impeding both credit growth and asset quality.

### Emerging Risks of Cross-Border Spillovers

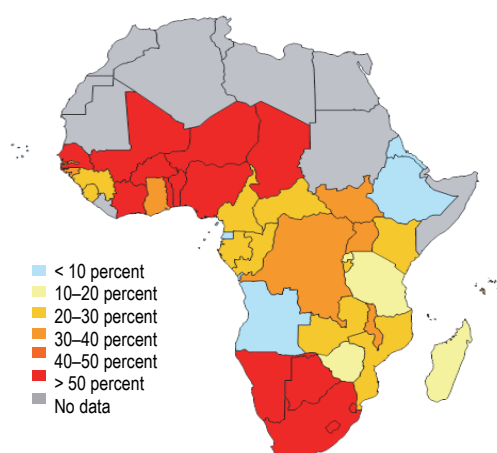
Will the depressed outlook in many countries in the region spill over to neighboring countries? Previous research in the April 2016 *Regional Economic Outlook* found that the channels for transmission of shocks within the region were rather muted. Still, the region has gradually become more interconnected over the past decade, increasing the potential for cross-border spillovers.

This is particularly the case in the financial sector, as pan-African banks have emerged across the region, many of them headquartered in countries where growth has been weakening (Nigeria, South Africa) and with subsidiaries in numerous countries across the region (Figure 1.13; Box 1.1). The 14 largest pan-African banks now represent more than 50 percent of total deposits in 14 countries, and between 30 and 50 percent in an additional nine countries, surpassing the importance of long-established European banks in the region as of 2015.

Increased intra-regional linkages via cross-border firm ownership could also be a source of spillovers (Figure 1.14; Box 1.2). On the upside, the strengthening of regional ties fosters trade integration and the tapping of economies of scale and scope, as the sharing of technology and production practices allows for diversification and the leveraging of each country's comparative advantages. On the downside, though, the increased interconnectedness also implies increased exposure to shocks emanating from the host country or the headquarter-firm country, with the degree of the shocks depending on the nature of the linkages and magnitude of exposure.

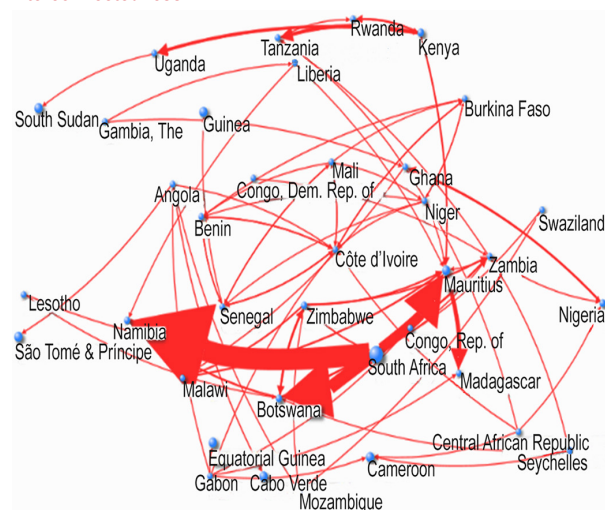
Other cross-border spillovers are occurring through trade (formal and informal) and banking channels. For example, some banks have lost correspondent banking relationships, affecting local banks in terms of funding and cross-border payments and possibly disrupting trade (Angola, Guinea, and Liberia). In some cases, bank funding could be significantly affected by a sharp slowdown in portfolio flows from abroad (South Africa).

**Figure 1.13. Pan-African Banking Group Deposits, 2015**  
(Percent share of total)



Source: IMF, International Financial Statistics.

**Figure 1.14. Sub-Saharan Africa: Cross-Border Firm Interconnectedness**



Source: Orbis.

Note: Created with NodeXL. Arrows represent the extent of firms ownership of subsidiaries in the country at which the arrow points.

## WHAT LIES AHEAD

### Subdued Outlook

With policies behind the curve, pressures on sovereigns rising, and spillovers to the private sector intensifying, the near-term outlook for growth in the region is foreseen to remain subdued. The modest rebound in aggregate growth—to 2.6 percent in 2017 in our baseline—is expected to be driven to a large extent by a mitigation of adverse circumstances that caused growth to slump sharply in the largest countries in 2016 (Table 1.1):

- Reflecting some idiosyncratic developments, *the three largest economies* (Angola, Nigeria, and South Africa) are expected to contribute about three-quarters of the regional rebound. Following a deep recession, economic activity in Nigeria is expected to recover, with growth forecast at 0.8 percent on the back of higher oil production—if relative peace in the Niger Delta can be maintained—and strong agricultural production. A fading impact of the drought combined with improved terms of trade are projected to drive growth to 0.8 percent in South Africa, although political risks continue to loom large. In Angola, a more expansive fiscal stance ahead of this year’s elections, along with an improvement in the terms of trade, are expected to push growth up to 1.3 percent.
- Meanwhile, the situation in *CEMAC countries* is expected to remain difficult. The nature of the fiscal consolidation strategy—which involves lowering high-import-content spending, eliminating expenditure items that have contributed little to growth in the past, and gradually repaying domestic arrears—is designed to limit the adverse impact of fiscal consolidation on growth. Still, the continued decline in oil production is expected to keep Equatorial Guinea in deep recession (–5 percent). Further cuts in capital spending will likely slow growth in Cameroon (3.7 percent) and Gabon (1 percent), while new oil production is expected to push growth up to 0.6 percent in the Republic of Congo, notwithstanding very deep fiscal adjustment.

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

	2004–08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Sub-Saharan Africa</b>	<b>6.6</b>	<b>3.9</b>	<b>7.0</b>	<b>5.0</b>	<b>4.3</b>	<b>5.3</b>	<b>5.1</b>	<b>3.4</b>	<b>1.4</b>	<b>2.6</b>	<b>3.5</b>
<i>Of which:</i>											
Oil-exporting countries	8.7	6.7	9.2	4.7	3.9	5.7	5.9	2.6	-1.4	0.9	2.0
<i>Of which: Nigeria</i>	7.7	8.4	11.3	4.9	4.3	5.4	6.3	2.7	-1.5	0.8	1.9
Middle-income countries	6.6	3.6	6.9	4.5	4.3	4.7	4.6	2.7	0.5	1.8	2.8
<i>Of which: South Africa</i>	4.8	-1.5	3.0	3.3	2.2	2.5	1.7	1.3	0.3	0.8	1.6
Low-income countries	6.3	5.2	7.2	6.9	4.5	7.2	6.8	5.6	4.4	5.2	5.6
Memorandum item:											
World economic growth	4.9	-0.1	5.4	4.2	3.5	3.4	3.5	3.4	3.1	3.5	3.6
Sub-Saharan Africa other resource-intensive countries <sup>1</sup>	4.9	0.6	4.8	5.2	4.1	4.3	3.4	2.5	2.0	2.8	3.6
Sub-Saharan Africa nonresource-intensive countries <sup>2</sup>	6.0	4.9	6.4	5.4	5.8	6.4	6.6	6.6	5.8	5.7	6.1
Sub-Saharan Africa frontier and emerging market economies <sup>3</sup>	6.8	4.2	7.3	5.1	4.5	5.2	5.1	3.6	1.5	2.6	3.5

Source: IMF, World Economic Outlook database.

<sup>1</sup> Includes Botswana, Burkina Faso, Central African Republic, Democratic Republic of Congo, Ghana, Guinea, Liberia, Mali, Namibia, Niger, Sierra Leone, South Africa, Tanzania, Zambia, and Zimbabwe.

<sup>2</sup> Includes Benin, Burundi, Cabo Verde, Comoros, Côte d'Ivoire, Eritrea, Ethiopia, The Gambia, Guinea-Bissau, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Swaziland, Togo, and Uganda.

<sup>3</sup> Includes Angola, Cameroon, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Kenya, Mauritius, Mozambique, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Uganda, and Zambia.

- In *other resource-intensive countries*, economic growth is foreseen to pick up gradually, reaching close to 3 percent after an estimated 2 percent in 2016, helped by somewhat improved terms of trade. Growth above 5 percent is projected in Mali and Niger on the back of strong public investment and favorable harvests, notwithstanding continued security issues. With a rate of 6¾ percent, driven by continued strong mining and service activities, Tanzania would remain the fastest-growing resource-intensive country. Growth in Ghana is expected to reach 5.8 percent, boosted by the coming on-stream of new oil fields. On the other hand, economic and social vulnerabilities are expected to increase further in Zimbabwe, despite some rebound in agricultural production.
- Despite the buildup of vulnerabilities highlighted in earlier sections, the growth momentum in *nonresource-intensive countries* is expected to remain robust. However, in many cases, new shocks have materialized and are starting to weigh on activity. For example, while growth in Côte d'Ivoire is expected to remain brisk at 6.9 percent, supported by continued large infrastructure investment, that growth rate will still mark a deceleration from last year as a result of lower cocoa prices and the intensification of social tensions. The EAC

countries, Kenya, Rwanda, Tanzania, and Uganda are foreseen to continue to grow at 5 percent or more, supported by sustained public spending, but the ongoing drought would dent the growth momentum somewhat. Growth is forecast to reach 6.8 percent in Senegal with the continued implementation of the *Plan Sénégal Emergent*. Elsewhere, economic activity is expected to continue to strengthen in Madagascar on the back of expanding mining projects and an increase in vanilla prices, and in Comoros following improvement in electricity production.

Adding to this overall subdued outlook, political tensions and security issues continue to have a significant humanitarian impact and weigh on economic activity in several countries, including Burundi, Central African Republic, Chad, Democratic Republic of the Congo, Mali, and South Sudan.

Furthermore, while the effect of the drought that hit most southern African countries in 2016 is fading, a new bout of drought is now affecting parts of eastern Africa (Ethiopia, Kenya, South Sudan, and Tanzania) as the erratic weather patterns of La Niña hit these countries. In addition, pest and armyworm infestations in some southern African countries (Democratic Republic of Congo, Malawi, Namibia, South Africa, Zambia, and Zimbabwe)

are impacting agricultural activity negatively. As a result of these developments, about half of sub-Saharan African countries have reported food insecurity situations that could potentially impact 60 million more people in the region this year. Worse still, famine has been declared in South Sudan and is looming in northeastern Nigeria as a result of past and ongoing conflicts.

Other macroeconomic projections mirror these different growth experiences (Table 1.2):

- The inflation outlook is expected to continue to be extremely heterogeneous across the region. On the one hand, inflationary pressures are foreseen to remain in large oil exporters (Angola, Nigeria) against the backdrop of unresolved external imbalances, and South Sudan is forecast to continue to suffer from excessive inflation. Similarly, Burundi, Democratic Republic of Congo, Ghana, Malawi, Mozambique, and Sierra Leone are still foreseen to register inflation rates in excess of 10 percent. Conversely, inflation is expected to remain below 3 percent in the WAEMU and CEMAC countries, while some Eastern African countries are expected to see a modest uptick in inflation reflecting pressures on food prices from the ongoing drought.
- The aggregate fiscal deficit is expected to remain elevated at 4½ percent of GDP, unchanged from 2016. While fiscal deficits are foreseen to widen in Angola and Nigeria, the CEMAC countries, which are planning to implement significant fiscal measures, will likely see the overall deficit decline from 7.2 to 3.4 percent

of GDP in 2017 for the union as a whole. Among oil importers, the average fiscal deficit is expected to narrow marginally from 4.3 to 4.2 percent of GDP. Most notably, the deficit is foreseen to decline to 5 percent of GDP in Ghana (6.8 percent on cash basis) after pre-election slippages drove fiscal deficits to about 8¼ percent of GDP in 2016. Finally, the deficit is expected to decline from 7.8 to 5.3 percent of GDP in Malawi, with fiscal and monetary policy working hand-in-hand to reduce inflation. Continued public investment in the largest countries in the WAEMU is forecast to result in an increase in the currency union's fiscal deficit from 4.5 percent to 4.6 percent of GDP in 2017, while the fiscal deficit in the EAC is expected to remain elevated at 5.3 percent of GDP.

### Implementation Risks amid Global Uncertainty

Downside risks stemming from both the external environment, as discussed in the IMF's April 2017 *World Economic Outlook*, and domestic factors drive the near-term uncertainties around our growth projection for sub-Saharan Africa.

On the external side, uncertainties persist despite the slight improvement in the global outlook and generally accommodating financial conditions. While fiscal policy easing is currently projected in the United States, the extent of expansion and the associated path of monetary policy normalization remain uncertain. Faster-than-expected normalization of monetary policy could also imply a sharp U.S. dollar appreciation and a tightening of financing conditions, especially for countries where fundamentals have deteriorated. A broad

**Table 1.2. Sub-Saharan Africa: Other Macroeconomic Indicators**

	2004–08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
				(Percent change)							
Inflation, average	8.8	9.8	8.1	9.4	9.3	6.6	6.3	7.0	11.4	10.7	9.5
				(Percent of GDP)							
Fiscal balance	1.7	-4.5	-3.4	-1.1	-1.8	-3.1	-3.5	-4.1	-4.5	-4.5	-3.9
Of which: Excluding oil exporters	-0.6	-4.2	-4.3	-3.6	-3.6	-3.9	-3.8	-4.1	-4.3	-4.2	-3.8
Current account balance	2.1	-2.8	-0.9	-0.8	-1.8	-2.4	-3.9	-6.0	-4.0	-3.8	-3.7
Of which: Excluding oil exporters	-4.3	-4.9	-3.9	-4.7	-7.0	-7.4	-6.7	-6.7	-5.7	-5.9	-6.2
				(Months of imports)							
Reserves coverage	5.1	5.2	4.1	4.6	5.3	5.0	5.3	5.8	4.8	4.7	4.5

Source: IMF, World Economic Outlook database.

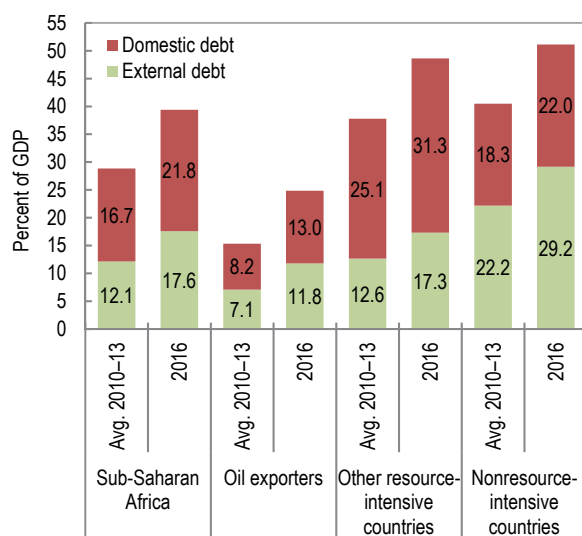


shift toward inward-looking policies, including protectionism, could impede global growth by reducing trade, migration, and cross-border investment flows, and negatively impact commodity prices and exports from the region.

In particular, a potential further U.S. dollar appreciation could have mixed implications for the region:

- On the upside, a stronger U.S. dollar against the euro would imply depreciation of currencies that are pegged to the euro, fostering price competitiveness in the WAEMU and CEMAC. Given that most commodities are quoted in dollars, this would also mean higher proceeds in domestic currencies for commodity exporters, but conversely a higher import bill for oil importers.
- On the downside, a stronger U.S. dollar would most likely imply tighter financing conditions for frontier and emerging market economies in the region, as well as a higher external debt burden. First, higher yields on low-risk advanced market paper would make emerging and developing countries' bonds less attractive, further exacerbating the discrimination against sub-Saharan Africa frontier market economies

**Figure 1.15. Sub-Saharan Africa: Public Sector Debt Decomposition, 2010–13 and 2016**



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

Note: Lesotho and South Sudan have been excluded due to data inavailability. See page 70 for country groupings.

with delayed policy adjustment and/or weak fundamentals. Second, a large share of sovereign debt in the region is denominated in foreign currency (Figure 1.15). As a result, a further appreciation of the U.S. dollar could increase foreign debt servicing cost significantly.

A depreciation of national currencies could also result in a spike in inflation.

On the domestic side, further delays in adjusting, and political developments, also pose risks in some countries. In Angola and Nigeria, ongoing reliance on exchange restrictions will continue to depress activity in the non-oil sector and enhance the risk of a disorderly adjustment. In CEMAC, implementation of the fiscal consolidation strategy is paramount. Elsewhere, upcoming elections in Angola and Kenya could make it more difficult for these countries to address weaknesses in their underlying fundamentals.

## COMING OUT STRONGER

With growth having slowed in much of the region, and large fiscal consolidation still needed in many oil-exporting countries, achieving sustained, durable, and inclusive growth is needed more than ever to respond to the aspirations of a growing and young population for better living standards. This would, however, require decisive efforts at a time when most of the factors known to adversely affect the duration of growth episodes in the past—including unfavorable external conditions, and deteriorating macroeconomic conditions—are now present in most countries in the region (see Chapter 2). Specific policy measures will depend on country circumstances, but ensuring macroeconomic stability, in a growth-friendly manner, is a prerequisite and urgently needed in many countries:

- *Resource-intensive countries*, in particular oil exporters, need to take decisive, sizable, and restorative measures to re-anchor macroeconomic stability. In the CEMAC, further fiscal adjustment is critical. The strategy of delaying the necessary fiscal adjustment by relying on central bank financing and drawing down on reserves has reached its limits, and the

recent firming up of oil prices provides only limited external and fiscal space. While fiscal adjustment would likely further dampen economic conditions in the short term, it is still a prerequisite to prevent the negative and much more long-lasting impact of macroeconomic instability.<sup>1</sup> For oil exporters with scope for exchange rate flexibility (Angola and Nigeria), the exchange rate should be allowed to fully absorb pressures, and exchange restrictions should be eliminated to address the damage that is being inflicted on the private sector, undermining growth recovery efforts.

- *For nonresource-intensive countries* including some countries in the WAEMU and in the EAC, it will be important to ensure that public investment, which has led to rapidly rising debt levels, is steadily returned to normal levels consistent with medium-term fiscal and external sustainability. In addition, in the WAEMU, there is a need for stronger coordination to ensure that individual country deficits are consistent with regional stability, guided by the regional convergence criteria. In both cases, a much greater focus on domestic revenue mobilization is required, which, when combined effectively with public investment, should crowd-in private investment (Box 1.3).

These measures aside, Chapter 2 explains in greater detail why policies needed to restart the growth engine in the region will need to go beyond restoring macroeconomic stability. Addressing structural weaknesses is also critical, and doing it now, in parallel with the measures above, will enable the region to emerge stronger.

Key structural issues on the fiscal side include:

- *Boost domestic revenue mobilization to create space for growth-enhancing spending.* Previous analysis in the October 2015 *Regional Economic Outlook* suggests that the median country in the region has the potential to increase tax revenues by about 3 to 6½ percent of GDP, while there is also scope in many to make the tax system more progressive. For resource-intensive countries, the focus should be on broadening

the sources of taxes away from commodity related income, including by better balancing income taxes and indirect taxes, and broadening the tax base to improve the resilience of tax revenues (see IMF 2011). More broadly, countries should focus on strengthening and streamlining tax procedures as was done in Mauritius and Tanzania in the mid-2000s.<sup>2</sup> This includes tapping into e-filing programs to improve the efficiency of tax collection.

- *Leverage financial development to broaden the tax base.* A major challenge to revenue mobilization in the region has been the large size of the informal sector (cash-based economy). However, as is shown in more detail in Chapter 3, there is evidence to support the role of financial development (including the ongoing drive for mobile banking) to help enhance domestic revenue mobilization as informal firms grow (Figure 1.16; see also Gordon and Li 2009).

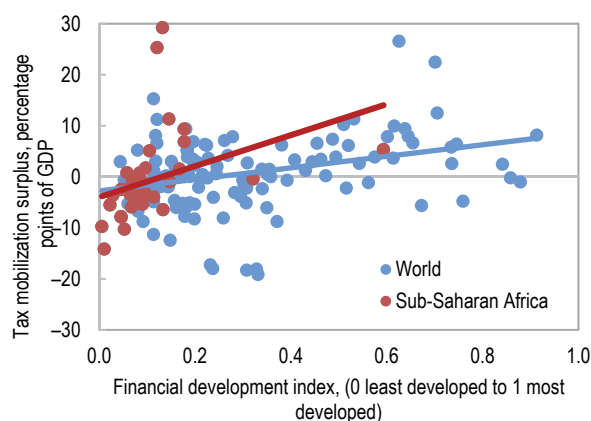
Other structural reforms also need to be advanced to safeguard financial stability and strengthen competitiveness. These include:

- *Strengthening financial supervisory capacity and increasing efforts to strengthen cross-border collaboration to ensure effective consolidated supervision (in particular for pan-African banks) and safeguard financial stability.* The recent deterioration in financial stability indicators points to emerging stress that could spill over within the region. This leaves no room for complacency, especially in countries with the weakest supervisory capacity, as spillover risks might develop undetected.
- *Addressing longstanding weaknesses in the business climate and diversifying economies.* This is needed to unleash the formidable but untapped

<sup>1</sup>For more detailed advice on fiscal rebalancing, see IMF (2016).

<sup>2</sup>Mauritius broadened its tax base in 2006 while making the system more equitable by eliminating exemptions from the income tax, introducing a simple property tax payable with income tax without the need for cadaster, and normalizing the taxation of its export processing zones. Tax revenues rose from 17 percent of GDP in 2007 to almost 20 percent of GDP in 2016, despite a simultaneous reduction in the corporate tax rate from 25 to 15 percent. In Tanzania, efficiency gains from strengthening the capacity of the tax revenue authority resulted in close to a 5 percentage point increase in tax revenues within a decade, largely without raising tax rates (IMF 2015b).

Figure 1.16. Financial Development and Tax Revenue, 1980–2013



Sources: Author's calculations; and Sahay and others (2015).

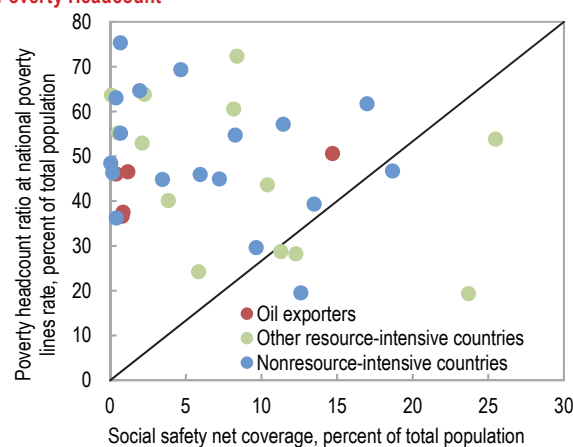
Note: The tax mobilization surplus is the difference between the actual level of tax revenue (in percent of GDP) and its predicted level. It is obtained through fixed effects regression of the tax revenue ratio on purchasing power parity-adjusted GDP per capita (to capture the level of economic development). Post-estimation, all data are averaged at the country level (with data running from 1980–2013).

potential for private sector growth, thereby fostering diversification and resilience. Reforms to support broad financial sector development will also be critical to address what has been a substantial impediment to the development of new sources of growth.

In the meantime, a growth rebound has to be durable and inclusive in order to maintain past gains. This means simultaneously providing a social safety net well targeted to the most vulnerable segments of the population. In fact, strengthening social safety nets and implementing fiscal consolidation are complementary goals—with safety nets mitigating the impact of consolidation on the poor—and can be pursued in parallel at a lower fiscal cost. Addressing key design and implementation gaps could enhance the effectiveness of social safety net programs already in place (Box 1.4). They should also be seen, in a broader context, as setting the stage for more emphasis on SDGs over the medium term.

Countries should develop more integrated social safety net systems. A number of countries are already implementing social assistance programs in one form or another, including cash transfers (conditional or not), food or in-kind transfers, as well as capitation grants for education and health services. But programs are often fragmented, not

Figure 1.17. Sub-Saharan Africa: Social Security Coverage and Poverty Headcount



Source: Beegle, Coudouel, and Monsalve (2017), drawing on the ASPIRE database.

Note: The figure shows the population benefiting from social safety nets as a share of the total population. It includes the latest data on beneficiaries for active social safety nets and social care services. See page 70 for country groupings.

always well-targeted, and cover only a small share of the population in many countries of the region (Figure 1.17). Consolidating benefits into a smaller number of large programs with clearly established objectives and strong targeting mechanisms, while phasing out regressive expenditures such as fuel subsidies or programs that benefit the rich disproportionately, would enhance efficiency and have a greater impact on poverty. This would also create additional room to finance an expansion in coverage with adequate benefit levels.

In parallel, emphasis could shift toward introducing or expanding programs that are poverty-targeted (means-tested or proxy-means tested) and that provide transfers in cash. Such programs have had substantial impacts on poverty in other regions (Brazil and Mexico). There are also lessons from pilot programs in African countries that have successfully introduced poverty-targeted cash transfers, as they show similarly important impacts on consumption, investment in human capital, and productive activities.

### Box 1.1. Potential Spillovers from the Financial Sector

African financial systems have become increasingly interwoven, reflecting the rapid expansion of pan-African banks over the last 15 years (IMF 2015a). The number of subsidiaries of the largest pan-African banking groups, with headquarters in Côte d'Ivoire, Kenya, Morocco, Nigeria, South Africa, and Togo, has more than tripled since the early 2000s. The expansion of pan-African banks accelerated following the global financial crisis, as in other emerging regions, partly due to the retrenchment of lenders from advanced economies (see Chapter 2 in the April 2015 *Global Financial Stability Report*). As of 2015, the 14 largest pan-African banks had a share of total deposits above 50 percent in 14 countries and between 30 and 50 percent in an additional nine countries, trumping the importance of long-established European banks in the region.

The organizational structure of pan-African banks and the nature of cross-border banking relations may reduce the risk of contagion from this exposure in the following ways:

- Pan-African banks have expanded mainly through subsidiaries, with limited integration across affiliate networks or with parent banks in terms of funding or capitalization. Figure 1.1.1 illustrates the case of banks with headquarters in South Africa and Nigeria, respectively, where interbank funding from home to host is negligible for most host countries. In particular, net interbank exposure from the parent to the subsidiary is positive only for Kenya and Tanzania in the case of Nigerian banks, and for Burkina Faso, Kenya, Nigeria, and Uganda in the case of South African banks.
- The limited interbank exposures are mainly directed from host to home, reflecting the fact that subsidiaries fund themselves domestically and deposit excess liquidity in parent institutions. In the absence of regulation in host countries impeding the movement of liquidity across jurisdictions, this suggests that pan-African banks have a centralized approach to liquidity risk management. Based on international experience, this is expected to have benefits in terms of financial stability by allowing the parent to open centrally managed cash and collateral resources to subsidiaries under temporary financial pressures (Reinhardt and Riddiough 2014). However, it may also entail the risk that liquidity will be drained from subsidiaries in the event of financial pressures on the parent.
- Direct cross-border lending to the nonbank private sector is also limited. The analysis of direct cross-border bank flows in sub-Saharan Africa is hampered by the fact that countries in the region, with the exception of South Africa, do not report to the Bank for International Settlements. However, other available information suggests that lending to the private sector is mainly extended by domestically funded subsidiaries. Lending by subsidiaries, in turn, appears more stable than direct cross-border lending (Peek and Rosengren 2000; De Haas and van Lelyveld 2006).

These characteristics suggest that local banking systems might be protected from first-round contagion effects, which usually come through interbank funding and direct cross-border lending. There is a risk, however, that local economies might feel the impact of shocks at a later stage, when reputational risks and confidence effects spread problems in one part of the banking group to other affiliates.

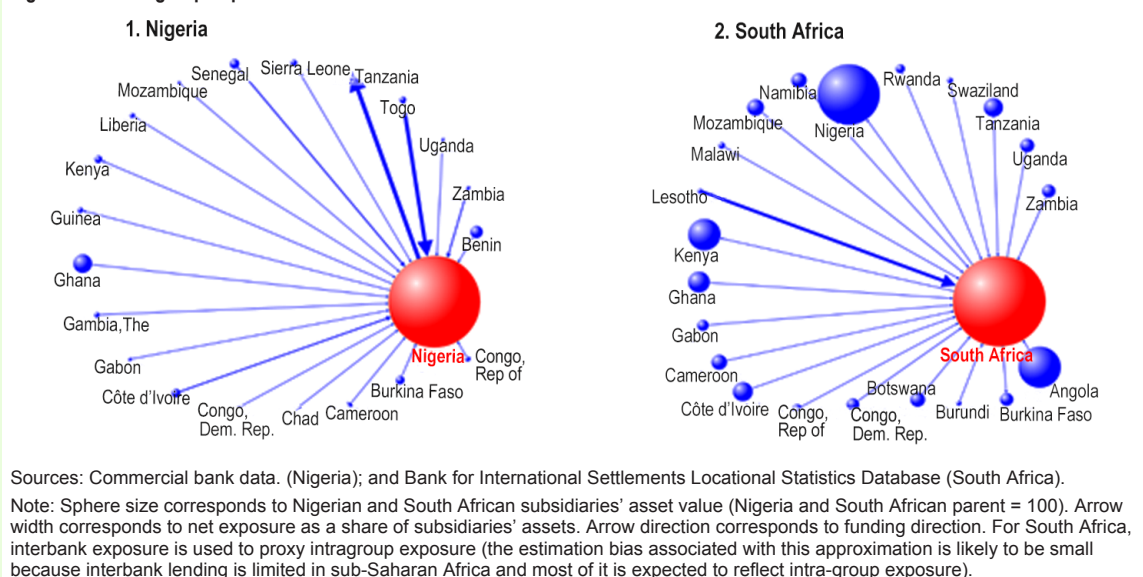
Contagion is also possible if banking groups have interlinkages with other sectors, or if some business segments are particularly sensitive to regional or global lending conditions. The following features in the expansion and business models of pan-African banks amplify these risks:

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This box was prepared by Daniela Marchettini.

- Pan-African banks have become increasingly complex, encompassing nonbank activities such as insurance and securities dealings, particularly in the Southern African region (for South Africa, see IMF 2014; for Namibia, see Torres 2016). This increases the linkages between banks and other financial institutions of the same group (deposit funding), and between home and host countries (securities exposures).
- Pan-African banks have significant ownership stakes in a wide variety of financial and nonfinancial entities. Nigerian banking groups have the largest number of controlling ownership linkages with the corporate sectors of other African economies, while South African banking groups have comparatively few controlling ownership linkages. However, these banks are heavily connected to the rest of Africa via noncontrolling interests, particularly in the financial sector.<sup>1</sup> This creates links between bank and nonbank corporate sectors and across banking groups, thus heightening possibilities of contagion within countries' financial sectors and to the real economy.

Figure 1.1.1. Intragroup Exposures: Stock at the End of 2015



<sup>1</sup> For instance, in 2014 the South African banking group Nedbank acquired a share of about 20 percent of the Togolese group Ecobank Transnational Incorporated.

### Box 1.2. Firm Ownership in Sub-Saharan Africa and Intra-Regional Spillovers

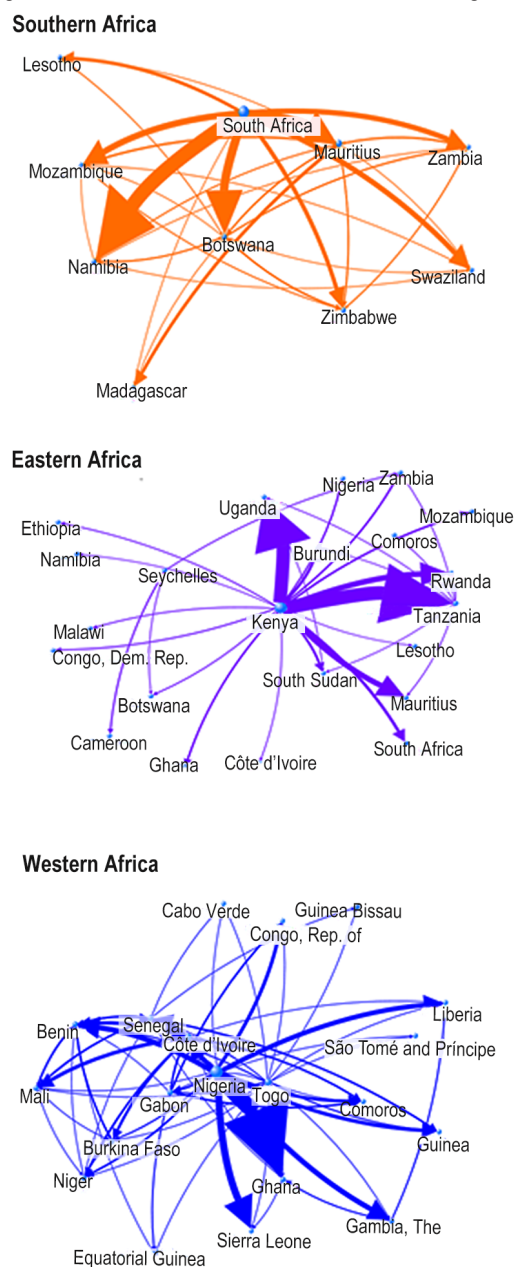
*Sub-Saharan African firms are increasingly becoming connected through cross-border ownership structures, with some regional hubs. This interconnectedness comes with many opportunities, such as knowledge transfer and trade, but also poses risks of spillovers of economic downturns from affected countries to other countries, as currently experienced in many countries of the region.*

Firms in sub-Saharan Africa are increasingly connected with one another through cross-border firm ownership. Figure 1.2.1, constructed based on firm-level relationships across countries (Orbis), illustrates the extent of cross-border firm activity in all of sub-Saharan Africa. While firms headquartered in South Africa own the most subsidiaries in other sub-Saharan African countries (over 2,400 subsidiaries), other regional hubs have also emerged. Kenyan firms play a key role in investing in neighboring countries in East Africa, and Nigerian firms are the major investor in firms in the neighboring region of West Africa. In contrast, cross-border ownership activity is relatively sparse in Central Africa.

These intra-regional linkages via cross-border firm ownership bring both benefits and increased potential for spillovers in the event of shocks. On the one hand, the strengthening of regional ties fosters more trade integration, sharing of technology and production practices, diversification, and the leveraging of a country's comparative advantages and exploitation of economies of scale and scope. But the increased interconnectedness also implies exposure to shocks emanating from the host country or the headquarter-firm country.

Overall, sub-Saharan African subsidiaries in other African countries have performed relatively well compared to domestically owned subsidiaries (Figure 1.2.2). They have exhibited higher profit margins and higher profitability during some of the period following the global financial crisis, even compared to subsidiaries not owned by sub-Saharan African firms. However, since 2014 there have been some declines in the profitability of subsidiaries owned by both domestic and non-sub-Saharan African firms if measured by return on equity.

Figure 1.2.1 Sub-Saharan Africa: Cross-Border Firm Linkages



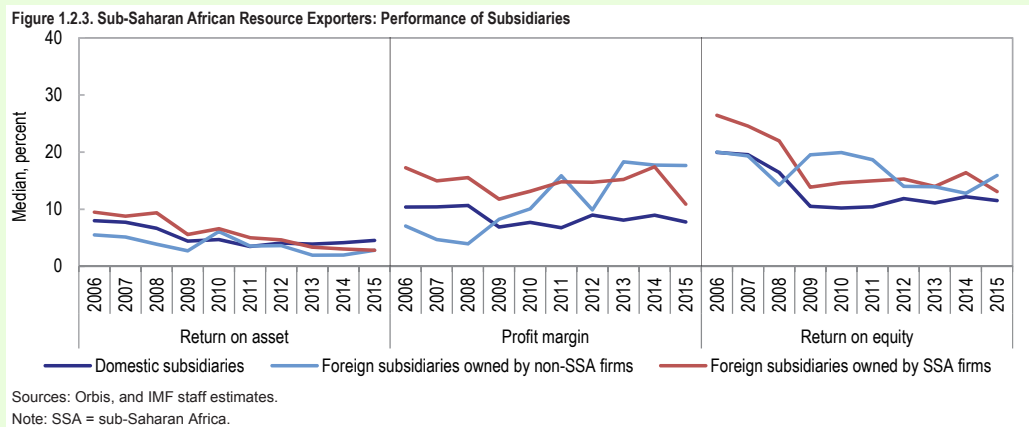
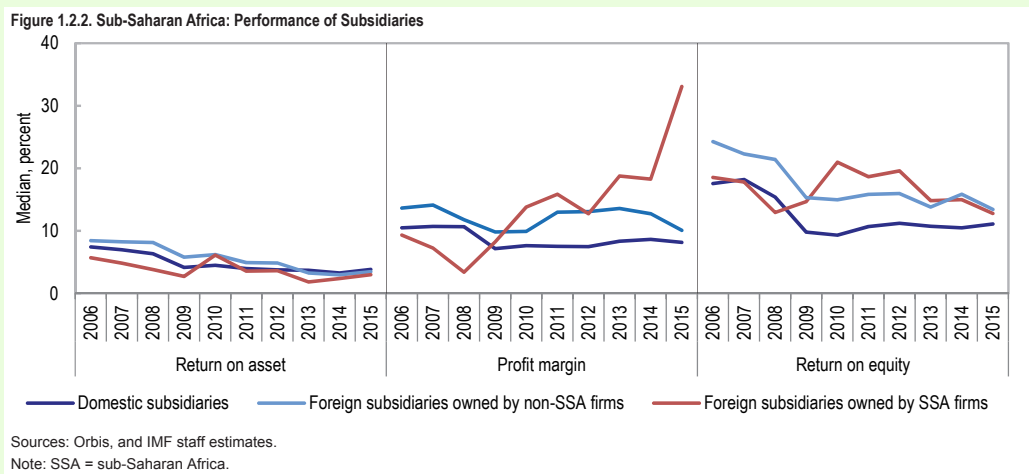
Source: Orbis.

Note: Created with NodeXL. Arrows represent the extent of firms ownership of subsidiaries in the country at which the arrow points.

This box was prepared by Wenjie Chen.

In resource-exporting countries, the performance of domestic subsidiaries and subsidiaries owned by other sub-Saharan African firms has deteriorated compared to subsidiaries owned by foreign firms outside of the region (Figure 1.2.3). As governments have reacted with different sets of policies to the decline in commodity prices, the impact on the operation of these cross-border firms has varied as well. Angola and Nigeria have imposed exchange rate restrictions due to external pressures on the currency, hurting businesses that are operating locally because the controlled allocation of foreign exchange disrupts production. Although subsidiaries owned by firms headquartered outside of Nigeria are likely to have easier access to foreign currency compared to their Nigerian-owned counterparts, the deteriorating condition and decreased demand of the host country has a negative effect on the performance of the local subsidiary and thus poses an increased risk for the parent company.

On the other hand, for Nigerian firms that own subsidiaries in other sub-Saharan African countries that are still experiencing robust growth—such as many of the nonresource-intensive countries in the East African Community (Kenya, Tanzania, and Rwanda)—these cross-border investments, helped by strong internal demand, could act as buffers to offset some of the profit losses at home.



### Box 1.3. Fostering Private Investment in Sub-Saharan Africa

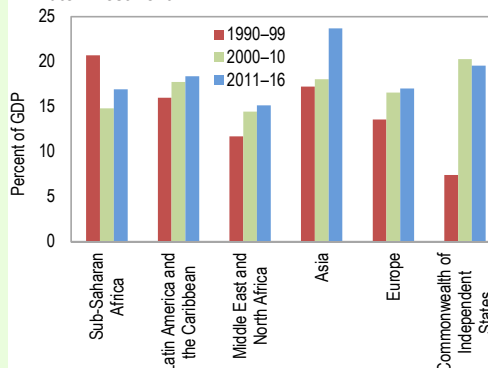
Sub-Saharan Africa's private investment-to-GDP ratio led emerging and developing countries in the 1990s, but fell behind over the following two decades (Figure 1.3.1). While Asia saw its ratio increase from 17 percent of GDP in the 1990s to 24 in 2011–16, and while the ratio increased more modestly in other regions, the ratio in sub-Saharan Africa decreased from 20 percent to 17 percent, at a time when public sector investment has been scaled up to address infrastructure gaps. These trends raise the question as to whether public investment may be crowding-out private investment in sub-Saharan Africa.

Following Servén (2003) and Cavallo and Daude (2011), the ratio of private investment in terms of GDP is modeled as a function of its own lagged values (given the series' high persistence), the lagged ratio of public investment to GDP, the relative price of investment with respect to consumption goods (to capture distortions in the economy), exchange rate volatility (as an indicator of macroeconomic stability), and credit to the private sector in percent of GDP (to capture available funding) for a sample of developing and emerging economies.

Results for a sample of developing and emerging economies confirm that private investment ratios are associated negatively with public investment—providing evidence for crowding out—but positively with higher levels of credit to the private sector (Table 1.3.1, column 1).<sup>1</sup> A similar exercise, restricting the sample to sub-Saharan African economies only, yields comparable results.

However, the crowding-out effect of public investment on private investment can be mitigated when more resources are available to finance government expenditures—a hypothesis tested by estimating the interaction effect of public investment with revenue mobilization and trade openness. The results indeed highlight that increased revenue mobilization and more integration with the rest of the world, as proxied by trade openness, can lessen the crowding out of private investment (Table 1.3.1, columns 1 and 2). An increase in the ratio of government revenue to GDP from the 25th to 75th percentile in the sample reduces the estimated crowding-out effect of public investment by 0.3 percentage points, as it lowers the need for government borrowing in the domestic market. Similarly, the crowding-out effect is reduced by 0.1 percentage points when the country increases its access to the external pool of financial resources and has better opportunities to trade.

Figure 1.3.1. Emerging and Developing Economies: Private Investment



Source: IMF, World Economic Outlook database.

Table 1.3.1. Emerging and Developing Economies: Private Investment

	(1)	(2)
Real private investment in percent of GDP ( $t-1$ )	0.658*** (6.888)	0.747*** (9.705)
Real public investment in percent of GDP ( $t-1$ )	-0.664** (-2.531)	-0.486*** (-2.790)
Relative price of investment, Log of	-0.638 (-1.133)	-0.051 (-0.099)
Credit to private sector, percent of GDP, Log of	0.873** (2.355)	0.321 (1.400)
Real exchange rate volatility, Log of	0.165 (0.994)	0.168 (0.757)
Government stability, ICRG	0.048 (0.287)	0.270 (1.453)
General government revenue, percent of GDP	-0.095 (-1.420)	
(Public investment x government revenue)	0.017** (2.370)	
Trade openness, in percent of GDP		0.023 (1.268)
(Public investment x trade openness)		0.003* (1.674)
Constant	-11.933 (-0.447)	5.093 (0.449)
Observations	1,083	1,178
Number of countries	62	62
Adjusted $R$ -squared	0.477	0.866
Hansen	0.896	0.997
Instruments	78	80

Source: Author's calculations

Note: Time fixed effects included. Z-statistics in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ ; ICRG = International Country Risk Guide.

This box was prepared by Francisco Arizala, Jesus Gonzalez-Garcia, and Jiayi Zhang.

<sup>1</sup> The generalized method of moment system addresses potential endogeneity concerns.



### Box 1.4. Strengthening Social Safety Nets

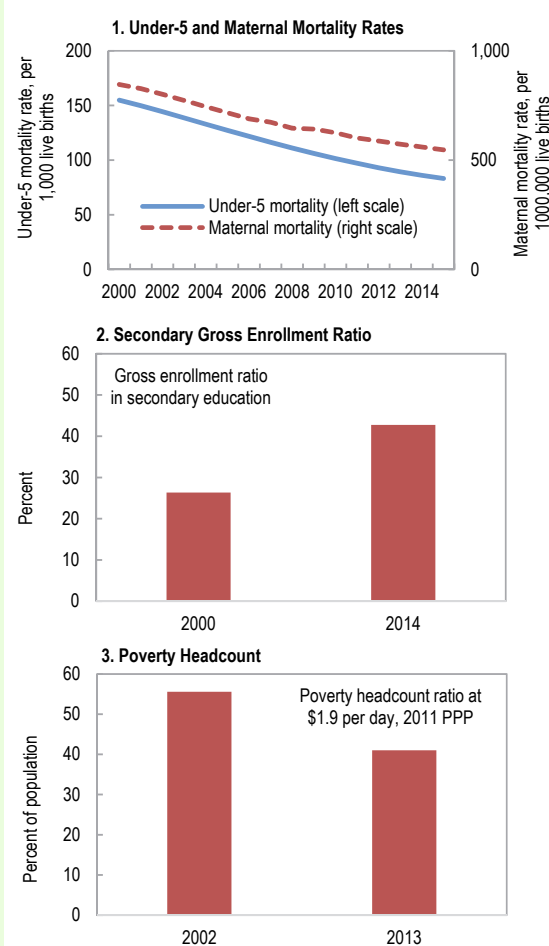
*Strengthening social safety nets and fiscal consolidation are not mutually exclusive goals, but spending on social safety nets should, at a minimum, mitigate the social costs of the consolidation. Removing regressive expenditures and improving the efficiency of progressive programs can provide fiscal space to expand targeted social safety net programs providing opportunities to a larger share of the population of poor households.*

Strong growth in sub-Saharan Africa over the past two decades has coincided with improvements in several human development indicators (Figure 1.4.1). Health outcomes have improved, with infant mortality and maternal death rates declining. Education enrollment rates have increased, and poverty rates have declined. However, the absolute number of people living below the poverty line has risen.

#### Varying Coverage of Social Safety Nets

Public spending levels on social safety nets—that is, noncontributory transfer programs that target the poor and vulnerable so that they can meet their basic consumption needs, mitigate the impact of shocks, and invest in their human capital and productive capacity—vary widely across the region (Beegle, Coudouel, and Monsalve 2017; World Bank 2012). Between 2012 and 2016, government spending on social safety nets ranged from less than ½ percent of GDP on average in most oil-exporting countries to an average of about 1½ percent of GDP in other countries (Figure 1.4.2, panel 1). An important share of programs is categorically targeted to provide services to certain demographic groups, often children, including school feeding (Botswana, Lesotho, Malawi, Nigeria, Zambia), the disabled (Guinea-Bissau, Namibia, Niger, Swaziland), or the elderly (Kenya, Mozambique, Mauritius, Nigeria) (Figure 1.4.2, panel 2). Differences in design have resulted in variations in the coverage of social safety nets across countries, with less than 20 percent of the population in the region currently covered by such interventions. The transfer amount (as a share of the international daily poverty line of US\$1.90 purchasing power parity in 2011) varies from less than 5 percent (Ghana, Lesotho, Tanzania, Zambia) to more than 10 percent in higher-income countries (Botswana, Namibia, South Africa).

Figure 1.4.1. Sub-Saharan Africa: Development Indicators

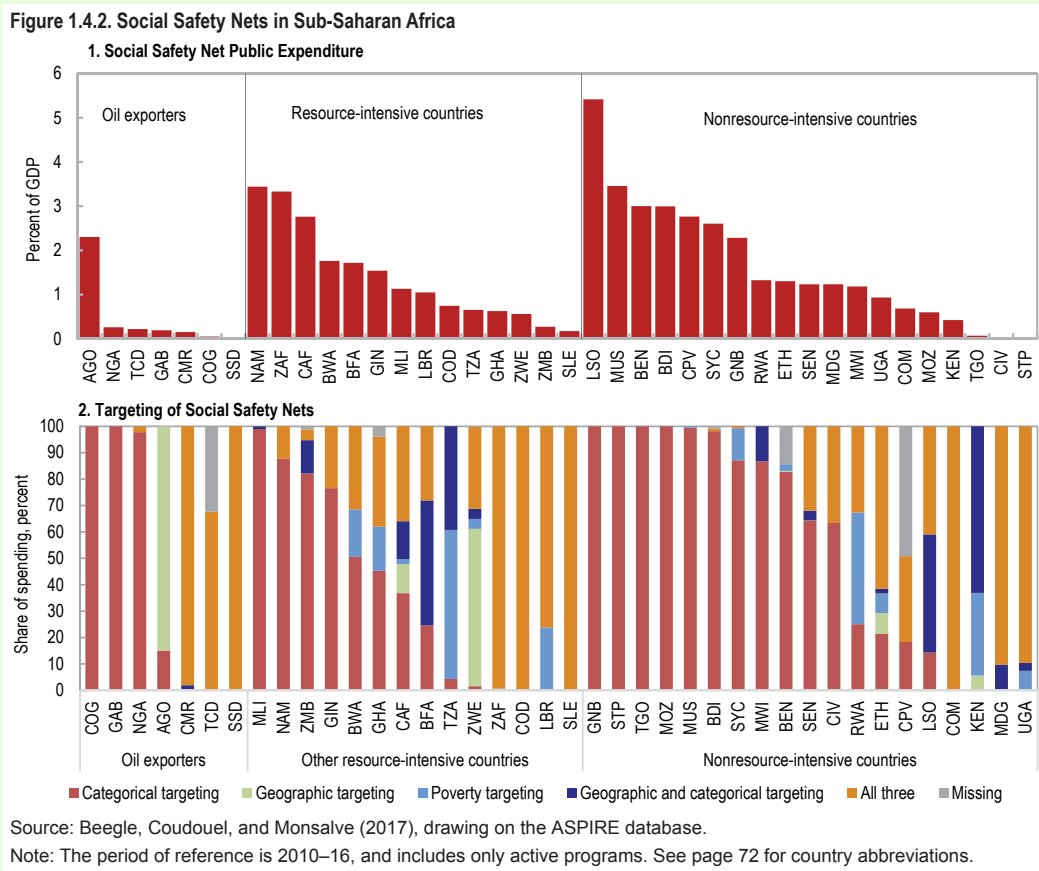


Source: World Bank, World Development Indicators.

Note: PPP = purchasing power parity.

This box was prepared by Aline Coudouel, Emma Monsalve (both from the World Bank), and Monique Newiak.

Box 1.4 (continued)



## Varied Impact

The impact of social safety nets on the poorest is important, but varies according to the type of program, the target population, and the generosity of the program. A recent meta-evaluation of social safety nets in Africa underlines their impact in the following areas (Beegle, Coudouel, and Monsalve 2017).

- *Equity.* Programs have a strong impact on households' overall consumption and food consumption, particularly if they have strong targeting protocols for the poor and provide transfers on a predictable and regular basis. The impact on (extreme) poverty rates and depth depends on overall poverty and transfer levels, as programs can improve the consumption of the poorest without bringing them over the poverty line.
- *Opportunity.* Programs can affect productive assets if they have a clearly defined productive objective, and if transfers are larger and given as lump-sums, and combined with complementary activities. Programs can promote investments in human capital, especially for upper primary education and the use of health care services.
- *Resilience.* Programs also promote increased savings and reduced use of negative coping strategies, with a notable reduction in child labor.

## Design Matters

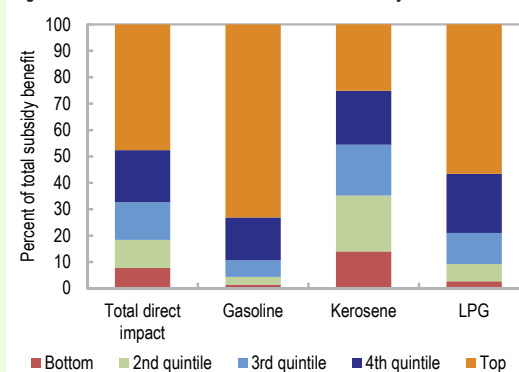
There are no silver bullets for the design of social safety nets, but evidence points to the importance of the design and implementation of effective targeting mechanisms; the right levels and the predictability and regularity of transfers; the sustainability of programs in the long term; a combination of activities that are complementary (school feeding); taking into account particular constraints faced by different groups, such as youth and women; and stronger access to quality basic services. Countries should focus on developing a safety net system that articulates different types of safety nets to respond to their profile of poverty and vulnerability with the following priorities (World Bank 2012; Monchuk 2014; Beegle, Coudouel, and Monsalve 2017):

- *Creating synergies* by building links between existing institutions and programs—for example, by establishing a common institutional platform—and by developing shared instruments to improve efficiency and coordination (particularly through the development of social registries that can be shared by all programs and the establishment of efficient payment systems).
- *Developing the opportunity aspect* of social safety net programs so that, in addition to providing consumption support and mitigating the impact of shocks, they can increase households' human capital and productivity and more generally their resilience to future shocks (for example, cash transfers conditioned on school attendance or enrollment in health programs).
- *Establishing shock-responsive programs* that can be triggered in an efficient and timely manner when shocks occur. Such interventions can build on existing programs and expand them vertically (temporarily adjusting amounts and frequency) or horizontally (adding temporary beneficiaries), triggering new programs for a limited period (ideally building on the administrative systems of permanent programs), or temporarily modifying the program focus or target. Important efficiency gains can be made by responding in a more timely manner with a predefined set of instruments and an adequate financing strategy.

## Progressive Funding

Rebalancing from regressive to more progressive expenditures, revenue mobilization, and enhanced public investment efficiency can provide the resources to expand social safety nets. For example, fuel subsidies generally benefit richer households, with less than 15 percent of them received by the bottom 20 percent in the case of kerosene which is mostly used by the poor (3 percent in the case of liquified petroleum gas and gasoline) (Figure 1.4.3). They are, hence, a very inefficient way of increasing the consumption of the poorest households. For sub-Saharan African countries, on average, providing US\$1 to the poorest 40 percent households through untargeted gasoline subsidies costs US\$23 (Coady, Flamini, and Sears 2015).

Figure 1.4.3. Sub-Saharan Africa: Distribution of Subsidy Benefit



Source: Coady, Flamini, and Sears (2015).  
Note: LPG = liquified petroleum gas.

## REFERENCES

- Beegle, K., A. Coudouel, and E. Monsalve, editors. 2017. "Realizing the Full Potential of Social Safety Nets in Sub-Saharan Africa." Africa Chief Economist Office Regional Study, World Bank, Washington DC.
- Cavallo, E., and C. Daude. 2011. "Public Investment in Developing Countries: A Blessing or a Curse?" *Journal of Comparative Economics* 39(1): 65–81.
- Coady, D., V. Flamini, and L. Sears. 2015. "The Unequal Benefits of Fuel Subsidies Revisited: Evidence for Developing Countries." In *Inequality and Fiscal Policy*, edited by B. Clements, R. de Mooij, S. Gupta, and M. Keen. Washington, DC: International Monetary Fund.
- De Haas, R., and I. van Lelyveld. 2006. "Foreign Banks and Credit Stability in Central and Eastern Europe. A Panel Data Analysis." *Journal of Banking and Finance* 30(7): 1927–952.
- Gordon, R., and W. Li. 2009. "Tax Structures in Developing Countries: Many Puzzles and a Possible Explanation." *Journal of Public Economics* 93: 855–66.
- International Monetary Fund (IMF). 2011. "Revenue Mobilization in Developing Countries." IMF Policy Paper, Washington, DC.
- . 2014. "South Africa – Financial Stability Assessment." IMF Country Report No. 14/340, Washington, DC.
- . 2015a. "Pan-African Banks: Opportunities and Challenges for Cross-border Oversight." African Department and Monetary and Capital Markets Department Paper, Washington, DC.
- . 2015b. "Financing for Development: Revisiting the Monterrey Consensus." IMF Policy Paper, Washington DC, July.
- . 2016. "How to Adjust to a Large Fall in Commodity Prices?" Fiscal Affairs Department. How-to-Note. Washington DC, September.
- Monchuk, V. 2014. *Reducing Poverty and Investing in People: The New Role of Safety Nets in Africa*. World Bank, Washington, DC.
- Peek, J., and E.S. Rosengren. 2000. "Implications of the Globalization of the Banking Sector: The Latin American Experience." Federal Reserve Bank of Boston Conference Series 44 (June): 145–85.
- Reinhardt, D., and S.J. Riddiough. 2014. "The Two Faces of Cross-border Banking Flows: An Investigation into the Links between Global Risk, Arms-length Funding and Internal Capital Markets." Bank of England Working Paper No. 498, London.
- Sahay, R., M. Čihák, P. N'Diaye, A. Barajas, R. Bi, D. Ayala, Y. Gao, A. Kyobe, L. Nguyen, C. Saborowski, K. Svirydzenka, and S.R. Yousefi. 2015. "Rethinking Financial Deepening: Stability and Growth in Emerging Markets." IMF Staff Discussion Note 15/08. International Monetary Fund, Washington, DC.
- Servén, L. 2003. "Real-Exchange-Rate Uncertainty and Private Investment in LDCs." *Review of Economics and Statistics* 85 (1): 212–218.
- Torres, J. 2016. "Macro-Financial Risks from Linkages between Banks and Non-Bank Financial Institutions." IMF Country Report 16/374. International Monetary Fund, Washington, DC.
- World Bank. 2012. "Managing Risk, Promoting Growth. Developing Systems for Social Protection in Africa. The World Bank's Africa Social Protection Strategy 2012–22." World Bank, Washington, DC.

## 2. Restarting Sub-Saharan Africa's Growth Engine

After nearly two decades of strong growth, average economic activity in sub-Saharan Africa has decelerated sharply, against the backdrop of lower commodity prices, a less-supportive global environment, and, in the hardest-hit countries, a delayed policy response (Chapter 1). However, the full picture is more complex, with considerable heterogeneity across countries. Against this backdrop, two related questions arise: How can growth be revived in the hardest-hit countries? And for countries that are still growing fast, how can growth be sustained?

This chapter tries to answer these questions by examining the growth performance of sub-Saharan African countries through the lens of growth turning points and periods of sustained growth episodes using a sample containing data from 1950 to 2016.<sup>1</sup> To that effect, the chapter first documents the stylized facts of growth turning points—defined here as growth accelerations (up-breaks) and decelerations (down-breaks)—and sustained growth episodes (growth spells) across the region and vis-à-vis the rest of the world. The chapter then examines the changes in both the external and domestic environment (including policies) that coincided with turning points in sub-Saharan Africa. Finally, the chapter investigates how some episodes of growth acceleration become periods of sustained growth, and what influences the duration of these episodes.<sup>2</sup>

Based on the findings, the chapter concludes with policy recommendations to revive and sustain growth in sub-Saharan African countries.

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This chapter was prepared by a team led by Charalambos Tsangarides and comprised of Francisco Arizala, Jesus Gonzalez-Garcia, Tim Willems, and Mustafa Yenice.

<sup>1</sup> Following an extensive literature on cross-country average growth performance, attention has turned to investigating the frequency and duration of growth episodes. See, for example, Hausmann, Pritchett, and Rodrik (2005), Hausmann, Rodriguez, and Wagner (2006), Jerzmanowski (2006), Aizenman and Spiegel (2007), Jones and Olken (2008), Berg, Ostry, and Zettelmeyer (2012), and Tsangarides (2012).

<sup>2</sup> Since what is associated with turning points may not necessarily be what sustains growth, we examine these two aspects separately.

The main findings are as follows:

- Growth turning points are common in sub-Saharan Africa, but with substantial variation across time. Before 2000, both up-breaks and down-breaks were frequent in the region, suggesting that growth was characterized by shifts between expansions and contractions. The region has experienced relatively fewer down-breaks since 2000.<sup>3</sup>
- Growth spells are also frequent in sub-Saharan Africa—both among resource-intensive and nonresource-intensive countries—and have become more frequent over the last 15 years. However, growth spells in the region have tended to be shorter than elsewhere. They also tend to be characterized by the largest swings in growth before, during, and after the spell: they start from worse growth positions and typically end in more “hard landings” compared to spells elsewhere—a result that still holds after controlling for armed and political conflicts.
- Growth accelerations are generally associated with improved external conditions, increased investment and trade openness, better fiscal balances, and more diversified economies, while the opposite is associated with growth decelerations. However, some factors seem to operate asymmetrically. Typically, up-breaks tend to be characterized by declines in inflation, increased fiscal revenues and foreign direct investment, improvements in the institutional environment and social indicators, and reductions in inequality. For their part, down-breaks coincide more often with increased public expenditure, higher debt ratios, increased aid flows, and overvalued exchange rates. These findings suggest that what is associated with growth accelerations may be different from what is observed when growth stalls, posing a different set of challenges in terms of policy options.

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<sup>3</sup> By construction, the empirical approach used to identify breaks requires selecting a minimum number of years between breaks, which we set at five. As a result, while our analysis covers the period 1950–2016, breaks can only be identified up to 2011 (see also Berg, Ostry, and Zettelmeyer, 2012).

- Transitioning from growth turnarounds to periods of sustained growth is difficult and often requires additional efforts beyond what is needed to trigger a growth up-break. In particular, besides the importance of an improved external environment, better macroeconomic policies play a specific and important role in lengthening the duration of a growth spell. The main factors are the consistency of macroeconomic policies, which we proxy by the level of inflation, sound fiscal policy through reduced debt-to-GDP ratios, more outward-oriented trade policies, efforts to induce higher investment-to-GDP ratios, and improved macro-structural policies, as captured by lower market distortions. Also, better-quality institutions, diversification, and technology adoption help sustain growth spells in the region. Each of these factors or policies has an important effect on the duration of spells. Improvements in *each* policy variable from its median value by 25 percentile points in the distribution (while keeping other variables constant) increases the length of the spell by one to six years.
- Historically, sustained periods of growth have required joint efforts on a number of macroeconomic policy fronts. In the context of the current environment, the following policy implications can be drawn:
  - ♦ For countries in a severe growth slowdown, the most pressing challenge is to preserve macroeconomic stability, which can help trigger a turnaround and lead to a period of sustained growth. Such a turnaround can be achieved through a policy adjustment effort that includes consistent monetary policy to contain inflation, and sound fiscal policy to anchor public debt increases. Also, an environment that fosters investment, increased openness to trade, and more stable political environments can help growth recover.
  - ♦ For countries continuing to grow at a fast clip, attention should turn to addressing potential vulnerabilities. In particular, many of these countries should focus on rebuilding buffers and stemming increases in public debt through domestic revenue mobilization to finance a larger part of their ambitious infrastructure projects while avoiding overheating.
  - ♦ For all countries, more efforts are needed to unlock their growth potential. These efforts include advancing economic diversification to increase resilience to shocks and generate new sources of growth; deepening technology adoption; invigorating financial reforms; and strengthening macro-structural policies to reduce market distortions and risks associated with investment, and to improve the business climate.

## STYLIZED FACTS: TURNING POINTS AND GROWTH SPELLS IN SUB-SAHARAN AFRICA

This section begins by examining how turning points and episodes of durable growth have evolved in sub-Saharan Africa since 1950. As differences in average growth rates across countries are influenced historically by large fluctuations in rates of growth over time, it makes sense to investigate growth breaks. But with the frequency of growth accelerations fairly constant across regions, there is also a need to look beyond to the length of growth spells, since this is what likely explains the different growth rates across countries or regions.<sup>4</sup> Figure 2.1 illustrates the concepts of growth up-breaks and down-breaks, and growth spells for a country in our sample.

### Growth Turning Points

Following Berg, Ostry, and Zettelmeyer (2012), we identify structural turning points as breaks in economic growth classified as *up-breaks*—periods of higher growth than before, or growth accelerations—and *down-breaks*—periods of lower growth than before, or growth decelerations—using a variant of the Bai and Perron (1998) methodology (see Annex 2.1 for details). We find that growth

<sup>4</sup> In addition, investigating turning points and periods of durable growth avoids many of the pitfalls of cross-country growth regressions that attempt to explain developing economies' average growth experience, where the average typically confounds periods of volatility from sharp growth increases and declines, compared to the smooth upward paths of industrial countries (Pritchett 2000).

up-breaks and down-breaks are common across the world, but with substantial variation across time and income levels.

*Many growth breaks in sub-Saharan Africa...*

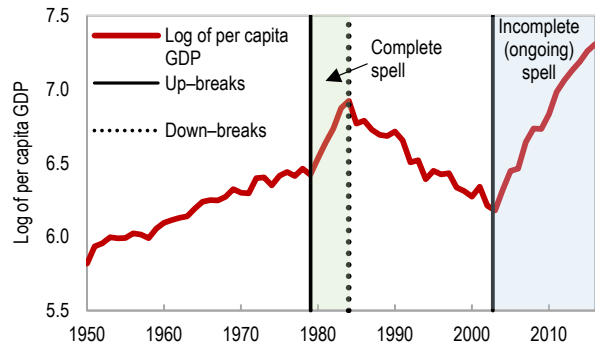
The great majority of growth turning points occurred in developing economies over 1950–2016, with sub-Saharan Africa experiencing many of the up-breaks and down-breaks (Figures 2.2a and 2.2b).<sup>5</sup> Dividing the period into four roughly equal sub-periods, we find that, overall, about 25 percent of total up-breaks and down-breaks identified correspond to sub-Saharan Africa, which is in line with the fraction of sub-Saharan African countries in the sample, about 28 percent.<sup>6</sup>

Growth in the region during 1950–99 was characterized by high volatility and frequent shifts between periods of expansion and contraction: up-breaks were most common during 1985–99 while most down-breaks occurred during 1970–84. However, this pattern seems to have changed during the last 15 years. In contrast to the rest of the developing economies in the sample, sub-Saharan Africa experienced less volatile growth and fewer down-breaks during 2000–16, while maintaining about the same number of up-breaks. This suggests that at the turn of the century the region transitioned from a pattern of high growth

<sup>5</sup> Sub-Saharan Africa has experienced political and armed conflicts over the years, although their frequency has declined significantly in recent decades. Using a proxy for “severe” conflicts from the Uppsala Conflict Data Program, we find that the vast majority of breaks in the region do not occur around conflict years. In some cases, however, they have occurred within a year or two of the beginning or end of conflicts, as was the case for the growth down-breaks in Mozambique (1981) and Sierra Leone (1994), and some up-breaks in growth in Angola around 2000–01, Chad in 1980, Mozambique around 1993–95, Uganda after 1989, and Zimbabwe in 1979. As will be discussed later, conflict years do not affect the results in the chapter including the multivariate regression analysis.

<sup>6</sup> Developing economies in Latin America and the Caribbean represent 16 percent of the countries in the sample and experienced about 19 percent of up-breaks and down-breaks; developing economies in the Middle East and North Africa represent 13 percent of the countries in the sample and experienced about 16 percent of up-breaks and down-breaks; and developing economies in Asia represent 9 percent of the countries in the sample and experienced about 13 percent of up-breaks and 8 percent of down-breaks. Similarly, the shares of total breaks of emerging market economies correspond roughly to their shares in the sample. In contrast, advanced economies represent 21 percent of the countries in the sample but experienced 13 percent of up-breaks and 18 percent of down-breaks.

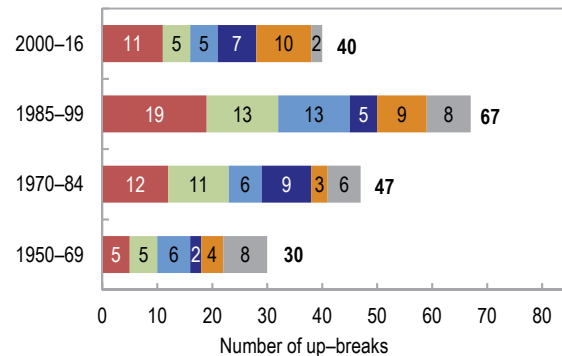
**Figure 2.1. Up-Breaks, Down-Breaks, and Growth Spells of per Capita GDP**



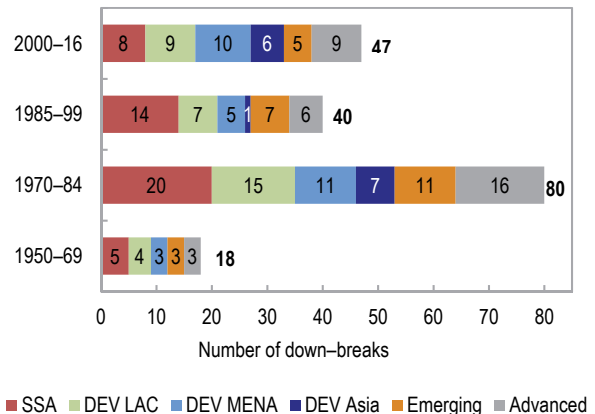
Source: Authors' calculations based on data from Penn World Tables 9.0.

Note: GDP per capita measured in purchasing power parity terms. A complete growth spell is the period that starts with an up-break, is followed by an average rate of per capita growth of at least 2 percent, and ends with a down-break; an incomplete or ongoing spell starts with an up-break and ends with the end of the sample.

**Figure 2.2a. Selected Groups: Growth Up-Breaks, 1950–2016**



**Figure 2.2b. Selected Groups: Growth Down-Breaks, 1950–2016**



Source: Authors' calculations.

Note: DEV Asia= developing Asia; DEV LAC = developing Latin America and the Caribbean; DEV MENA = developing Middle East and North Africa; SSA = Sub-Saharan Africa.

volatility, with frequent shifts from expansion to contraction, to a somewhat more regular pattern of growth upticks.

### ...but also more dramatic shifts in growth

Nonetheless, countries in the region tend to experience large growth fluctuations between up-breaks and down-breaks—that is, large break sizes—suggesting high volatility (Figure 2.3). On average, per capita growth in sub-Saharan African countries was 10 percentage points higher after an up-break compared to the period before it. This is the largest break size among all groups examined—higher than the 7 percent break size in other emerging and developing economies. Similarly, countries in the region experience large swings in growth following a down-break, on par with developing economies in the Middle East and North Africa, and Asia, but significantly less than in emerging market economies. These large swings point to more widespread stop-and-go growth patterns than elsewhere, with a detrimental impact on investment behavior and large swings in living conditions.

### From Turning Points to Growth Spells

The previous discussion shows that countries in the region have managed to get growth started, but that growth has also been more volatile. We now turn to the analysis of episodes of durable growth or growth spells—that is, episodes where growth after up-breaks was sustained. Following Berg, Ostry, and Zettelmeyer (2012), we define a *complete* growth spell as a period of time that starts with an up-break, is followed by an average rate of per capita growth of at least 2 percent, and ends with a down-break (and a per capita growth rate of less than 2 percent).<sup>7</sup> Since some spells may be ongoing at the end of the sample period, we similarly define an *incomplete* or *ongoing* growth spell as one that was still ongoing using data up to 2016, the end of the sample.

The analysis identifies three main patterns among growth spells in the region: growth breaks in the region are frequent, but they are shorter than elsewhere, and they are characterized by large swings in growth rates.

<sup>7</sup> The rate of per capita GDP growth of 2 percent is considered a reasonable rate for low-income and sub-Saharan African countries, and has been used in the related literature.

**Figure 2.3. Selected Groups: Change in Median Annual per Capita Growth During Up-Breaks and Down-Breaks**  
(Percentage points)



Source: Authors' calculations.

Note: The bars indicate the median difference in per capita growth after the break (and until the next break) minus per capita growth before the break (and after the previous break). DEV Asia = developing Asia; DEV LAC = developing Latin America and the Caribbean; DEV MENA = developing Middle East and North Africa; SSA = Sub-Saharan Africa.

### Frequent growth spells in the region...

The region recorded 40 growth spells between 1950 and 2016—about 30 percent of total spells identified over the sample period—which is slightly above the share of sub-Saharan African countries in the sample (Figure 2.4). Furthermore, 25 out of the 40 growth spells in the region are ongoing, which represents more than a third of all ongoing spells in the sample—a testament of the positive growth performance that the region has recorded in the last two decades, notwithstanding recent challenges.<sup>8</sup>

Indeed, growth spells in the region were more concentrated after 1995, a period characterized by a significantly improved business and macroeconomic environment, increased trade integration with the rest of the world, higher average commodity prices, and accommodative global financial conditions (Figure 2.5).<sup>9</sup> This performance was widespread across the region, with more than two-thirds of countries enjoying 10 or more years of uninterrupted growth—with both resource-intensive and nonresource-intensive countries experiencing a roughly equal number of growth

<sup>8</sup> Given the growth slowdown that some of the countries in the region are currently experiencing, it is possible that some of these growth spells will come to an end in the years to come.

<sup>9</sup> Also, the Highly Indebted Poor Country (HIPC) Initiative in the region had a positive impact by lifting a heavy burden that restrained growth in many countries.



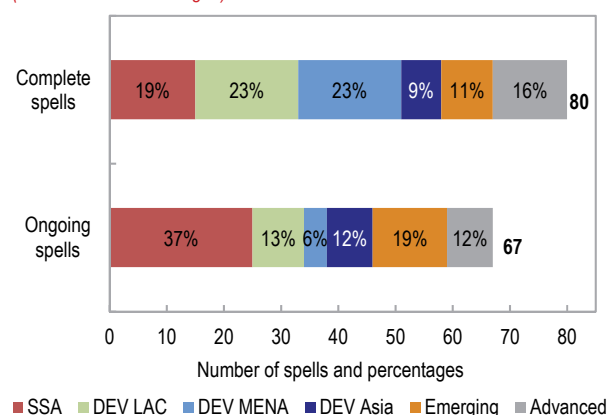
spells (23 for the former group, 17 for the latter).<sup>10</sup> Of the ongoing growth spells, two are among oil exporters, six among other resource-intensive countries, and 17 among nonresource-intensive countries, highlighting that the growth momentum remains strong among countries that have not been adversely affected by the fall in commodity prices. In fact, Côte d'Ivoire, Ethiopia, Kenya, Rwanda, and Tanzania—forecast in 2017 to register growth at 5 percent or higher—are also in the midst of ongoing growth spells.

*...but shorter spells than elsewhere...*

While the region's record on growth spells is relatively positive, the spells have nonetheless tended to be shorter than elsewhere. The median length of complete growth spells in the region has been six years (six years for resource-intensive countries, and five years for nonresource-intensive countries) compared to 10 years for other developing economies and eight years for emerging market economies (Figure 2.6).

Spells in the region are not just more likely to be shorter; it is also the case that fewer complete spells in the region last longer. For example, only one out of three spells in the region lasts at least 10 years compared to more than half of the spells in the rest of the developing world and about 80 percent of spells in industrialized economies.

**Figure 2.4. Selected Groups: Growth Spells, 1950–2016**  
(Number and Percentages)

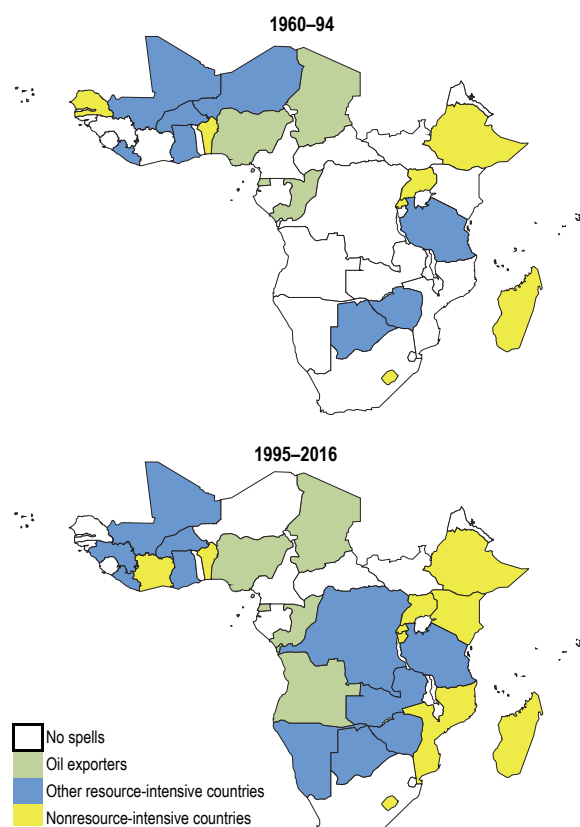


Source: Authors' calculations.

Note: DEV Asia = developing Asia; DEV LAC = developing Latin America and the Caribbean; DEV MENA = developing Middle East and North Africa; SSA = Sub-Saharan Africa.

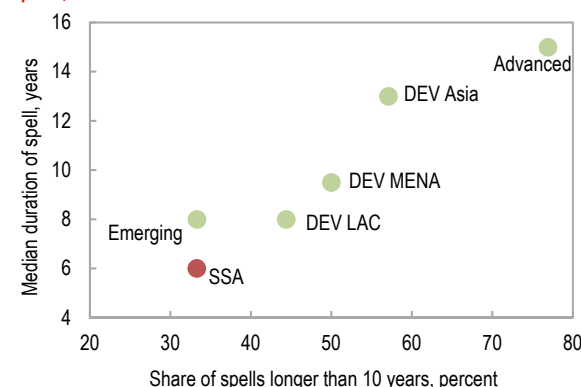
<sup>10</sup> There are 23 resource-intensive countries (of which eight are oil producers) and 22 nonresource-intensive countries in the region and in our sample. See page 70 for country groupings.

**Figure 2.5. Sub-Saharan Africa: Growth Spells, 1960–94 and 1995–2016**



Source: Authors' calculations.

**Figure 2.6. Selected Groups: Median Duration of Complete Growth Spells, 1950–2016**



Source: Authors' calculations.

Note: DEV Asia = developing Asia; DEV LAC = developing Latin America and the Caribbean; DEV MENA = developing Middle East and North Africa; SSA = Sub-Saharan Africa.

### ... and large swings in growth before, during, and after spells

Furthermore, based on complete spells in the sample and consistent with the earlier finding of greater growth fluctuations at the time of up-breaks and down-breaks, spells in sub-Saharan Africa tend to be characterized by the largest swings in growth before, during, and after spells (Figure 2.7). Overall, spells in the region start from worse positions and typically end in “hard landings” or crashes—in sharp contrast to the rest of the world, where spells are characterized by both milder starts and softer landings. Indeed, while the median annual growth rate during growth spells is highest in sub-Saharan Africa, it swings from  $-4$  percent before a spell to 9 percent during spells, before turning negative again at about  $-4$  percent after the end of the spell.<sup>11</sup>

The results do not appear to be influenced by the relatively more frequent periods of conflict experienced in the region during the period. Specifically, median annual growth rates excluding conflict countries continue to be at about  $-4$  percent before growth spells, reach about 8 percent during spells, and return to negative growth of  $-6$  percent

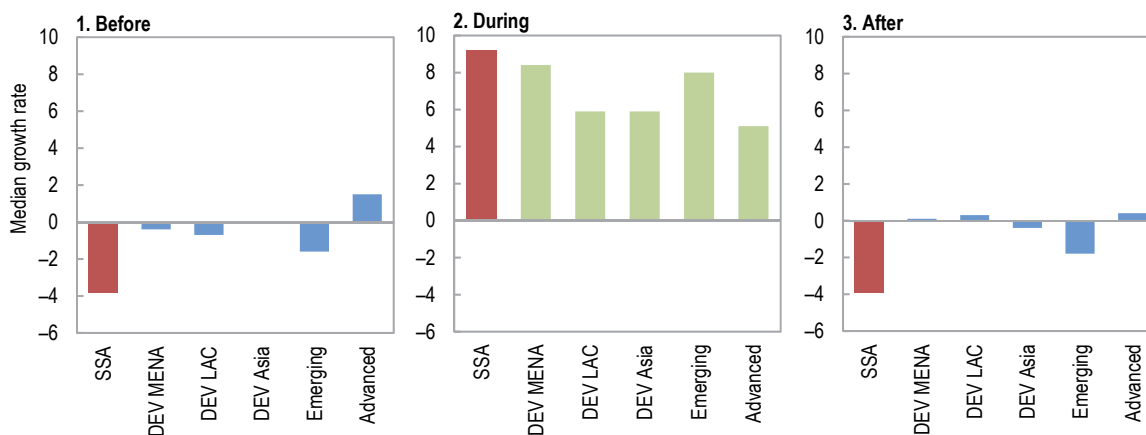
after the end of the spell, consistent with the patterns observed in Berg, Ostry, and Zettelmeyer (2012) and Tsangarides (2012).<sup>12</sup>

These findings—shorter growth spells and larger swings in growth—point to specific difficulties in the region in engineering and sustaining growth over long periods. The subsequent sections investigate first what factors may coincide with growth up-breaks, and then what factors may influence the duration of growth spells.

## WHAT HAPPENS AROUND GROWTH TURNING POINTS?

Using the turning points previously identified, this section examines what happens in economies that experience transitions between periods of strong and weak (or negative) growth. To this end, we examine what happened around the time of breaks in growth to variables representative of the external environment, macroeconomic policies, structural features, and political and institutional characteristics (see Annex 2.2 for a list of variables

**Figure 2.7. Selected Groups: Median Annual per Capita Growth Before, During, and After Complete Spells**  
(Percentage points)



Source: Authors' calculations.

Note: “Before” is defined as the per capita growth before the start of the spell and after the previous break; “during” is per capita growth during the spell; and “after” is per capita growth after the end of the spell and until the next break. DEV Asia = developing Asia; DEV LAC = developing Latin America and the Caribbean; DEV MENA = developing Middle East and North Africa; SSA = Sub-Saharan Africa.

<sup>11</sup> The swings in growth after complete spells are even starker when looking at average growth numbers: average annual growth after the end of a complete spell in sub-Saharan African plummets (from close to 10 percent during the growth spells) to  $-6$  percent, as opposed to  $-1$  percent in other developing economies, and  $-2$  percent among emerging market economies.

<sup>12</sup> As a further robustness check, we investigate whether natural disasters, epidemics, or HIPC debt relief are associated with break points in growth or the beginning or end of spells. Our results suggest that these three factors do not show systematic relationships with breaks in growth or spells.

and their sources).<sup>13</sup> This analysis does not attempt to identify what caused the emergence of growth turning points, nor does it control for other factors that may also potentially influence their occurrence. Instead, the goal is to identify the regularities observed over time.

### Exogenous Factors

Growth turning points coincide with significant changes in key exogenous factors (Figure 2.8). Specifically:

- Growth up-breaks in the region tend to coincide with improvements in the countries' terms of trade, while the opposite holds for down-breaks of a similar magnitude (as confirmed by a statistical test for symmetry between up- and down-breaks). The importance of changes in terms of trade has been particularly relevant for commodity exporters; for instance, worsening terms of trade following the global financial crisis coincided with down-breaks in Nigeria in 2010 and in Equatorial Guinea and the Republic of Congo in 2011. Also, stronger growth in trading partners is significantly associated with up-breaks in growth (not shown in the figure).

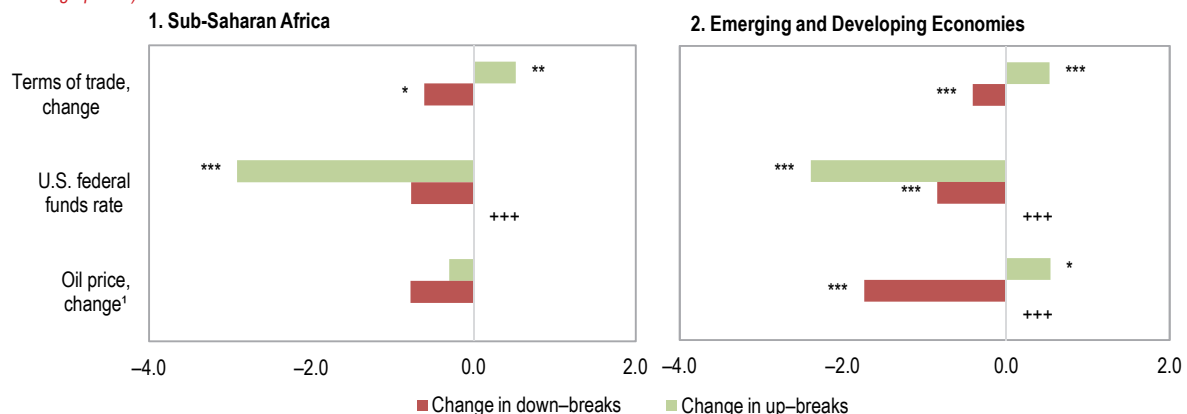
- Growth up-breaks in sub-Saharan Africa are associated with looser global liquidity conditions, represented by declines in the U.S. federal funds rate of about 2.5 percentage points on average, as observed in the early 2010s. However, there is no significant association between changes in the U.S. federal funds rate and down-breaks.
- Unlike in the rest of the emerging and developing economies, growth breaks in the region are not significantly associated with changes in oil prices. This is most likely because sub-Saharan Africa includes both oil exporters and importers, two groups for which the role of oil prices in relation to growth breaks plays in opposite directions.<sup>14</sup>

### Macroeconomic Indicators

This section turns to the domestic macroeconomic environment, for which changes in several variables tend to significantly characterize changes between periods of strong or weak growth (Figure 2.9). Specifically:

- Growth up-breaks in sub-Saharan Africa coincide with lower inflation, significant

**Figure 2.8. Change in External Shocks Variables Associated with Growth Breaks**  
(Percentage points)



Source: Authors' calculations.

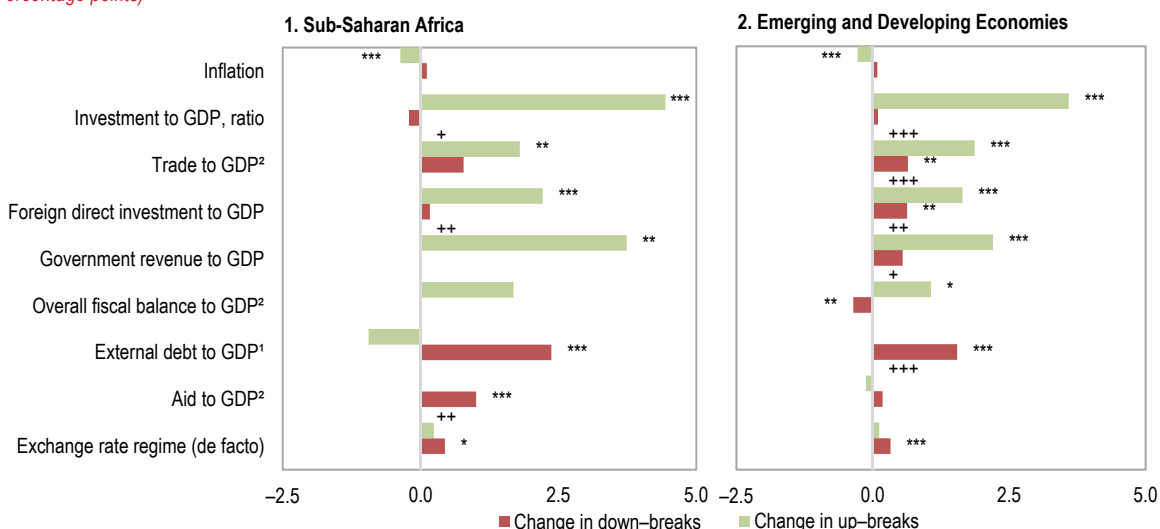
<sup>1</sup> Changes divided by 5.

Note: \*, \*\*, and \*\*\* indicate that the changes in means are significant at the 10, 5 and 1 percent levels. +, ++, and +++ indicate that the absolute magnitudes of changes in means between up-breaks and down-breaks are significantly different at the 10, 5, and 1 percent levels.

<sup>13</sup> We follow the approach in Jones and Olken (2008). For each variable tested, we report the change in its mean value when there is a break in the rate of growth and test whether the change is statistically significant. Also, we test if changes in variables have similar absolute magnitudes when up-breaks and down-breaks occur in a form of a "symmetry test." More details are provided in Annex 2.1.

<sup>14</sup> In other emerging and developing economies, growth up-breaks are associated with higher oil prices—likely reflecting stronger global growth for that group—and higher trade partner growth, while down-breaks coincide with lower oil prices.

**Figure 2.9. Change in Macroeconomic Variables Associated with Growth Breaks (Percentage points)**



Source: Authors' calculations.

<sup>1</sup> Changes divided by 10.

<sup>2</sup> Changes divided by 5.

Note: \*, \*\*, and \*\*\* indicate that the changes in means are significant at the 10, 5 and 1 percent levels. +, ++, and +++ indicate that the absolute magnitudes of changes in means between up-breaks and down-breaks are significantly different at the 10, 5 and 1 percent levels. The exchange rate regime variable is based on the fine classification in the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions database, with higher values indicating more flexibility.

increases in investment, more trade openness, and stronger net inflows of foreign direct investment, as well as increases in the ratio of credit to the private sector to GDP (not shown in the figure). In particular, growth up-breaks in Zambia in 1999, and Equatorial Guinea in 1994 were associated with increases in investment. Likewise, successful efforts to curb inflation in Uganda during 1993–94 and the Democratic Republic of Congo after 2009 coincided with growth up-breaks. Also, increases in foreign direct investment were observed at the time of growth up-breaks in the Democratic Republic of Congo in 2009, Zambia in 1999, and São Tomé and Príncipe in 1995.

- Fiscal variables also tend to change significantly at the time of growth breaks, although differently on the upside and downside. Growth up-breaks are accompanied by higher government revenues and better fiscal balances—probably reflecting the impact of better growth performance on fiscal outcomes and measures to boost revenue mobilization—while down-breaks coincide with higher debt ratios.<sup>15</sup> For example, up-breaks in Ethiopia in

<sup>15</sup> Both external debt and total public debt, not shown in the figure, show similar results.

2003, Angola in 2000–01, and Rwanda and Tanzania in 1994 coincided with improved fiscal balances. Conversely, large increases in debt-to-GDP ratios during down-turns have been recorded in sub-Saharan Africa. Interestingly, aid flows toward the region also rise significantly during down-breaks, suggesting a strong international response to support countries in difficult times.

- Finally, exchange rate developments show interesting associations with growth breaks in sub-Saharan Africa. Growth down-breaks tend to be associated with more flexible exchange rate regimes, potentially reflecting the fact that, in response to a growth deceleration, countries may allow more exchange rate flexibility in order to use the exchange rate as an adjustment tool.

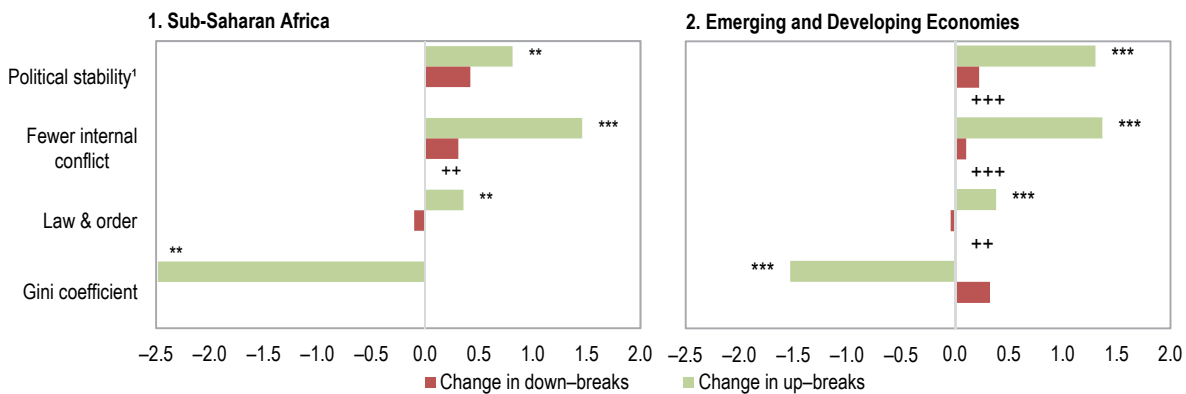
### Institutions, Social Indicators, and Structural Transformation

The final set of factors covers domestic institutional and social factors, productivity, and structural features of the economy. Although these are slow-moving variables, it is possible to identify some interesting patterns. Specifically:

- Growth up-breaks in the region coincide with improvements in the institutional environment, such as a reduction in political risks, fewer internal conflicts, and improved law and order (Figure 2.10). Also, growth up-breaks in the region tend to be associated with significant declines in inequality.<sup>16</sup>
- Improvements in structural factors are also associated with growth up-breaks, while down-breaks generally coincide with their

deterioration (Figure 2.11). In particular, growth up-breaks are found to coincide with significant increases in the rate of growth of total factor productivity—implying that the use of resources becomes more efficient or more intense during those periods of rapid growth—while the opposite holds true for down-breaks. Also, slower adoption of technology, represented by hampered growth of mobile cell phone lines, is present during down-breaks.

**Figure 2.10. Change in Institutions and Inequality Variables Associated with Growth Breaks**  
(Percentage points and units)

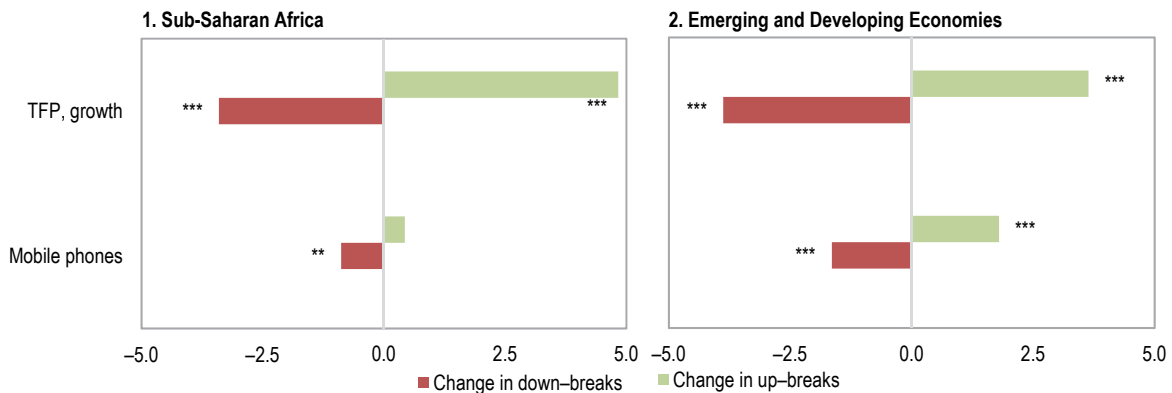


Source: Authors' calculations.

<sup>1</sup> Changes divided by 5.

Note: \*, \*\*, and \*\*\* indicate that the changes in means are significant at the 10, 5 and 1 percent levels. +, ++, and +++ indicate that the absolute magnitudes of changes in means between up-breaks and down-breaks are significantly different at the 10, 5 and 1 percent levels.

**Figure 2.11. Change in Structural Transformation Variables Associated with Growth Breaks**  
(Percentage points and units)



Source: Authors' calculations.

Note: \*, \*\*, and \*\*\* indicate that the changes in means are significant at the 10, 5, and 1 percent levels. +, ++, and +++ indicate that the absolute magnitudes of changes in means between up-breaks and down-breaks are significantly different at the 10, 5 and 1 percent levels. TFP = Total factor productivity.

<sup>16</sup> There is a general declining trend in political risks and conflicts, which helps explain why the institutional environment generally improves, irrespective of up-breaks

or down-breaks. However, as the figure shows, it is only in the case of growth up-breaks that a significant improvement in those conditions can be identified.

## ANALYZING THE DURATION OF GROWTH SPELLS

Having established the changes in the external and domestic environment that tend to occur at times of growth turning points, this section now turns to what influences the length of growth spells. We use the findings of the previous section to motivate the variables and policies that are likely to affect the duration of growth spells in sub-Saharan Africa, but at the same time, we expand our search to allow the possibility that sustaining a growth spell may pose a different challenges than those required to trigger a growth up-break.

More specifically, we relate the probability that a spell will end in the next period to changes in those variables, also investigating to what extent these relationships might differ in the region from elsewhere (see Annex 2.1 for more details). Due to a relatively short number of spells and the unavailability of long time series, we follow a two-step approach. First, we test the relevance of each factor or policy of interest, controlling for initial conditions at the beginning of each spell (to account for growth convergence). Second, we take a set of representative factors or policies from all groups analyzed in the first step in a way that preserves a reasonable sample size, and examine a multivariate setting that allows us to identify the effect of each factor or policy while controlling for other determinants.<sup>17</sup>

### Determinants of Growth Spells: One by One

The first step of the two-step approach consists of investigating the effect of several variables on the duration of growth spells one by one while controlling for income levels.

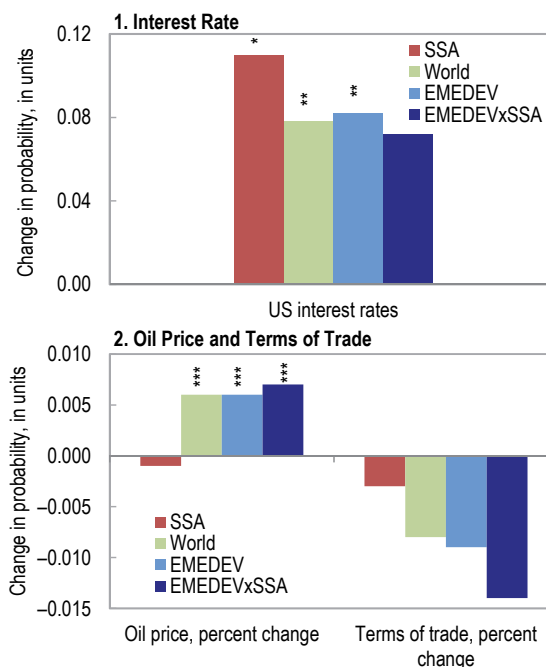
#### Exogenous Factors

Since emerging markets and developing economies are particularly sensitive to changes in commodity prices and global financial conditions, we first investigate the extent to which external shocks may disrupt growth spells. As before, we focus on

changes in the terms of trade, oil prices, and U.S. interest rates (as a proxy of global liquidity conditions).<sup>18</sup>

We find that tighter global financial conditions significantly increase the probability that growth spells end in sub-Saharan Africa as well as in the rest of the world (Figure 2.12).<sup>19</sup> On average, fluctuations in oil prices do not appear to have a significant impact on spells in the region, but this result may be influenced by the fact that changes in oil prices have a very different impact on oil exporters and importers.

Figure 2.12. External Shocks



Source: Authors' calculations.

Note: The size of the bars corresponds to the change in the probability (measured in units) that the growth spell will end associated with a 1 unit change in each of the described variables. EMEDEV = all emerging and developing economies; EMEDEVxSSA = all emerging and developing economies excluding sub-Saharan Africa; SSA = sub-Saharan Africa. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent levels.

<sup>18</sup> Real external shocks have been found to be particularly costly in terms of output in developing economies, with external financial shocks being relatively costlier in the emerging market context (Becker and Mauro 2006).

<sup>19</sup> For the U.S. interest rate we use a composite rate that combines the effective U.S. federal funds rate with alternative shadow measures of the U.S. monetary policy rate to account for the monetary accommodation provided by unconventional policies after the global financial crisis, when interest rates hit the zero lower bound (Krippner 2016).

<sup>17</sup> A similar approach is taken in Berg, Ostry, and Zettelmeyer (2012), who investigate a similar question but focus on the global country sample.

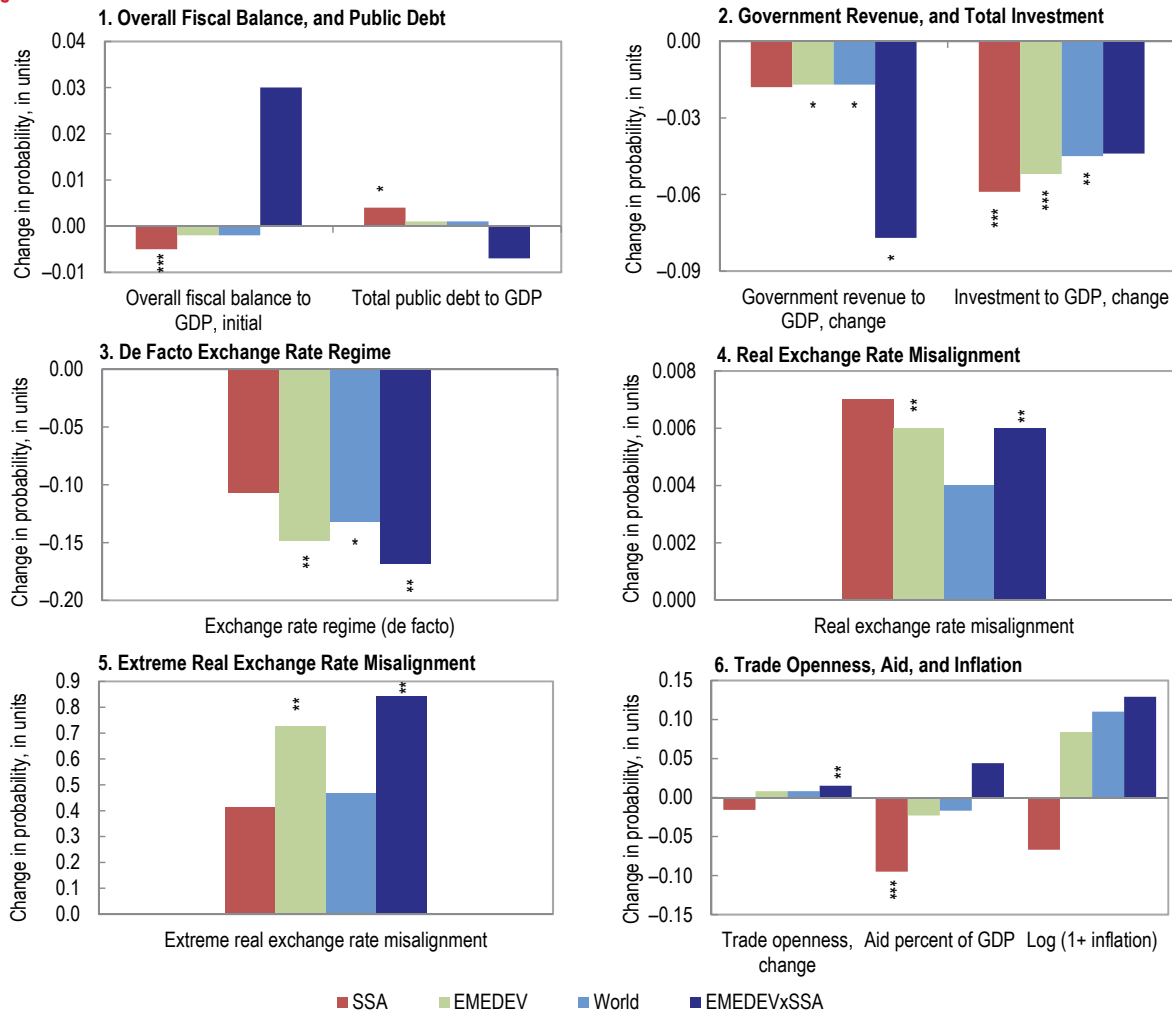
**Macroeconomic Indicators**

Negative developments in the external environment can adversely affect the duration of a growth spell. In contrast, good macroeconomic policies should, in theory, have a protective effect on the spell, as they can promote healthy rates of investment, and provide an internal source of growth momentum.

Indeed, prudent fiscal policies play a special role in sustaining growth spells in sub-Saharan Africa: a better fiscal balance significantly increases the chance that a growth spell will continue, while conversely, a higher debt burden can accelerate its end (Figure 2.13). In fact, in most countries

of the region, the substantial debt reduction that occurred in the wake of debt relief provided through the Highly Indebted Poor Country (HIPC) Initiative allowed more fiscal space to finance productive spending with otherwise healthier fiscal balances—providing supporting conditions for sustainable growth. For instance, in Tanzania, the period of strong growth that started in the early 1990s was accompanied by an improvement in terms of public debt, together with a stepping-up of public expenditures (Robinson, Gaertner, and Papageorgiou 2011). This also is a reminder that a steady increase in public debt, even in fast-growing economies, ultimately poses a risk to growth spells, as elaborated in Chapter 1.

**Figure 2.13. Macroeconomic Indicators**



Source: Authors' calculations.

Note: The size of the bars corresponds to the change in the probability (measured in units) that the growth spell will end associated with a 1 unit change in each of the described variables. The exchange rate regime variable is based on the fine clarification in the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions database; higher values indicate more flexibility. EMEDEV = all emerging and developing economies; EMEDEVxSSA = all emerging and developing economies excluding sub-Saharan Africa; SSA = sub-Saharan Africa. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent levels.

Investment also appears to play a strong role in warding off growth stops and sustaining growth spells, as it not only supports aggregate demand initially but also expands productive capacity over time. While in some resource-intensive countries this might reflect an investment boom related to discoveries of large commodity reserves, for the region as a whole, the momentum has gone beyond that to include large and much-needed infrastructure investment. For example, growth spells in Chad and Lesotho in the 1980s were accompanied by a sharp increase in the investment-to-GDP ratio.

Other macroeconomic factors seem to have a significant impact on the duration of growth in the world but less so in sub-Saharan Africa (Figure 2.13).<sup>20</sup> The effects of competitiveness, trade openness, and inflation are as follows:

- A more flexible exchange rate regime and less overvalued exchange rate levels seem to extend the length of growth spells (echoing findings in Rodrik 2008), although here again the coefficients do not come out significant for the region.<sup>21</sup>
- Higher trade openness tends to increase the duration of growth spells—although not significantly—most likely reflecting more diversified economies, which allows for more resilient and sustainable growth. One such example is Botswana, which experienced one of the longest growth spells in the sample, and where total trade (that is, the sum of exports and imports) represented 95 percent of GDP during the period. In the case of sub-Saharan Africa aid flows also appear to significantly increase the duration of growth spells in the region, a result that is new to the literature.<sup>22</sup>

<sup>20</sup> Given their general significance in the global sample, we will nonetheless keep those other macroeconomic factors as candidates for our multivariate analysis in the next section.

<sup>21</sup> Other proxies for macroeconomic factors, such as the growth of trading partners, and indicators of financial deepening (credit to GDP, and the rate of growth of credit to the private sector), were not significant.

<sup>22</sup> Earlier studies have examined the effect of aid inflows on the rate of economic growth, rather than on the duration of growth spells, often without a robust finding (Rajan and Subramanian 2008).

- Higher inflation seems to decrease the duration of growth spells in the region, although the estimated coefficient is not significant.

### *Institutions and Social and Human Development*

Turning to more slowly moving variables, the first set of such variables relates to the quality of political and economic institutions. The literature has long argued that these variables affect the ability of countries to fend off economic crises (Acemoglu and others 2003). Along a number of such variables—ranging from political stability to institutional constraints to policy decisions and the profile of countries to attract investment—in line with the literature, we find that high institutional quality strongly supports growth spells in the region, and consistently more so than in any other regions (Figure 2.14). For example, the strong economic growth in Eastern African Community (EAC) countries has been explained by the macroeconomic stability, favorable business climate, and government stability in those countries (McAuliffe, Saxena, and Yabara 2012). In addition, armed conflicts significantly disrupt economic activity and shorten the duration of growth spells in sub-Saharan Africa, although it should be noted that the number of such conflicts has dramatically decreased over the last two decades in the region.

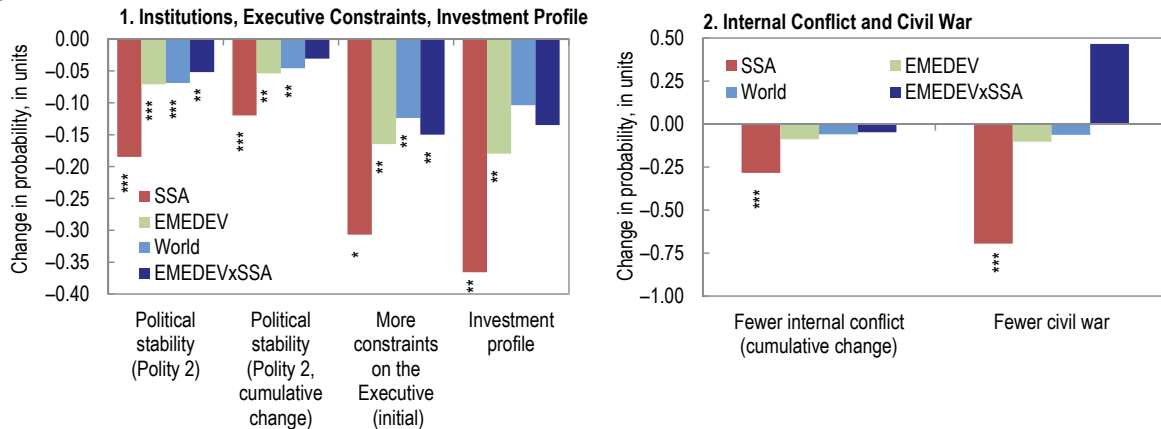
Finally, social and human development—inasmuch as it improves aggregate education and health, and hence efficiency and productivity—is also found to profoundly impact growth spells, as higher levels of education and human capital are associated with longer growth spells (Figure 2.15). Indeed, countries in the region with relatively high levels of human capital, such as Botswana, Ghana, Lesotho, and Mauritius, have experienced longer growth episodes. Likewise, the reduction in infant mortality is associated with longer growth spells while higher income inequality leads to shorter spells (though the effect is not statistically significant in this sample).

### *Structural Transformation and Technology Adoption*

Finally, we investigate to what extent economic diversification, structural reforms, and adoption of foreign technology are important engines of durable growth (Figure 2.16).



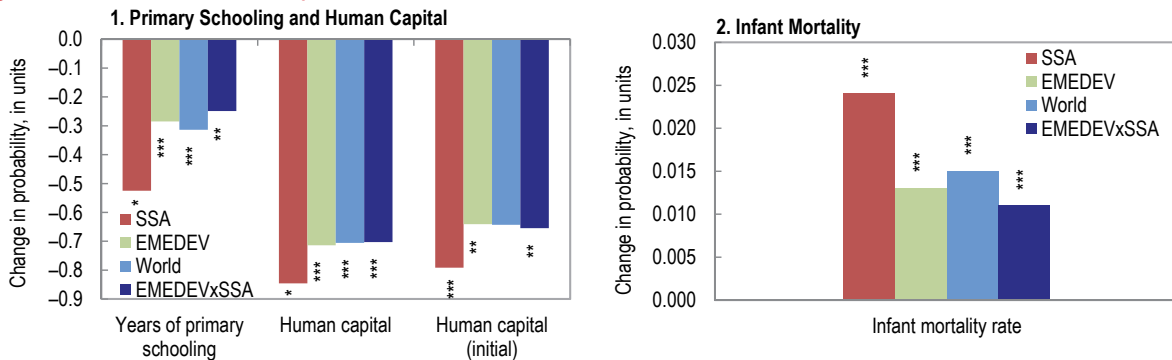
Figure 2.14. Institutions and Conflict



Source: Authors' calculations.

Note: The size of the bars corresponds to the change in the probability (measured in units) that the growth spell will end associated with a 1 unit change in each of the described variables. EMEDEV = all emerging and developing economies; EMEDEVxSSA = all emerging and developing economies excluding sub-Saharan Africa; SSA = Sub-Saharan Africa. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent levels.

Figure 2.15. Social and Human Development



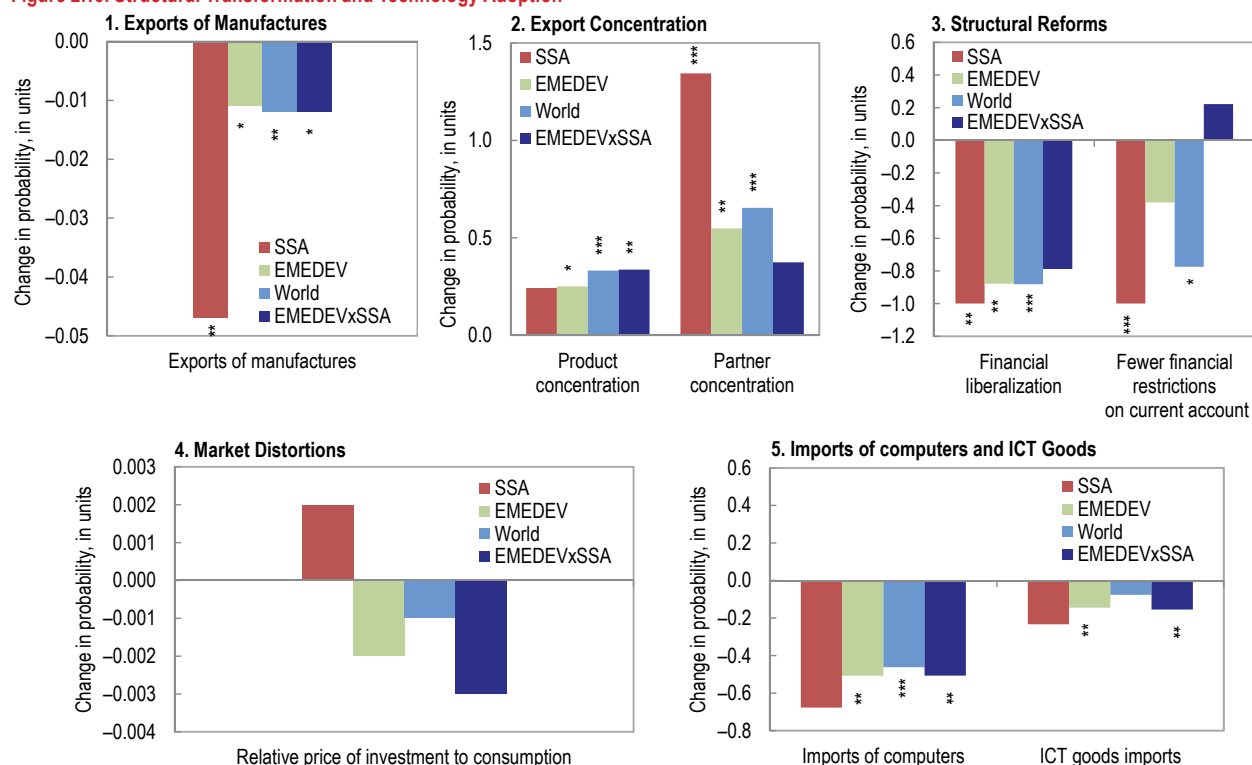
Source: Authors' calculations.

Note: The size of the bars corresponds to the change in the probability (measured in units) that the growth spell will end associated with a 1 unit change in each of the described variables. EMEDEV = all emerging and developing economies; EMEDEVxSSA = all emerging and developing economies excluding sub-Saharan Africa; SSA = sub-Saharan Africa. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent levels.

- Diversification, especially in terms of the composition of exports, is found to be an important factor supporting the resilience of growth episodes in the region, in line with findings in the literature that export concentration hampers the level of economic growth (Lederman and Maloney 2003). A high level of the share of exports of manufacturing products appears to be particularly beneficial, presumably because, unlike raw materials, manufacturing exports are associated with higher value-added content and less volatile prices. Countries with relatively high levels of product diversification, such as Tanzania and Kenya, are enjoying ongoing growth spells. Indeed, Giginishvili, Mauro, and Wang (2014) found that the strong growth of EAC countries during the last decade is explained by

the step-up in output and export diversification, and by the increase in sophistication and quality of exports. In the same vein, Botswana, Cabo Verde, Lesotho, and Mauritius managed to substantially increase the share of manufactures as a proportion of their exports while experiencing sustained growth episodes.

- Higher financial liberalization—proxied by an index reflecting interest rate restrictions, credit controls, competition restrictions, high state ownership, and the quality of banking supervision (IMF 2008)—is also associated with longer growth spells in the region, as it allows the economy to direct resources to the most profitable activities and to achieve efficiency gains.

**Figure 2.16. Structural Transformation and Technology Adoption**


Source: Authors' calculations.

Note: The size of the bars corresponds to the change in the probability (measured in units) that the growth spell will end associated with a 1 unit change in each of the described variables. EMEDEV = all emerging and developing economies; EMEDEVxSSA = all emerging and developing economies excluding sub-Saharan Africa; SSA = sub-Saharan Africa. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent levels.

- The relative price of investment to consumption goods—a proxy for market distortions—seems to be associated with shorter spells, although the coefficients are not statistically significant. This is consistent with the notion that distortions of market prices impact negatively on growth rates through their effects on investment decisions (Barro 1991).<sup>23</sup>
- Finally, while the adoption of (foreign) new technology—via, for example, imports of computers and other information technology products—seems to matter elsewhere to support growth spells, this is not the case for sub-Saharan Africa, where the coefficient does not come out significant. This probably reflects

still-low levels of such imports across the region, as well as limited data availability.

### Determinants of Growth Spells: A Summary View

To complete the analysis, we examine in a final stage the joint effect of factors and policies on the duration of growth spells. As many of these variables are likely to be correlated, this is a required step to assess their independent power in accounting for longer growth spells.

To that effect, we use duration analysis to relate the probability that the spell will end in the next year to a set of representative variables from all groups analyzed in the previous section, along with initial income.<sup>24</sup>

<sup>23</sup> Typically, the relative price of investment goods is higher in less-developed economies. This may reflect low productivity in the production of investment and traded goods relative to consumption goods, and barriers to the production or import of investment goods resulting from distortionary tax systems or monopolistic structures in the market for investment goods. See Hsieh and Klenow (2007).

<sup>24</sup> As discussed earlier, due to a relatively short number of spells and the unavailability of long time series, we avoid “general-to-specific” modeling. Instead, we include at least some variables from each of the groups examined in the previous section while maintaining a reasonable sample size.

Our full model includes the U.S. interest rate, change in the terms of trade, and the oil price change (exogenous factors); trade openness, capital account openness, inflation, exchange rate regime, the debt-to-GDP ratio, and the change in the investment rate (domestic policy variables); human capital and institutions as measured by Polity 2, a proxy for political stability (human and institutional factors); and a measure of market distortions (macro-structural policy variable). The average growth during the spell is added to reflect potential overheating, and an indicator variable for 2000–08 is added to capture differential effects from the decade starting in 2000.<sup>25</sup>

Results suggest that the duration of growth spells in sub-Saharan Africa is supported by improved monetary and fiscal policies, better political institutions, less market distortions, and a better external environment (see detailed results in Annex Table 2.3). In particular, increases in the investment rate, more trade openness, lower inflation, and a lower debt-to-GDP ratio tend to prolong growth spells in the region. In addition, a higher growth rate in the previous period increases the probability that a spell comes to an end—pointing to the risks associated with an overheated economy. At the same time, the results also suggest to additional benefits from improving political institutions (making them more democratic) and reducing market distortions associated with the high relative price of investment.<sup>26</sup>

To get a better sense for the importance of each factor or policy influencing growth spells in the region, we ask the following question: what is the change in the spell's expected duration if a factor or policy improves by 25 percentile points, starting from its median value (while keeping other factors constant)?

<sup>25</sup> The indicator variable receives the value of 1 during the period 2000–08 to capture effects from the period of booming commodity prices. Results are robust to the exclusion of this variable.

<sup>26</sup> The findings are robust to alternative specifications. Other potential determinants turned out to be nonsignificant, including a variable capturing the growth of trading partners, the current account deficit and its changes, financial flows and indicators of financial deepening (credit to the private sector and bank deposits to GDP), credit growth, and the private and public investment components of total investment individually.

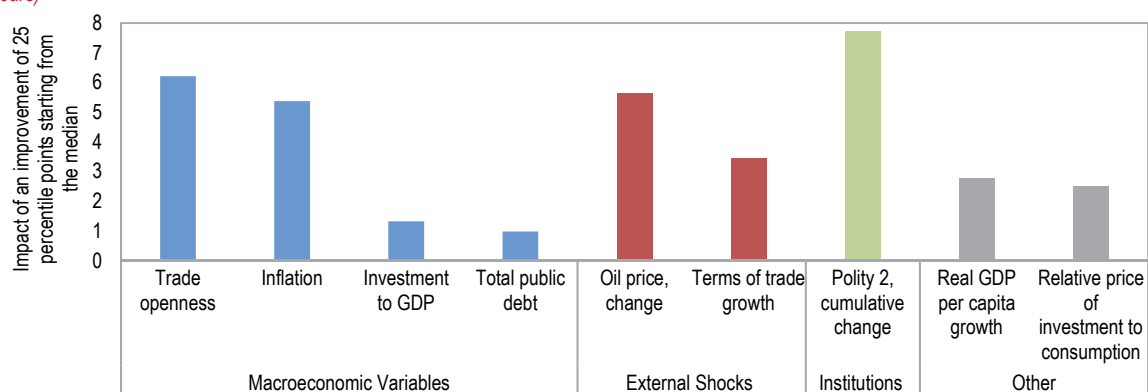
The main results are as follows (Figure 2.17):

- *Better policies sustain growth spells in the region:* (1) an acceleration in the change of investment to GDP increases the expected length of the spell by about 1.3 years, (2) a reduction in the debt-to-GDP ratio increases the expected length of the spell by about one year, (3) an increase in openness increases the expected length of the spell by six years, and (4) a reduction in inflation increases the expected length of the spell by 5.4 years.
- *Reduced market distortions help sustain growth spells:* a reduction in the ratio of the relative price of investment to consumption increases the expected length of the spell by 2.5 years.
- *A more favorable external environment is supportive of longer spells:* an improvement in the percent change of terms of trade increases the expected length of the spell by 3.4 years. Similarly, increases in the oil price are associated with an increase in the expected length of the spell of 5.7 years.<sup>27</sup>
- *Better institutional quality increases the duration of the spell:* an increase in improvements in the Polity 2 rating increases the duration of the spell by 7.7 years.
- *Signs of overheating decrease the expected duration of the spells:* a reduction in GDP per capita growth increases the expected duration of the spell by 2.8 years.

In summary, each of these factors or policies has an important effect on spell duration. For example, improvements by 25 percentile points in *each* policy variable from its median value (while keeping others constant) increases the length of the spell by one to six years, while a similar percentile points improvement in the institutional environment or exogenous factors raises the spell length by four to eight years.

<sup>27</sup> These results suggest that improvements in the terms of trade not only help to jump-start growth (as shown in the up-breaks analysis section), but they also have a significant impact on the duration of growth spells in the region. Differentiating the effects between resource-intensive and nonresource-intensive countries is not possible due to sample size.

**Figure 2.17. Sub-Saharan Africa: Impact on Spell Duration (Years)**



Source: Authors' calculations.

Note: Each bar shows the change in the expected duration of a growth spell (in numbers of years) if a variable improves by 25 percentile points from the median value in the sample of sub-Saharan African countries, while holding other variables constant.

Investigating how the same factors and policies affect the duration of growth spells in emerging and developing economies can shed light on similarities and differences in growth spells in the region compared to those in the rest of the world.<sup>28</sup> Our results suggest that lower inflation, good institutions, and lower government debt prolong growth spells both in sub-Saharan Africa as well as in the rest of the emerging and developing economies of the world. However, other results are more specific to particular groups: only in sub-Saharan Africa do we find that a higher investment-to-GDP ratio, positive developments in the terms of trade prolong growth spells. Similarly, trade openness appears to have a stronger positive effect in the region (suggesting a heavier reliance of sub-Saharan Africa on countries from different continents), while macro-structural distortions as captured by higher dispersion in the relative price of investment, seem to do more harm in sub-Saharan Africa. Overall, the results suggest that growth spells in sub-Saharan Africa are somewhat different from those in the rest of the world, as several determinants operate differently in the region.

## POLICY CONSIDERATIONS AND CONCLUDING REMARKS

Growth turnarounds and periods of sustained growth have become more common among countries in sub-Saharan Africa since the turn of the century. While this is clearly a positive development, the analysis in this chapter shows that, historically, growth spells in the region tend, on average, to last for shorter periods than elsewhere, exhibit larger swings, and often end in “hard landings.” Thus, the critical challenge in the context of the current economic difficulties faced by many countries in the region is to sustain spells for longer and avoid hard landings.

Historically, engineering growth up-breaks and transforming them into sustained periods of growth has been possible as a result of a number of factors and policies rather than one or two single driving sources. For example, a supportive external environment—be it better terms of trade or favorable global financial conditions—and improvements in the quality of institutions have clearly helped. However, our work shows that domestic macroeconomic policies play a critical role. These include sound fiscal policy to prevent excessive public debt accumulation, monetary policy geared toward low inflation, outward-oriented trade policies to make the best of opportunities offered by a globalized world, and macro-structural policies to reduce market distortions at the domestic level, with a view to both unleash the growth potential of the private sector and boost investment.

<sup>28</sup> Annex Table 2.3 compares our baseline multivariate estimation for sub-Saharan Africa and two comparator groups: all emerging and developing economies (EMEDEV), and all emerging and developing economies excluding sub-Saharan Africa (EMEDEV without SSA).

Where does that leave us today? Resource-intensive countries in sub-Saharan Africa have been severely affected by the slump in commodity prices. And while many other countries in the region continue to enjoy robust growth, some of those have started to see growth decelerate gradually and vulnerabilities emerge, as shown in Chapter 1. Furthermore, it is expected that the global environment will continue to provide little support for growth in the region, with growth rebalancing in China toward less resource-intensive sectors, commodity prices expected to remain low for a long period of time, aid flows expected to become more scarce, and growing risks of inward-looking policies across the globe.

The discussion above implies that the impetus to *revive* growth where it has faltered, and *sustain* growth where it has remained relatively strong, must come from inside. That is, it must come from a focus on macroeconomic and structural policies that support self-sustaining sources of growth:

- *For countries where growth has slowed markedly, the priority is to maintain macroeconomic stability and set the stage for a growth turnaround that can then be sustained.* Such policy adjustments need to be based on a comprehensive set of policies that reinforce each other. This includes improving fiscal balances through targeted cuts and measures that durably increase revenue to contain the increase in public debt, and ensuring that monetary policy is consistent with keeping inflation under control. It also means strengthening macro-structural policies that foster investment and help recover growth, as well as promoting openness and integration with the global economy, and improving human capital and more stable political environments. Our analysis indeed finds that all these policies are strongly associated with growth turnarounds and sustained growth spells.
- *For countries currently enjoying a growth spell, the focus should be on prolonging it and trying to avoid a hard landing.* Countries that are still growing robustly should rebuild buffers in comparatively favorable times to stem increases in public debt, as the analysis shows this is an important factor to sustain the length of growth episodes. Debt has been on an upward trend in many of these countries despite robust growth, and, going forward, some gradual fiscal consolidation is warranted, especially in the current environment of tighter and more volatile financial markets. It is also necessary to further strengthen monetary policy frameworks to ensure that objectives are centered around a price stability mandate, consistent with the findings of our analysis.
- *For all countries in the region, complementing macroeconomic policies with efforts to unlock the countries' growth potential is critical to the growth agenda.* These efforts include fostering educational development, advancing economic diversification to increase resilience to shocks, promoting regional and international trade integration, prioritizing growth-enhancing investment, invigorating macro-structural policies to reduce market distortions, and strengthening governance frameworks as well as the business climate to attract investment towards new sectors of growth. Concrete measures include investing in the development of human capital, increasing diversification of exports in terms of partners and products as well as increasing the share of manufactures in total exports, deepening technology adoption through imports of information technology goods, strengthening financial liberalization reforms, and reducing risks associated with investment, as evidenced in our empirical results.

## Annex 2.1. Methodology

### Structural Breaks

To construct the growth turning points, we follow Antoshin, Berg, and Souto (2008), who develop a variant of the Bai and Perron (1998) procedure to test for multiple structural breaks in time series when both the total number and the location of breaks are unknown.<sup>1</sup> The procedure requires setting in advance two parameters for the determination of structural breaks: the minimum possible number of years between potential breaks and the statistical significance to test the existence of those structural breaks ( $p$ ). We focus on a minimum number of years between breaks of five years ( $h = 5$ ), and a critical value of 10 percent ( $p = 0.10$ ), which maximize the number of accurately measured breaks for a reasonable minimum number of years between breaks.<sup>2</sup>

Using this method, we identify 184 up-breaks and 185 down-breaks in economic growth in 146 countries over the period 1950–2016. By construction, since we impose a minimum of five years between breaks, the empirical approach used to identify structural breaks cannot use the first and last five years of the estimation sample. As a result, for a country with 66 years of data and with sample  $h = 5$ , a total of 12 possible structural breaks can be identified, with the last possible break occurring in 2011. The breaks are grouped by level of income into advanced, emerging, and developing economies, with the latter group disaggregated into Asia, Middle East and North Africa, sub-Saharan Africa, and Latin America.

### Growth Spells

Using the identified up-breaks and down-breaks we follow Berg, Ostry, and Zettelmeyer (2012) to define “complete” growth spells as periods of time that (1) begin with a growth up-break followed by a period of at least 2 percent average per capita income growth; and (2) end with a growth down-break followed by a period of less than 2 percent average per capita income growth. The 2 percent rate of per capita growth has been used before in the literature, for example, by Berg, Ostry, and Zettelmeyer (2012), and is considered reasonable per capita growth for low-income and sub-Saharan countries. Similarly, “incomplete” growth spells can be defined as those that satisfy condition (1) and are ongoing at the end of the sample. A total of 80 complete and 67 incomplete spells are identified for the full sample.

### Changes in Variables at Turning Points

We follow Jones and Olken (2008) and use one-sample  $t$ -tests to examine the changes in the means of a large set of variables observed between the period before a break (and after the previous turning point) and the period after a break (and before the next turning point), for both up-breaks and down-breaks.

More specifically, to test changes in means, we calculate those changes at each break date. Then the mean change across breaks is obtained and tested (where the null hypothesis is that the mean change is equal to zero). The test compares the magnitude of the mean changes observed in up-breaks and down-breaks, irrespective of the direction (sign). We also apply symmetry tests, which are two-sample  $t$ -tests to evaluate whether the mean changes observed during up-breaks have the same magnitude as the mean changes observed during down-breaks. These tests allow for both the samples and variances of the mean changes in up-breaks and down-breaks to be different. The Satterthwaite approximation is used to take into account the measures of dispersion of both samples and the calculation of degrees of freedom for the  $t$ -test also considers the different samples and variances.

<sup>1</sup> This procedure has been used previously for the identification of structural breaks in growth rates by Berg, Ostry, and Zettelmeyer (2012) and Tsangarides (2012).

<sup>2</sup> Averaging of five years is also typically used in panel growth regressions as a unit of averaging. A larger minimum number of years between breaks (such as eight) also seems reasonable in order to reduce lower frequency fluctuations or cyclical factors, but may result in fewer spells. Results using  $h = 8$  yield similar conclusions concerning the distribution of breaks among groups of countries and time periods, as well as the range of fluctuations in the rates of growth.

## Duration Analysis

To study how the duration of a certain episode varies with covariates of interest, we take the previously identified growth spells and subject them to a duration analysis.<sup>3</sup> In general, survival models consist of two parts: (1) the baseline hazard function, which describes how the risk of an event happening changes over time at reference levels of covariates; and (2) the effect parameters, which describe how the hazard function varies in response to changes in the covariates (away from the reference level).

In this chapter, we are interested in the duration of growth spells. If we let  $T$  denote the duration of a growth spell, we can obtain the survival function  $S(t)$  as the complement of the cumulative distribution function  $F(t) = Pr(T \leq t)$ , that is,  $S(t) = 1 - F(t)$ . This reflects the probability that the spell under consideration does not end before time  $t$ .

From this setup, one can define the hazard rate (the probability that a spell ends at a particular time  $t$ , conditional on survival up to that time) as:

$$\lambda(t) = \lim_{h \rightarrow 0} \frac{Pr(t \leq T < t + h | T \geq t)}{h}.$$

This implies that, for small time intervals  $h$ , the probability of a spell ending during instant  $h$  is approximately equal to  $\lambda(t)h$ .

There are different ways to specify the hazard function: one can assume that it is constant over time, while it is also possible to be less restrictive and take a more general approach allowing for duration dependence. A particularly popular specification allowing for duration dependence is the proportional hazard model. It is built on the assumption that covariates are multiplicatively related to the hazard—implying that covariates have the same proportional effect on the hazard rate at all horizons. Mathematically, a proportional hazard model can be written as:

$$\lambda(t; X) = \lambda_0(t) \exp(X\beta),$$

where  $\lambda_0(t)$  is the baseline hazard,  $X$  is a vector of covariates that may influence the duration of a growth spell, and  $\beta$  is a vector of parameters measuring the semi-elasticity of the hazard with respect to the covariates. In our analysis, we follow Berg, Ostry, and Zettelmeyer (2012) in specifying a Weibull distribution for the baseline hazard  $\lambda_0(t)$ .

Finally, when estimating hazard models, any feedback from the duration of a spell to the covariates may be problematic. Consequently, we assume that the hazard at time  $t$  only depends on lagged realizations of the covariates (not on current or future ones); hence, our empirical implementation uses lagged values of covariates in our estimations.

<sup>3</sup> See Wooldridge (2002, Chapter 20) for further details. The approach follows Berg, Ostry, and Zettelmeyer (2012) and Tsangarides (2012).

**Annex 2.2. Variable List and Sources****Annex Table 2.2. Variable List and Sources**

Description	Details	Source
Real GDP per capita growth	2011 U.S. dollars at PPP, extended using WEO until 2016, percent change	PWT 9.0
Initial GDP per capita	U.S. dollars in PPP	PWT 9.0
Investment to GDP	In percent of GDP	PWT 9.0
Trade openness	Exports plus imports, in percent of GDP	PWT 9.0
Population growth	Percent change	PWT 9.0
Overall fiscal balance	In percent of GDP	WEO
Total government revenue	In percent of GDP	WEO
Foreign direct investment, net	In percent of GDP	WEO
Total public debt	In percent of GDP	FAD
External debt	In percent of GDP	WEO
Log (1 + inflation)	Consumer price index	WEO
Crude oil price	Simple average of Brent, WTI, and Fateh spot prices	WEO
Terms of trade growth	Goods, U.S. dollars, percent change	WEO
Capital account openness	Normalized from 0 to 1	Chinn-Ito database (2014)
Shadow federal funds rate	Interest rate	Krippner (2016)
Political stability (Polity 2)	Modified polity score +10 (strongly democratic) to -10 (strongly autocratic)	Polity IV dataset
More constraints on the Executive (Executive constraints)	0–7 scale, 1 is unlimited authority and 7 is executive parity	Polity IV dataset
Political stability (Political risk)	Composite index, 0–100 scale, higher numbers suggest improvement	ICRG dataset
Investment profile	0–12 scale, higher numbers suggest improvement	ICRG dataset
Fewer internal conflict (Internal conflict)	0–12 scale, higher numbers suggest improvement	ICRG dataset
Law & order	0–6 scale, higher numbers suggest improvement	ICRG dataset
Fewer civil war (Civil war)	0–4 scale, higher numbers suggest improvement	ICRG dataset
Years of primary schooling	Average number of years	Barro and Lee database (2013)
Human capital	Index	PWT 9.0
Aid	Net official development assistance and aid received in percent of GDP	WDI
Gini coefficient	Gini index (World Bank estimate)	WDI
Infant mortality rate	Per 1,000 live births	WDI
De facto exchange rate regime	DF: hard=1 conventional=2 basket=3 band=4 crawl=5 managed=6 independent=7	October 2016 REO Chapter 2
Exchange rate misalignment calculations	In percent of equilibrium level / Dummy variable	IMF staff calculation/PWT
Product concentration	Index	SPR
Partner concentration	Index	SPR
Manufactured exports	Percent of merchandise exports	WDI
ICT goods imports	Percent of total goods imports	WDI
Mobile phone lines	Per 100 people	WDI
Imports of computers	Percent of total imports	Comtrade
TFP (Total factor productivity)	Constant national prices (2011=1)	PWT 9.0
Relative price of investment to consumption	Ratio	PWT 9.0
Financial liberalization	Index	IMF (2008)
Fewer financial restrictions on current account	Index	IMF (2008)

Note: FAD = IMF Fiscal Affairs Department; ICRG = International Country Risk Guide; ICT = information and communications technology; PPP = purchasing power parity; PWT = Penn World Tables; SPR = IMF, Strategy, Policy, and Review Department; WDI = World Bank, World Development Indicators; WEO = IMF, *World Economic Outlook*.



## Annex 2.3. Duration Analysis

Annex Table 2.3. Multivariate Duration Regressions for Different Country Groups

Variables	(1)	(2)	(3)
	SSA	EMEDEV	EMEDEV without SSA
	Estimated Effect		
<u>External Shocks</u>			
U.S. interest rates	1.021 (0.110)	1.046 (0.0437)	1.037 (0.0529)
Oil price, change	0.935 *** (0.0187)	1.005 (0.0209)	1.032 (0.0293)
Terms of trade growth	0.959 ** (0.0161)	0.996 (0.0135)	0.996 (0.0165)
<u>Macroeconomic Indicators</u>			
Investment to GDP, change	0.923 * (0.0403)	0.962 (0.0429)	0.953 (0.0332)
Total public debt to GDP	1.007 ** (0.00343)	1.006 ** (0.00258)	1.007 (0.00812)
Trade openness	0.98 * (0.0117)	0.992 (0.00686)	0.994 (0.0109)
Capital account openness	1.359 (0.797)	1.071 (0.173)	1.086 (0.230)
Inflation	3.242 ** (1.770)	1.472 * (0.302)	1.527 * (0.343)
De facto exchange rate regime	0.756 (0.210)	0.81 ** (0.0740)	0.849 (0.0882)
<u>Institutions</u>			
Polity 2, cumulative change	0.815 ** (0.0652)	0.963 (0.0280)	1.003 (0.0311)
<u>Social and Human Development</u>			
Human capital	0.159 (0.355)	0.464 (0.333)	0.355 (0.322)
<u>Other</u>			
Real GDP per capita growth	1.115 *** (0.0321)	1.049 *** (0.0138)	1.064 ** (0.0286)
Initial GDP per capita	4.691 (6.359)	1.531 (0.454)	1.052 (0.422)
Population growth	1.073 (0.671)	1.004 (0.232)	1.104 (0.251)
Relative price of investment to consumption	1.015 ** (0.00582)	0.994 (0.00574)	0.982 *** (0.00638)
Decade dummy 2000	1.380 (1.634)	0.547 (0.256)	0.424 (0.249)
Observations	326	1,076	750
Subjects	28	81	53
Failures	8	29	21
$\alpha$	3.956	1.557	1.342
$p$ -value	0.00	0.00	0.00

Source: Authors' calculations.

Note: The table reports exponentiated regression coefficients (so-called "hazard ratios"), where a hazard ratio larger than 1 implies that increases in the associated variable shortens spells, while a ratio smaller than 1 implies that the covariate has a "protective" effect, that is, it helps sustain the spell. For instance, a hazard ratio of 1.05 implies that a unit increase in the associated regressor increases the risk that a growth spell will end in the next period by 5 percent. EMEDEV = all emerging and developing countries; SSA = sub-Saharan Africa. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent levels.

## REFERENCES

- Acemoglu, D., S. Johnson, J. Robinson, and Y. Thaicharoen. 2003. "Institutional Causes, Macroeconomic Symptoms: Volatility, Crises, and Growth." *Journal of Monetary Economics* 50: 49–123.
- Aizenman J., and M. Spiegel. 2007. "Takeoffs." NBER Working Paper No. 13084. National Bureau of Economic Research, Cambridge, MA.
- Antoshin, S., A. Berg, and M. Souto. 2008. "Testing for Structural Breaks in Small Samples." Working Paper No. 75. International Monetary Fund, Washington, DC.
- Bai, J., and P. Perron. 1998. Estimating and Testing Linear Models with Multiple Structural Change. *Econometrica* 66: 47–78.
- Barro, R. J. 1991. "Economic Growth in a Cross Section of Countries." *The Quarterly Journal of Economics* 106: 407–43.
- Becker, T., and P. Mauro. 2006. "Output Drops and the Shocks that Matter." IMF Working Paper No. 06/172. International Monetary Fund, Washington, DC.
- Berg, A., J. Ostry, and J. Zettelmeyer. 2012. What Makes Growth Sustained? *Journal of Development Economics* 98: 149–66.
- Gigineishvili, N., P. Mauro, and K. Wang. 2014. "How Solid Is Economic Growth in the East African Community?" IMF Working Paper 14/150. International Monetary Fund, Washington, DC.
- Hausmann, R., L. Pritchett, and D. Rodrik. 2005. "Growth Accelerations." *Journal of Economic Growth* 10: 303–29.
- Hausmann, R., F. Rodriguez, and R. Wagner. 2006. "Growth Collapses." Working Paper No. 136. Center for International Development, Cambridge, MA.
- Hsieh, C-T and Pete Klenow. 2007. "Relative Prices and Relative Prosperity." *American Economic Review*, 98(3): 562–85.
- International Monetary Fund (IMF). 2008. "Structural Reforms and Economic Performance in Advanced and Developing Countries." Research Department Board Paper. International Monetary Fund, Washington, DC.
- Jerzmanowski, M. 2006. "Empirics of Hills, Plateaus, Mountains and Plains: A Markov-Switching Approach to Growth." *Journal of Development Economics* 81: 357–85.
- Jones, B. F., and B. A. Olken. 2008. "The Anatomy of Start-Stop Growth." *Review of Economics and Statistics* 90: 582–87.
- Krippner, L. 2016. "Documentation for Measures of Monetary Policy." Reserve Bank of New Zealand. Wellington, New Zealand.
- Lederman, D., and W.F. Maloney. 2003. "Trade Structure and Growth." Policy Research Working Paper No. 3025. World Bank, Washington, DC.
- McAuliffe, C., S. Saxena, and M. Yabara. 2012. "The East African Community: Prospects for Sustained Growth." IMF Working Paper 12/272. International Monetary Fund, Washington, DC.
- Pritchett, L. 2000. "Understanding Patterns of Economic Growth: Searching for Hills Among Plateaus, Mountains, and Plains." *World Bank Economic Review* 90: 221–50.
- Rajan, R.G., and A. Subramanian. 2008. "Aid and Growth: What Does the Cross-Country Evidence Really Show?" *Review of Economics and Statistics* 90: 643–65.
- Robinson, D., M. Gaertner, and C. Papageorgiou. 2011. "Tanzania: Growth Acceleration and Increased Public Spending with Macroeconomic Stability." In *Yes, Africa Can: Success Stories from a Dynamic Continent*, edited by P. Chuhan-Pole and M. Angwafo. Washington, DC: World Bank.
- Rodrik, D. 2008. "The Real Exchange Rate and Economic Growth." *Brookings Paper on Economic Activity*: Fall.
- Tsangarides, C. G. 2012. "Determinants of Growth Spells: Is Africa Different?" IMF Working Paper No. 12/227. International Monetary Fund, Washington, DC.
- Wooldridge, J. M. 2002. *Econometric Analysis of Cross-Section and Panel Data*. Cambridge, MA: The MIT Press.

### 3. The Informal Economy in Sub-Saharan Africa

The informal economy is a key component of most economies in sub-Saharan Africa, contributing between 25 and 65 percent of GDP and accounting for between 30 and 90 percent of total nonagricultural employment. While international experience indicates that the share of the informal economy declines as the level of development increases, most economies in sub-Saharan Africa are likely to have large informal sectors for many years to come, presenting both opportunities and challenges for policymakers.

The precise nature of the informal economy will differ from country to country. In this chapter the informal economy is defined as including (1) household enterprises that have some production at market value but are not registered;<sup>1</sup> and (2) more broadly, underground production, where productive activities are performed by registered firms but may be concealed from the authorities to avoid compliance with regulations or the payment of taxes, or are simply illegal. The informal economy as broadly defined exists to varying degrees in all countries, but the narrower definition of the informal economy is likely more prevalent in low-income countries. This chapter will henceforth refer to the narrower definition as the informal sector or household enterprises, and the broader definition as the informal economy.

On the positive side, the informal sector provides a welcome pool of jobs—this is particularly important in countries where the demographics are such that there is a large and growing working-age population that outstrips the pace of job creation in the formal sector. At the same time, however, the informal sector tends to contain relatively low productivity activities, so that a large informal sector perpetuates low productivity in the economy. Thus as the share of the formal sector increases—either by growth

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This chapter was prepared by a team led by Ali Mansoor and Cemile Sancak and comprised of Leandro Medina, Romain Bouis, Hilary Devine, Mehmet Cangul, and Frank Wu, with contributions from Luisa Charry, Yun Liu, Manabu Nose, Alun Thomas, and Arina Viseth.

<sup>1</sup> Household enterprises are microenterprises, as inferred from household surveys, that are comprised of persons who are earning money but not in salaried employment. Subsistence agriculture is included if its production is sold.

of formal sector entities or through the movement of informal sector entities into the formal sector—productivity gains are likely to materialize and the tax base is likely to expand, facilitating the revenue mobilization required to finance public services to sustain the development process.

The challenge for policymakers, therefore, is to create an economic environment in which the formal sector can thrive while creating opportunities for those working in the informal sector to maintain or improve their living standards.

To assess and identify the steps required to create such an environment, this chapter first examines the size of the informal economy in sub-Saharan Africa and how it compares to other regions. As there is considerable variation in the estimated sizes of the informal economies in sub-Saharan African countries, this chapter then seeks to identify factors that are associated with their relative sizes. It also investigates the interaction between informality and economic performance. Lastly, it draws on this analysis to identify policies that could promote the expansion of formal sector activity, and in the process unleash productivity and create jobs.

The main findings are as follows:

- The size of the informal economy is large in sub-Saharan Africa, especially in oil-exporting and fragile states, averaging 38 percent of GDP during 2010–14. The share of informal employment averages 60 percent of total nonagricultural employment.
- As household enterprises act as a safety net for the large and growing working-age population, authorities need to apply a balanced approach in their policies to formalize the informal sector, focusing on nurturing productivity gains rather than attempting to increase tax revenues from household enterprises. On the other hand, for firms that are above the tax threshold but choose to evade taxes either partially or fully, tax policy and revenue administration should work to improve tax compliance.

- To help expand the scope of the formal sector and facilitate the transition of resources from the informal to the formal sector, the authorities need to focus on improving access to finance and fostering product market efficiency. Deepening financial markets is possible if the overall business environment is friendly to small and medium-sized enterprises (SMEs). Particularly, important components of product markets are the cost to export and the cost of enforcing contracts together with access to electricity.

## SIZE AND NATURE OF THE INFORMAL ECONOMY

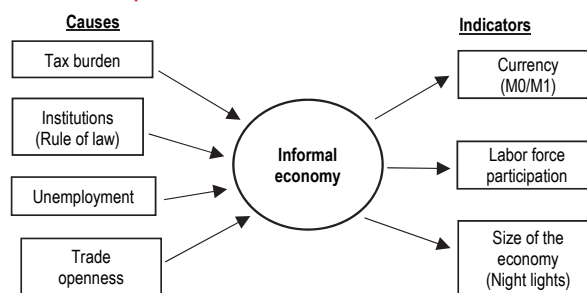
As the informal economy cannot be directly observed, its magnitude needs to be estimated. There are, broadly, three approaches in the literature: direct estimates through surveys; indirect estimates using one indicator of the informal economy (for example, electricity consumption or currency demand); and parametric models (see Annex 3.1 for a general description of these approaches). This chapter uses a parametric model, the Multiple Indicator–Multiple Cause (MIMIC) Model.<sup>2</sup>

The MIMIC Model uses indirect measures of the entire economy to derive the size of the informal economy that is “unobserved” in the surveys that form the basis of the national accounts. It estimates the unobserved informal sector by explicitly considering the multiple causes of the existence and growth of the informal economy, as well as its multiple effects (Figure 3.1).

The MIMIC Model in this chapter covers a sample of 140 countries during 1991–2014. Moreover, it has been refined to respond to past criticisms of

<sup>2</sup> The MIMIC model was first used by Frey and Weck-Hanneman (1984) to estimate the size of the informal economy in countries in the Organisation for Economic Co-operation and Development. It was later used in a number of studies, including Loayza (1997) and Schneider, Buehn, and Montenegro (2010).

**Figure 3.1. Estimation of the Informal Economy: The Multiple Indicator–Multiple Cause Model**



Source: Prepared by the authors.

the methodology.<sup>3</sup> The MIMIC Model relies on the following observable drivers of the informal economy:

- Tax burden.* A larger tax burden is likely to encourage more economic activity to remain in the informal economy.
- Institutional development.* Lack of respect for the law would encourage informal activity.
- Official unemployment rate.* Higher unemployment rates would indicate poorly functioning labor markets with labor not being absorbed into the formal sector.
- Trade openness.* Trade liberalization could reduce informality by increasing opportunities in the globally competitive part of the economy and, as a consequence, shift resources from the informal sector.

The MIMIC Model also uses measurable indicators of the informal economy, namely:

- Currency as a fraction of broad money, as people engaged in the informal economy usually conduct their activities in cash.
- Labor force participation.
- A measure of the size of the economy using night lights. Data on light intensity from outer space are employed as a proxy for the “true”

<sup>3</sup> A key criticism is that most studies using this methodology are subject to endogeneity, as they use GDP on both sides of the MIMIC equation, that is, GDP per capita as a cause, and growth of GDP per capita as an indicator. Annex 3.2 explains how the MIMIC model has been refined here to address past shortcomings.

economic growth achieved by countries, which is independent of GDP measures traditionally used and also reduces the endogeneity concerns in previous MIMIC models.

The MIMIC methodology uses the association between the observable causes and the effects of an unobserved variable, in this case the informal economy, to estimate the dynamics of the variable itself.<sup>4</sup> We then apply these estimated dynamics to a starting value—chosen to be 2000 and estimated for each country by Schneider (2007) using a currency demand model—to obtain annual values of the informal economy as a share of GDP.

Our estimates suggest significant heterogeneity in the size of informal economies in sub-Saharan Africa, ranging from a low of 20 to 25 percent in Mauritius, South Africa, and Namibia to a high of 50 to 65 percent in Tanzania and Nigeria (Figure 3.2).

The informal economy in sub-Saharan Africa remains among the largest in the world, although this share has been very gradually declining, as seems to be the case globally (Figure 3.3, panel 1). Informality appears to be persistent even in advanced economies, which suggests that, even with reforms, the shift from informal to formal will take time. The sub-Saharan Africa unweighted average share of informality reached almost 38 percent of GDP during 2010–14. This is surpassed only by Latin America and the Caribbean, at

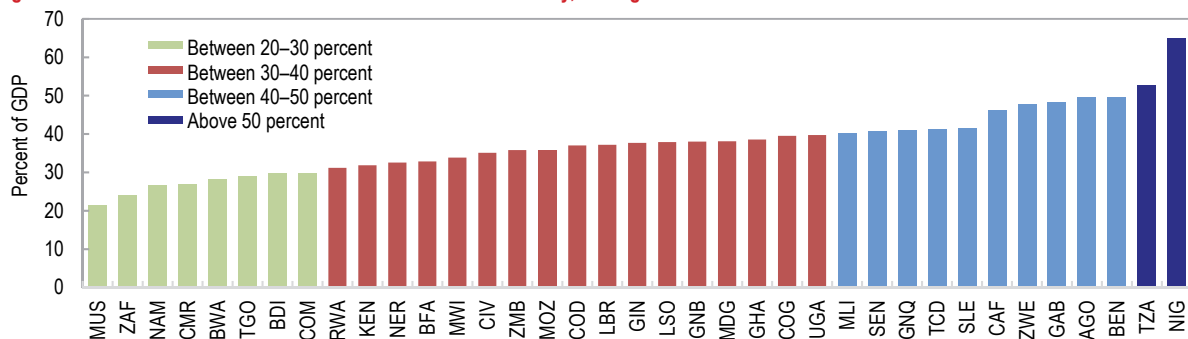
40 percent of GDP and compares with 34 percent of GDP in South Asia, and 23 percent of GDP in Europe. In member countries of the Organisation for Economic Co-operation and Development (OECD), the informal sector is estimated to account for 17 percent of GDP.

Informality seems to fall with the level of income, likely reflecting higher government capacity and better incentives toward formality in higher-income economies (Figure 3.3, panel 2).

That global trait also holds within sub-Saharan Africa, as the informal economy averages 40 percent in the region's low-income countries and 35 percent in its middle-income countries (Figure 3.3, panel 3). Oil exporters are more likely to harbor informality, with an informal economy close to 50 percent of GDP.

While per capita income level is, on average, an important indicator of informality, it is not a determining indicator, as demonstrated by similar informality levels in sub-Saharan Africa and Latin America and the Caribbean. Countries with similar per capita income levels can have significantly different informality levels based on the evolution of their drivers of informality, such as trade openness and institutions, as captured in the MIMIC Model (for example, Benin and Togo, as confirmed also by their national accounts statistics, as seen in Table 3.1, and Mauritius and Gabon, as seen in Figure 3.4, panels 1 and 2).

**Figure 3.2. Sub-Saharan Africa: Estimates of the Informal Economy, Average over 2010–14**

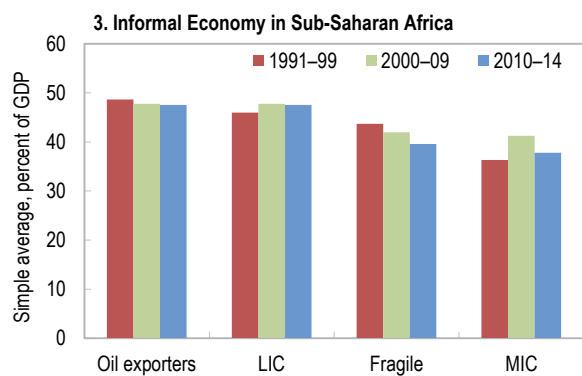
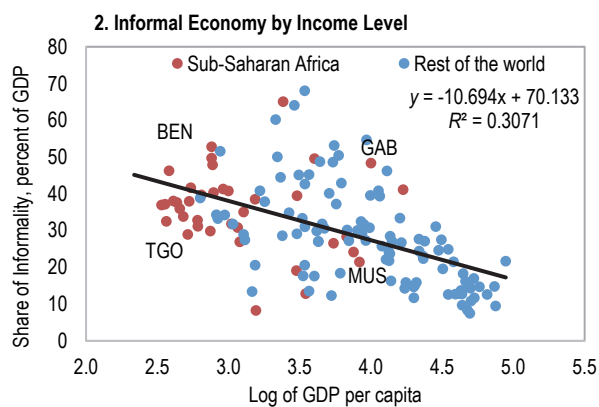
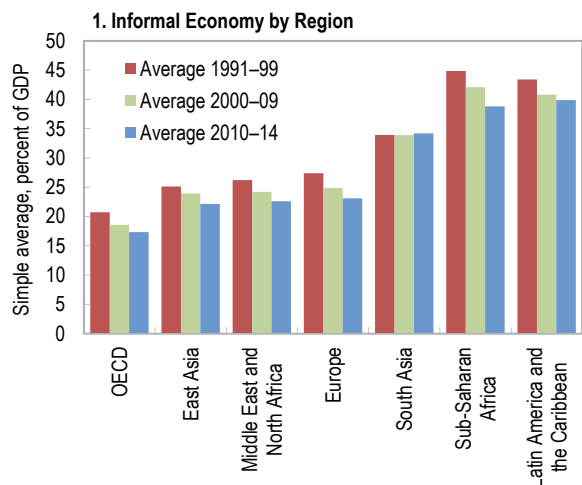


Source: IMF staff calculations.

Note: Excludes Cabo Verde, Eritrea, Ethiopia, The Gambia, São Tomé and Príncipe, Seychelles, and South Sudan due to lack of an informality measure. See page 72 for country abbreviations.

<sup>4</sup> The model consists of two parts, a structural equation model that determines the unobserved variable by a set of exogenous causes, and the measurement model using maximum likelihood as the fitting function.

**Figure 3.3. Informal Economy by Region, Income Level, and Type of Economy**



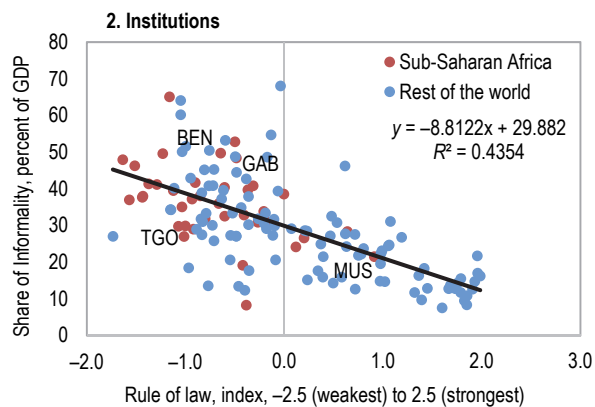
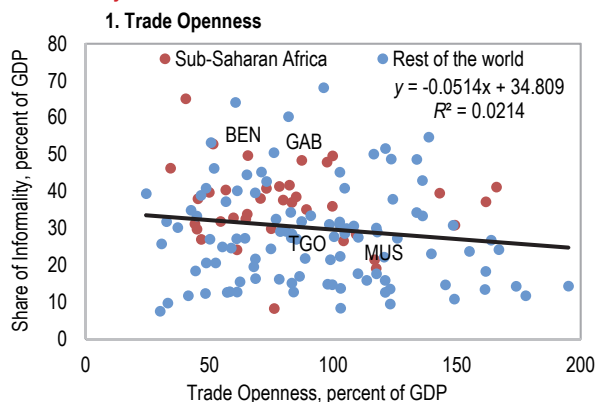
Source: IMF staff calculations.  
 Note: LIC = low-income countries; MIC = middle-income countries;  
 OECD = Organisation for Economic Co-operation and Development.  
 See Annex Table 3.4.1, page 66 for country classifications.

**Table 3.1. Selected Sub-Saharan African Countries: Comparison of Informality Rankings between Multiple Indicators**

Informality Level	Country	National Accounts	MIMIC (Rank)
Low	Côte d'Ivoire	1	3
Low	Togo	2	1
Low	Burkina Faso	3	2
Medium	Senegal	4	6
Medium	Guinea	5	4
Medium	Guinea-Bissau	6	5
High	Mali	7	7
High	Benin	8	8

Source: IMF staff calculations.  
 Note: Correlation: 0.73 Spearman's Rank Correlation: 0.857\*\*\*;  
 MIMIC = Multiple Indicator—Multiple Cause Model.

**Figure 3.4. Trade Openness and Institutions as Drivers of Informality**



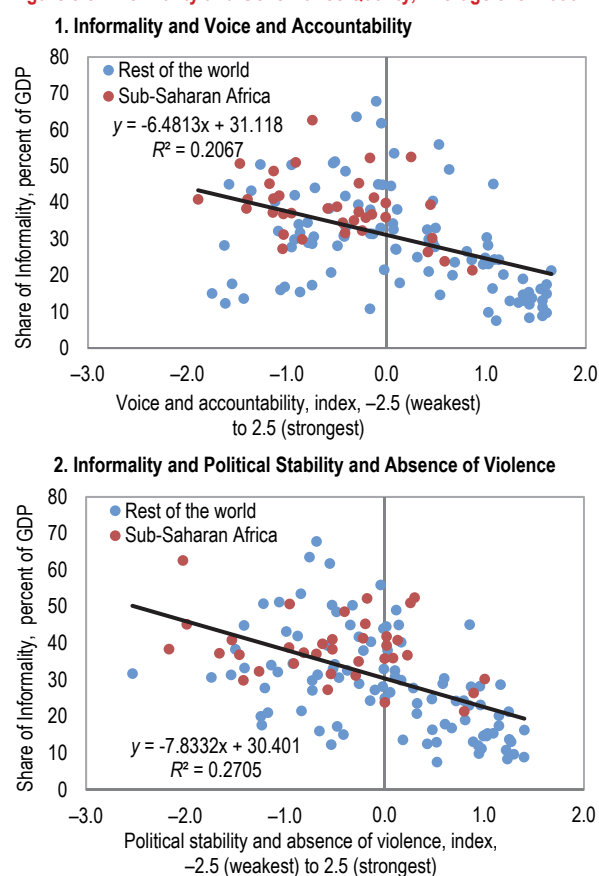
Sources: World Bank, World Governance Indicators; and IMF staff calculations.

Other institutional indicators, as measured by various subcomponents of the Worldwide Governance Indicators, are also found to be inversely related to the size of the informal economy (Figure 3.5).<sup>5</sup>

### How Reliable are Estimates of the Size of the Informal Economy?

The robustness of the MIMIC estimates was cross-checked using two approaches. First, an alternative and fully independent approach, the Predictive Mean Matching method (PMM) was used (Rubin 1987). This alternative method treats informality as a missing data problem (Little and Rubin 1987). The objective is to match the countries where survey data exist on the size of the informal

Figure 3.5. Informality and Governance Quality, Average over 2006–14



Sources: World Bank, World Governance Indicators; and IMF staff calculations.

<sup>5</sup> The Worldwide Governance Indicators cover six key dimensions of governance: (1) voice and accountability; (2) political stability and absence of violence; (3) government effectiveness; (4) regulatory quality; (5) rule of law; and (6) control of corruption. The higher the indicator, the better the quality of governance.

economy to those where data are missing.<sup>6</sup> The distinctive feature of the PMM is that it provides a tool for a matching process, rather than a regression model, to estimate the size of the informal economy. The groupings of the countries based on the estimated size of their informal economy are broadly aligned with the MIMIC findings (see Annex 3.2 for further details on the PMM approach).

A second robustness test is to check the MIMIC estimates with the estimates of statistical agencies of the eight sub-Saharan African countries that publish their estimates of the size of the informal economy (Table 3.1). The rank correlation is high (86 percent) between the MIMIC results and these estimates. While the estimates of statistical agencies are useful, their applicability is limited for cross-country comparisons. First, not all countries publish the information. Second, methodologies and sampling methods may affect the comparability of cross-country estimates. Finally, estimates may be rooted in approaches that fail to take account of recent changes in the domestic economy. In contrast, the MIMIC Model estimates the size of the informal economy for a large number of countries producing comparable results.

### Causes and Nature of Informality in Sub-Saharan Africa

What drives this large degree of informality in the region? Survey data provide some insights.<sup>7</sup> In terms of the experience of its populations as entrepreneurs, sub-Saharan Africa has the highest rate of total early-stage entrepreneurial activity and nascent entrepreneurship, which respectively measure the share of the working-age population that is in the process of starting a business and the share whose business is less than four months old (Figure 3.6, panel 1).

<sup>6</sup> Forty-nine countries were identified as having survey-based estimates of the size of their informal economies, including nine in sub-Saharan Africa.

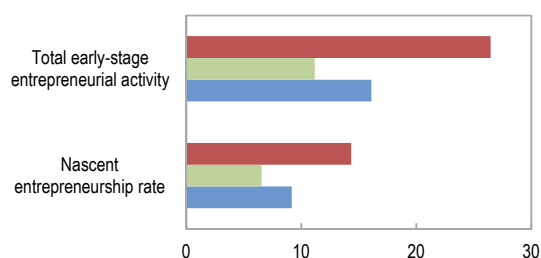
<sup>7</sup> This section is based on the two surveys conducted by the Global Entrepreneurship Monitor (GEM): The Adult Population Survey (APS) and the National Expert Survey (NES). While the APS collects primary data on entrepreneurship and provides key information on the entrepreneurial behavior and attitudes of individuals, the NES monitors the national context, focusing on the factors that are expected to have a specific impact on entrepreneurial attitudes and activities. Entrepreneurship and self-employment data have been commonly used as proxies for informal sector activities.

As in other parts of the world, the primary reported motivation for becoming an entrepreneur is an improvement-driven opportunity. However, about a third of the new entrepreneurs in sub-Saharan Africa report that they chose to be entrepreneurs out of necessity, slightly higher than other parts of the world (Figure 3.6, panel 2).

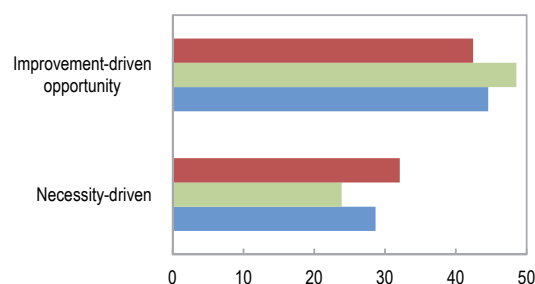
Nevertheless, sub-Saharan Africa has the most positive attitude towards entrepreneurship, with the largest share of its working-age population that considers entrepreneurship as a desirable career choice and believes that high status is associated with the activity (Figure 3.6, panel 3).

**Figure 3.6. Main Attributes of Informality**

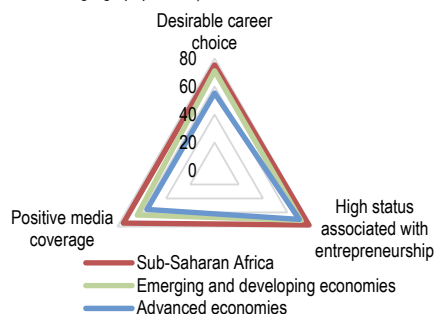
**1. Types of Entrepreneurship, Average over 2010–15**  
(Share of working-age population)



**2. Motivations of Entrepreneurship, Average over 2010–15**  
(Share of total early-stage entrepreneurial activity)



**3. How Entrepreneurial Activity is perceived: Societal Values on Entrepreneurship, Average over 2010–15**  
(Share of working-age population)



Source: Global Entrepreneurship Monitor (GEM) database.

The policy challenge is, therefore, to create an environment where small firms—in both the formal and informal sectors—can thrive and grow. Such an environment that is supportive of SMEs can, as discussed in Box 3.1, facilitate the expansion of the formal sector.

## INTERACTION BETWEEN INFORMALITY AND ECONOMIC PERFORMANCE

Given the relatively large size of informality in sub-Saharan Africa, how does this impact economic outcomes?

### Informality as a Safety Net

In the absence of sufficient opportunities in the formal sector, informal activity is an essential safety net that provides employment and income to a large number of people who might otherwise be bound to poverty. Surveys by the International Labour Organization (ILO) report that 30 to 90 percent of employment in the nonagricultural sector occurs in the informal sector in some sub-Saharan African countries (Table 3.2).<sup>8</sup>

Household surveys also confirm that the informal sector plays an important role in employment in sub-Saharan Africa. Between 55 and 75 percent of nonagricultural employment in low-income and resource-rich countries in sub-Saharan Africa occurs in household enterprises (Figure 3.7).<sup>9</sup> The distribution of salaried employment and household enterprises differs according to the income level of the country. As expected, the upper-middle-income countries have the highest ratio of salaried workers among nonagricultural workers. On the other hand, resource-rich countries have the highest ratio of household enterprises in all income groups, consistent with the MIMIC estimations of the informal sector.

Information on per capita consumption from household surveys supports the view that household enterprises serve to improve opportunities relative to the agricultural sector. Figure 3.8 shows the share of workers in agriculture and household

<sup>8</sup> The numbers reported by the ILO suggest that the share of informal employment in total employment is generally higher than the share of the informal economy in the total economy.

<sup>9</sup> Fox and others (2013).



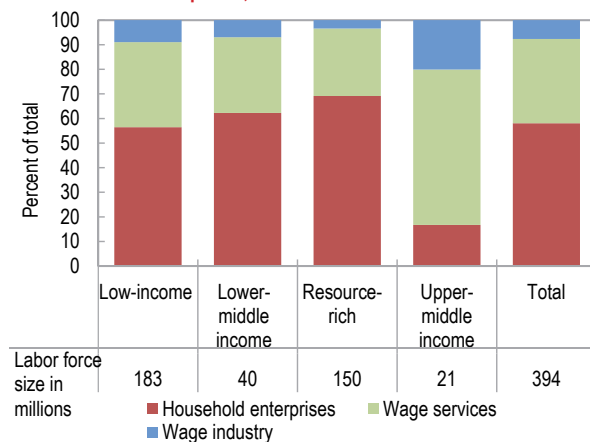
**Table 3.2. Sample of Sub-Saharan African Countries: Informal Employment, 2004–12**  
(Percent)

Year	Country	Share of Informal Employment in Nonagricultural Employment
2010	South Africa	33
2008	Lesotho	35
2008	Namibia	44
2010	Liberia	60
2008	Zambia	70
2006	Tanzania	76
2004	Mali	82
2012	Madagascar	89

Source: International Labour Organization (ILO).

Note: Countries listed are those for which data are available.

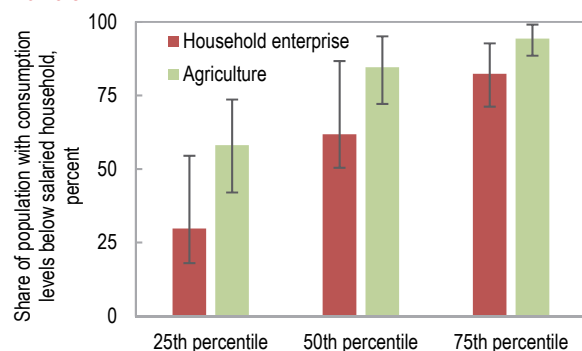
**Figure 3.7. Sub-Saharan Africa: Distribution of Salaried Employment and Household Enterprises, 2010**



Sources: Household surveys; and IMF staff calculations.

Note: See Annex Table 3.4.1, page 66 for country classifications. Resource-rich countries include Angola, Chad, Democratic Republic of Congo, Republic of Congo, Guinea, Nigeria, and Zambia.

**Figure 3.8. Sample of Sub-Saharan African Countries: Comparison of Consumption across Household Enterprises and Agricultural Workers**



Sources: Household surveys for Cameroon, Ghana, Mali, Rwanda, Uganda, and Zambia; and IMF staff calculations.

Note: The percentiles correspond to the percentiles of the income distribution of salaried workers. The black bars represent the range across countries in the sample.

enterprises that have per capita consumption levels below that of salaried workers at the 25th, 50th, and 75th percentiles in six low-income countries in Africa. Workers in the agricultural sector have per capita consumption levels considerably lower than households with salaried workers, with on average 60 percent of agricultural workers having consumption levels below the 25th percentile of salaried workers. The situation is considerably better for household enterprises, although the consumption level remains below that of salaried employment at the 50th and 75th percentiles. This is also the case at the 25th percentile for all except Rwanda and Uganda, where consumption is similar to that of salaried workers.

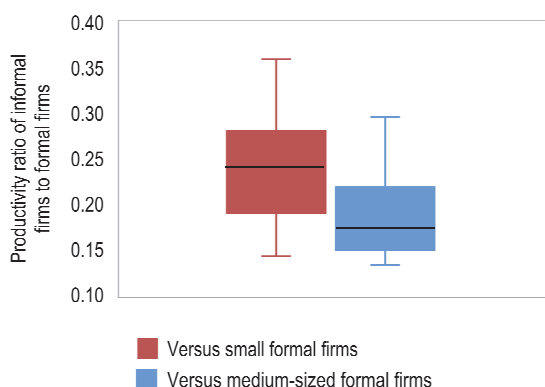
### Informality and Productivity

In a context where employment is particularly large in the informal sector, productivity in this sector has important implications for economic performance. Calculations based on World Bank Enterprise Surveys suggest that the productivity level of informal firms is significantly lower than formal firms (Figure 3.9).<sup>10,11</sup> On average, the productivity of informal firms is only 25 percent that of small formal firms and 19 percent of medium-sized formal firms, based on real output per employee. This likely reflects a lower level of physical capital and skill levels of workers.

There are also large country variations in the informal-formal productivity gap that reflect different levels of relative inefficiency of the informal sector. The productivity gap in real output per employee is particularly wide in some countries (for example, Kenya, Namibia, Niger, Senegal, Swaziland, and Tanzania) where more productive

<sup>10</sup> Data on informal firms come from the informal sector and microenterprise surveys that cover unregistered firms that exist without the government's knowledge. Following La Porta and Shleifer (2008), the data on formal firms are taken from the World Bank's Enterprise Surveys, in which firms are grouped into three categories according to the number of employees: fewer than 20 (small), between 20 and 99 (medium), and 100 or more (big).

<sup>11</sup> The informal-formal productivity gap is computed based on real output per employee in purchasing power parity terms for 16 sub-Saharan African countries. Firm productivity is often measured by nominal sales, but the sales-based measurement combines both physical output and prices. Given the absence of price indices for informal firms, real output per employee is used to measure firms' physical productivity following the approach proposed by Hsieh and Klenow (2009).

**Figure 3.9. Sub-Saharan Africa: Productivity of Informal Firms Relative to Formal Firms**

Sources: World Bank Enterprise Survey; La Porta and Shleifer (2008); and IMF staff calculations.

Note: The figure represents relative productivity of all informal firms versus both small and medium-sized formal firms. The box plot depicts the distribution of productivity ratio, with the middle line indicating the mean, the lower and upper boundaries of the box the 25th and 75th percentiles, respectively, and the lower and upper lines the 10th and 90th percentiles, respectively. Results are based on a sample of 16 sub-Saharan African countries.

formal and less productive informal firms coexist in a more segmented market. A similar pattern is observed for the ratio of value added per employee.

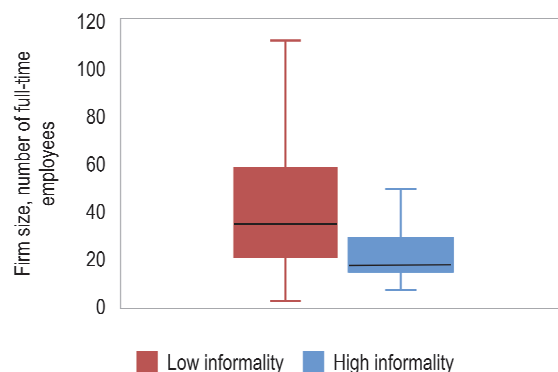
### Informality and Size of Firms

Relatedly, average firm size is significantly smaller for informal firms than formal firms in sub-Saharan Africa.<sup>12</sup> Informal firms are typically microenterprises with less than five workers, which is only about 30 percent of the average size of small formal firms and 7 percent the size of medium-sized formal firms.

Consequently, average firm size is much smaller in high-informality regions than in low-informality regions. Figure 3.10 shows the distribution of the average size of firms between the two groups and confirms that the size of firms in sub-Saharan African countries is significantly smaller for the high-informality regions at any part of the distribution.<sup>13</sup> The proportion of small firms is 71 percent in sub-Saharan Africa, somewhat

<sup>12</sup> Firm size is measured by the average number of full-time employees.

<sup>13</sup> Using the World Bank's Enterprise Surveys, the size of informal firms is computed for 156 subnational regions in sub-Saharan African countries, measured as the share of unregistered informal firms in each region. Based on this measure, the subnational regions are grouped into a low-informality group (below-average level of informality) and a high-informality group (above-average level).

**Figure 3.10. Sub-Saharan Africa: Informality and Firm Size**

Sources: World Bank Enterprise Survey; and IMF staff calculations.

Note: The level of informality is defined as the proportion of firms not registered when the business started. For each group, the box plot depicts the distribution of the firm size, with the middle line indicating the mean, the lower and upper boundaries of the box the 25th and 75th percentiles, respectively, and the lower and upper lines the 10th and 90th percentiles, respectively. See footnote 13 for definition of low and high informality. Results are based on a sample of 16 sub-Saharan African countries.

higher than in economies outside sub-Saharan Africa, where the proportion of small firms is only 61 percent.

This means that in sub-Saharan Africa, there is scope for policy action to raise productivity and output by shifting resources to the formal sector.

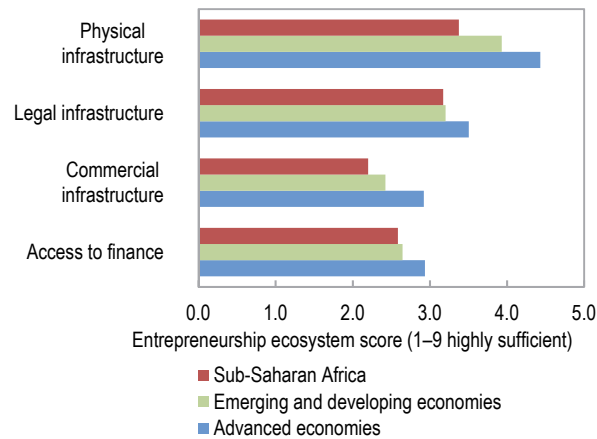
### Informality is a Vicious Cycle

Unfortunately, in an environment of low access to credit and poor conditions for entrepreneurship, many of the features of informal household enterprises (small size, low productivity) are the very ones that sustain a vicious cycle that keeps the informal sector large (Figure 3.11). La Porta and Shleifer (2008) identify the cost of financing and access to financing as the key obstacles that keep informal firm size small.

### Informality and Tax Policy

While increasing domestic revenue mobilization from the informal economy is often seen as a key objective, reducing informality cannot form the basis of tax policy, as the reasons for not paying taxes vary across informal firms. In designing tax policy, the reasons for not paying taxes matter as much as or more than the fact that a firm pays no taxes (Kanbur and Keen 2015). Informality usually implies nonremittance of the full amount of taxes due. Individuals or firms may not remit

**Figure 3.11. Sub-Saharan Africa and Comparators: Conditions for Entrepreneurship, Average over 2010–15**



Source: Global Entrepreneurship Monitor (GEM) database.

taxes because they are below the threshold at which they are legally obliged to pay taxes. This may be inevitable for most household enterprises due to their small size, while some larger firms may choose to operate just below the threshold. On the other hand, some larger firms may evade taxes either by partially declaring taxes or by not declaring them at all, even though they are above the tax threshold.

Lumping these informal firms into a single category can lead to misleading policy conclusions. For example, while conventional wisdom suggests that lowering tax rates would broaden the tax base, an optimal tax policy would instead suggest raising the value-added tax (VAT) threshold taking into account the different categories of informality. Raising the VAT threshold would encourage firms that choose to operate just below the threshold to increase production, while leaving the number of informal firms and the amount of tax collection unchanged (Kanbur and Keen 2014). Indeed, relatively high VAT thresholds are recommended for developing countries, with license fees or turnover taxes for businesses below the VAT threshold. This avoids small firms being discouraged from registering with the tax administration and ensures that scarce government resources are directed to enforcing compliance by large firms.<sup>14</sup>

<sup>14</sup> IMF (2011). The appropriate level of VAT thresholds should be determined on a case-by-case basis, informed by a range of factors including the size and record keeping capacity of businesses currently falling above the VAT threshold.

Increased growth and transition to formality would over time allow some household enterprises to grow to a size above the tax threshold, generating higher fiscal revenue. The benefit of formalization would be better access to finance and public services, which could exceed the tax cost. It is also worth noting that although household enterprises do not pay direct taxes, they pay a significant share of their income in indirect taxes (for example, the VAT on their inputs) and other charges. Helping them do better in the informal sector without imposing additional direct taxes on them would still generate additional revenue.

As for firms that are above the tax threshold but choose to evade taxes either partially or fully, tax policy and revenue administration should work to improve tax compliance. In this context, a simple system with limited exemptions that is easy to comply with would be helpful both to improve the overall business climate and facilitate compliance. At the tax policy level, countries should, therefore, focus on simplifying tax laws and reducing taxes on microenterprises and small businesses. At the tax administration level, revenue agencies should develop integrated compliance management strategies, including (1) reducing community tolerance for tax evasion; (2) providing targeted assistance to promote voluntary compliance; (3) encouraging self-regulation which may itself rest on simplification; and (4) demonstrating a visible and credible detection and enforcement capability (Russell 2010).

## **PATHWAYS TO EXPAND THE FORMAL SECTOR**

There are two pathways to expand the formal sector: (1) increase the size of formal enterprises and the entrance of new formal firms; and (2) transform informal enterprises into formal enterprises. The latter is possible if the business environment allows informal enterprises to grow and enter the formal sector. In previous studies and as documented in the World Bank's Enterprise Surveys, the cost of financing and access to financing are identified as key obstacles to the growth of informal enterprises as well as private formal enterprises. Inefficiencies in labor and product market regulations may create incentives for enterprises to work outside

the regulatory framework. The importance of these variables for expanding the formal sector is tested here in a panel regression.

The panel data generated through the MIMIC Model allow for extending the literature by establishing more robust and comprehensive empirical results. To filter out country-specific and time-specific effects while controlling for endogeneity, we use the Arellano-Bond generalized method of moments estimator for a sample of 108 countries from 2006 to 2014. Regression 1 of Table 3.3 tests for the effects of financial market and product market efficiency. Regression 2 includes an advanced economy dummy. Regression 3 checks the significance of oil exporters using an oil exporter dummy. Regression 4 adds labor market flexibility, and regression 5 incorporates an index constructed on the basis of components of the World Bank's Worldwide Governance Indicators that considers accountability of government and political stability.<sup>15</sup>

Key results from the regressions include:

- The size of the informal sector changes slowly. The strong significance of the lagged share of informality in all specifications points to a high level of persistence of informality.
- As the economy grows, the informal sector declines in importance, as reflected in a strongly significant negative relationship with GDP per capita growth in all specifications.
- Financial market efficiency is strongly associated with a reduction in informality. This variable, which is a proxy for access to finance, consists of five subcomponents: financial services meeting business needs, affordability of financial services, financing through local equity markets, ease of access to loans, and venture capital availability.<sup>16</sup> Financial market efficiency remains significant and robust under various specifications, including when adding the

<sup>15</sup> We construct an index using Principal Components Analysis (PCA) on the voice and accountability and political stability and absence of violence components of the World Governance Indicators.

<sup>16</sup> The variable is from the World Economic Forum's Global Competitiveness Index and is survey-based. The higher the index value, the more efficient the market.

growth rate of GDP per capita to control for growth effects.<sup>17, 18</sup> These results are consistent with the findings of the World Bank's Enterprise Surveys, indicating that the greatest perceived constraint for both informal and formal enterprises is a lack of access to finance .

- Product market efficiency lowers the share of the informal sector, consistent with the findings of the literature,<sup>19</sup> although only for some subcomponents of the World Bank's Doing Business Indicators such as the cost to export and the cost of enforcing contracts. The cost of enforcing contracts points to the importance of the legal system, while the cost to export can be considered as a proxy for trade liberalization, both of which are found to support the existence of informality when costs are high.<sup>20</sup>
- Labor market flexibility, on the other hand, is not found to be significant.<sup>21</sup>
- No statistically significant relationship is found between the size of the informal economy and either governance indicators or the macroeconomic environment (proxied by a subcomponent of the Global Competitiveness Index).
- Neither the advanced economy dummy nor the oil exporter dummy is found to be significant when included with policy variables.

<sup>17</sup> Annex 3.3 presents a regional overview of the associations between the size of the informal economy and aggregate values of the indices for regions. There is a broad association at the aggregate level, although it is weak for governance indicators.

<sup>18</sup> The control variable is the growth rate rather than the level of per capita GDP, which is nonstationary. Nonstationarity may cause problems if added directly into the regression (see La Porta and Schleifer 2014).

<sup>19</sup> See, for example, Loayza, Oviedo, and Serven (2005).

<sup>20</sup> The cost to export (U.S. dollars per container) measures the cost (excluding tariffs) associated with three sets of procedures—documentary compliance, border compliance, and domestic transport—within the overall process of exporting a shipment of goods.

<sup>21</sup> Similar to the Financial Market Efficiency Index, this variable is from the World Economic Forum's Global Competitiveness Index and is largely survey-based. It consists of five subcomponents: cooperation in labor-employer relations, flexibility of wage determination, hiring and firing practices, redundancy costs, and the effect of taxation on incentives to work.

## Drilling Down on Product-Market and Competitiveness Indicators

At the micro level, movement of resources to the formal sector will be facilitated by policies that help reduce the costs of becoming and staying formal. Insight can be gained on areas where governments with large informal sectors should focus reform by identifying the subcomponents of the World Bank's Doing Business Indicators and the World

Economic Forum's Global Competitiveness Indicators where the gap is largest between countries with small and large informal sectors (Table 3.4). This analysis suggests that key areas of focus for policymakers could be improving the protection of property rights, increasing electricity provision, lowering the burden of customs procedures, while enhancing the ease of exporting and the reliability of infrastructure.

**Table 3.3. Share of Informality and Policy Variables**

	Dependent Variable: Share of Informality <sup>1</sup>				
	(1)	(2)	(3)	(4)	(5)
Lagged share of informality	0.963*** (20.00)	0.820*** (6.89)	0.781*** (5.64)	0.800*** (6.76)	0.827*** (8.44)
Growth rate of GDP per capita (2011 U.S. dollars, PPP)	-0.422*** (-3.18)	-0.290*** (-2.77)	-0.273*** (-2.61)	-0.260*** (-2.76)	-0.205*** (-2.91)
Flexibility of labor market (CGI)				0.590 (0.67)	0.460 (0.57)
Efficiency of financial market (CGI)	-2.551** (-2.12)	-1.817*** (-2.79)	-1.718** (-2.29)	-1.633** (-2.46)	-1.159* (-1.87)
Cost of doing business <sup>2</sup>	1.340** (2.06)	1.106* (1.69)	1.682* (1.67)	1.600* (1.76)	1.492* (1.74)
Governance indicator <sup>3</sup>					0.393 (0.53)
Advanced economy dummy		-3.273 (-1.43)	-2.695 (-0.97)	-2.811 (-1.22)	-3.283 (-1.22)
Oil exporter dummy			5.314 (0.62)	2.483 (0.49)	2.293 (0.51)
Constant	9.064* (1.77)	11.57** (2.45)	10.59** (2.00)	7.623 (1.35)	5.854 (1.18)
Number of observations	803	803	803	803	803

Source: IMF staff calculations.

Note: Estimates using the Arellano and Bond system-generalized method of moments estimator, including year fixed effects. Robust t-statistics in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. CGI = Global Competitiveness Index; PPP = purchasing power parity.

<sup>1</sup> Taken from the MIMIC estimates.

<sup>2</sup> Based on an average of the standardized indices of cost to export and of the cost of enforcing contracts (World Bank, Doing Business database).

<sup>3</sup> First component from Principal Component Analysis of "Voice and Accountability" and "Political Stability and Absence of Violence" (Worldwide Governance Indicators).

**Table 3.4. Sub-Saharan Africa: Doing Business and Global Competitiveness Indicators with the Largest Statistically Significant Difference between Low- and High-Informality Countries**

Indicators	Low Informality (Bottom quintile)	High Informality (Top quintile)	Comparison of Means (f-test)
Getting electricity: Procedures (number) <sup>1</sup>	4.4	6.7	0.01
Time to export: Documentary compliance (hours) <sup>1</sup>	55	105	0.01
Irregular payments and bribes, 1-7 (best) <sup>2</sup>	4.2	3.1	0.02
Property rights, 1-7 (best) <sup>2</sup>	4.6	3.5	0.03
Reliability of infrastructure, 0-8 (best) <sup>1</sup>	2.7	0.4	0.03
Burden of customs procedures, 1-7 (best) <sup>2</sup>	4.2	3.3	0.03
Doing Business Indicators - Country Rank <sup>1</sup>	107	154	0.03

Sources: <sup>1</sup> World Bank, Doing Business Indicators; <sup>2</sup> World Economic Forum, Global Competitiveness Report.

## POLICY IMPLICATIONS

The analysis in this chapter suggests that creating more opportunities for resources to migrate from the informal sector by expanding the formal sector would increase productivity in the economy and could be an important mechanism to unlock sustained inclusive growth. However, as this transformation is expected to be slow, policies must also be set to support household enterprises that provide a safety net for those who would otherwise likely be unemployed. The good news for policymakers is that many of the same policies that support the growth of the formal sector also help raise the productivity of household enterprises.

Accordingly, policymakers should:

- Recognize that household enterprises are an important component of the economy—providing a safety net for the large and growing working-age population—that is likely to remain for many years to come. The authorities should therefore focus on policies to foster the productivity of household enterprises rather than policies to increase tax revenues collected from these enterprises. On the other hand, for larger firms that choose to evade taxes either partially or fully, revenue authorities should work to improve tax compliance.
- Focus on improving access to finance and enhancing product market efficiency, especially where indicators show the largest gap compared to countries with smaller informal sectors. This should help expand the scope of the formal sector both by transitioning from the informal to the formal sector and by expanding the formal sector. Improving access to finance is key to expanding the scope of the formal sector, and while access to formal financial services is often difficult in low-income countries, countries may focus on developing technological innovation within the financial sector, for example via mobile banking or Fintech. Fostering product-market efficiency also plays a role. The cost to export and the cost of enforcing contracts appear to be particularly important, together with access to electricity.

### Box 3.1. Success in Expanding the Formal Economy: The Cases of Mauritius and Rwanda

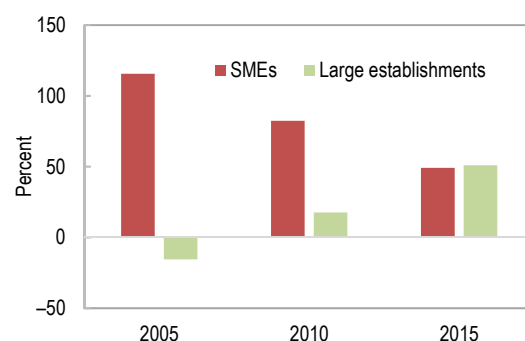
During 2010–14 relative to 1996–2000, Mauritius reduced informality from what was already a low level by a further four percentage points of GDP, reaching the levels of the Organisation for Economic Co-operation and Development (OECD). Similarly, Rwanda reduced the size of its informal sector significantly over the same period. These results reflect movement from informal household enterprises to formal small and medium-sized enterprises (SMEs) as a result of proactively creating a business environment for SMEs to flourish, removing identified barriers to formalization, and strengthening the capacity of these enterprises to become more competitive.

Rwanda has reformed commercial law, improved regulations to ease access to credit, and accelerated trade and property registration. Rwanda outperforms OECD standards in terms of the procedures to start a formally registered business.

In Mauritius, since the reforms that opened the economy in the early 1980s, successive governments have proactively supported SMEs by improving access to financing, providing free export market intelligence, and developing industrial parks. These efforts were intensified in response to the loss of trade preferences in textiles and sugar and the onset of the global financial crisis in 2007. Labor market reforms protected workers instead of jobs, while liberalizing access to the global pool of both skilled and unskilled workers. In close consultation with the business community, programs were set up to share risks with the banking system to enable SMEs to obtain credit at the prime rate. Registration of firms was computerized to allow same-day creation and SMEs were provided a one-stop shop to assist with financing, information, and the delivery of permits and licenses. Tax reform facilitated compliance by SMEs. The playing field was leveled through extensive computerization, including for paying taxes online, by the Minister of Finance giving up his powers of discretion, and via regulations moving from ex-ante authorization to ex-post verification.

Despite the global financial crisis and the other shocks, employment in SMEs continued to grow in Mauritius between 2005 and 2010 and contributed more job growth than larger firms (Figure 3.1.1). More importantly, SMEs play a significant role in the economy, representing close to 40 percent of GDP and about 45 percent of total employment, reflecting the success of the policy initiatives to support the development of SMEs in the formal sector.

**Figure 3.1.1 Mauritius: Share of Jobs Created in Small and Medium-sized Enterprises versus Large Establishments, 2000–15 (Percent)**



Sources: Statistics Mauritius; and IMF staff calculations.

Note: SMEs = small and medium-sized enterprises.

### Annex 3.1. Measuring the Informal Economy: Alternative Methodologies

This annex describes the main methodologies used to measure the informal economy, highlighting their advantages and drawbacks.<sup>1</sup> These approaches can be divided into direct or indirect, including the model-based ones.

The most common direct approaches to measuring the size of the informal economy rely on surveys and samples based on voluntary replies, or tax auditing and other compliance methods. While providing great detail about the structure of the informal economy, the results are sensitive to the way the questionnaire is formulated and to respondents' willingness to cooperate. Consequently, surveys are unlikely to capture all informal activities (see Isachsen and Strom 1985; Witte 1987; Mogensen and others 1995; and Feige 1997).

Indirect approaches, alternatively called "indicator" approaches, are mostly macroeconomic in nature. These are in part based on the discrepancy between national expenditure and income statistics; the discrepancy between the official and actual labor force; the "electricity consumption" approach of Kaufman and Kaliberda (1996); the "monetary transaction" approach of Feige (1979); the "currency demand" approach of Cagan (1958), among others; and the MIMIC approach. Specifically:

- **Discrepancy between national expenditure and income statistics:** If those working in the informal economy were able to hide their incomes for tax purposes but not their expenditure, then the difference between national income and national expenditure estimates could be used to approximate the size of the informal economy. This approach assumes that all the components of the expenditure side are measured without error and constructed so that they are statistically independent from income factors (see MacAfee 1980; and Yoo and Hyun 1998).
- **Discrepancy between the official and actual labor force:** If total labor force participation is assumed to be constant, a decline in official labor force participation can be interpreted as an increase in the importance of the informal economy. Since fluctuation in the participation rate might have many other explanations, such as the position in the business cycle, difficulty in finding a job, and education and retirement decisions, these estimates represent weak indicators of the size of the informal economy (see Contini 1981; Del Boca 1981; and O'Neill 1983).
- **Electricity approach:** Kaufmann and Kaliberda (1996) endorse the idea that electricity consumption is the single best physical indicator of overall (official and unofficial) economic activity. Using findings that indicate the electricity-overall GDP elasticity is close to one, these authors suggest using the difference between growth of electricity consumption and growth of official GDP as a proxy for the growth of the informal economy. This method is simple and appealing, but has many drawbacks, including that (1) not all informal economy activities require a considerable amount of electricity (for example, personal services) or the use of other energy sources (for example, coal, gas), hence only part of the informal economy growth is captured; and (2) the electricity-overall GDP elasticity might vary significantly across countries and over time (see Del Boca and Forte 1982; Portes 1996; and Johnson, Kaufmann, and Shleifer 1997).
- **Transaction approach:** Using Fischer's quantity equation,  $Money * Velocity = Prices * Transactions$ , and assuming that there is a constant relationship between the money flows related to transactions and the total (official and unofficial) value added, that is,  $Prices * Transactions = k (official\ GDP + informal\ economy)$ , it is reasonable to derive the following equation:  $Money * Velocity = k (official\ GDP + informal\ economy)$ . The stock of money and official GDP estimates are known, and money velocity can be estimated. Thus, if the size of the informal economy as a ratio of the official economy is known for a benchmark year, then the informal economy can be calculated for the rest of the sample. Although theoretically attractive,

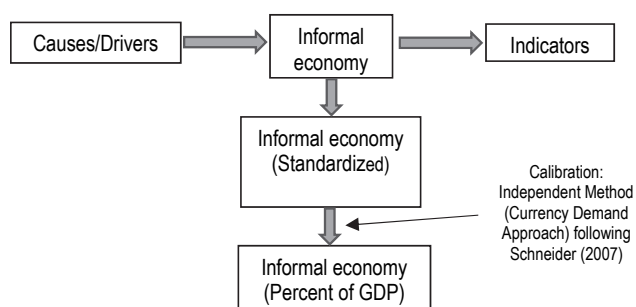
<sup>1</sup> Based on Schneider and Enste (2002).



this method has at least two weaknesses: (1) the assumption of  $k$  constant over time seems quite arbitrary; and (2) other factors like the development of checks and credit cards or mobile banking could also affect the desired amount of cash holdings and thus velocity (see Feige 1979; Boeschoten and Fase 1984; and Langfeldt 1984).

- Currency demand approach:** Assuming that informal transactions involve cash payments as a way to avoid leaving an observable trace for the authorities, an increase in the size of the informal economy will consequently increase the demand for currency. To isolate this “excess” demand for currency, Tanzi (1980) suggests using a time series approach in which currency demand is a function of conventional factors, such as the evolution of income, payment practices and interest rates, and factors causing people to work in the informal economy, like the direct and indirect tax burden, government regulation, and the complexity of the tax system. However, there are several problems associated with this method and its assumptions: (1) This procedure may underestimate the size of the informal economy, because not all transactions take place using cash as a means of exchange; (2) Increases in currency demand deposits may occur because of a slowdown in demand deposits rather than an increase in currency used in informal activities; (3) It seems arbitrary to assume equal velocity of money in both types of economies; and (4) The assumption of no informal economy in a base year is arguable (see Cagan 1958; Gutmann 1977; Tanzi 1980, 1983; Schneider 1997; and Johnson, Kaufmann, and Shleifer).
- Multiple Indicators–Multiple Cause (MIMIC) approach:** This method explicitly considers several causes as well as the multiple effects of the informal economy (Figure A3.1.1). The methodology makes use of the associations between the observable causes and the effects of an unobserved variable, in this case the informal economy, to estimate the variable itself (see Loayza 1997; Schneider, Buehn, and Montenegro 2010; Abdih and Medina 2016; and Vuletin 2009). The estimated MIMIC coefficients allow us to determine only relative estimated sizes of the informal economy in a particular country over time. In order to convert these measures into percent of GDP values we need to apply a benchmarking or calibration procedure. For this purpose, we use the Schneider (2007) calibration procedure, which takes the values from the year 2000 using the currency demand approach. This approach assumes that in order not to leave an observable trace, informal transactions are made in cash, and therefore, an increase in informality will consequently increase the demand for currency. This final step allows us to obtain a dynamic panel of the size of the informal economy in percent of GDP.

Annex Figure 3.1.1. The Multiple Indicators–Multiple Cause Model



Source: Prepared by the authors.

### Annex 3.2. The Multiple Indicator–Multiple Cause Methodology and Innovations to Address Past Shortcomings

As the informal economy cannot be directly observed by definition, its magnitude needs to be estimated using an econometric method. Every econometric methodology used to estimate the informal economy has strengths and weaknesses, and the Multiple Indicator–Multiple Cause (MIMIC) Model is no exception.

The MIMIC’s main features include the following: (1) the model explicitly considers multiple causes of the existence and growth of the informal economy, as well as multiple effects of the informal economy over time, whereas most other methods mainly use one indicator of the size of informal economy (for example, electricity consumption); and (2) the model is based on unobserved variables, taking into account a set of causes and indicators of the unobserved phenomenon to be measured.

Criticism of the MIMIC Model focuses on the following: (1) its use of GDP (GDP per capita and growth of GDP per capita) as cause and indicator variables; (2) the fact that the methodology relies on another independent study to calibrate from standardized values to the size of the informal economy in percent of GDP; and (3) the estimated coefficients are sensitive to alternative specifications, the country sample, and the time span chosen.

This chapter addresses the main criticisms. First, instead of using GDP per capita and growth of GDP per capita as cause and indicator variables, we use the night lights approach of Henderson, Storeygard, and Weil (2012) to independently capture economic activity. In their paper, those authors use data on light intensity from outer space as a proxy for the “true” economic growth achieved by countries. They also use the estimated elasticity of light intensity with respect to economic growth to produce new estimates of national output for countries deemed to have low statistical capacity. Therefore, by using the night lights approach we address MIMIC criticisms related to the endogeneity of GDP.

Second, an alternative and fully independent methodology, Multiple Imputation using Predictive Mean Matching (Rubin 1987; Little 1988), has been used to estimate the size of the informal economy. This alternative methodology broadly confirms the results from the MIMIC Model and provides confidence in the robustness of the results. Predictive Mean Matching uses survey-based observations of the size of the informal economy for 49 countries, and matches them to countries where data are missing through multiply-imputed datasets estimated by a linear regression. The distinguishing characteristic of the Multiple Imputation method is that, as its name suggests, instead of imputing a single point estimate for a missing data point, it produces a set of plausible estimates, building into the ultimate estimate the uncertainty associated with the missing data (Rubin 1987).<sup>1</sup> Once these plausible datasets are produced, results from them are then aggregated, often by an average, to make the final estimate.

The chapter uses Predictive Mean Matching to produce the estimates for each set of countries (Table A3.2.1). First, we estimate a linear regression of the informal economy size for all countries, including for the ones where we have observations, using covariates similar to those used in the MIMIC approach. Then a random draw is made from the posterior predictive distribution of the estimated coefficients for the covariates, which are then used to predict new values of the informal economy for all countries. The predicted values of the countries not missing the data are then matched to countries missing the data in groupings, and actual values for the countries not missing the data are used as estimates for the informal economy. Finally, the matches from each group in the respective samplings are averaged.<sup>2</sup>

<sup>1</sup> A point estimate has uncertainty associated with itself, manifested in confidence intervals. However, it does not incorporate this uncertainty into its estimation; the uncertainty is just an ex-post assessment. The Multiple Imputation procedure incorporates this uncertainty into the estimation itself.

<sup>2</sup> A critical element underlying this method is that the missing data mechanism is assumed to be “missing at random.” This is a weaker assumption than “missing completely at random,” but it still makes the assumption that while variables relevant for the informal economy can be related to the missing data mechanism, the probability of missing data itself is independent of the actual missing economy. This assumption can be challenged because one can argue that a large informal economy would be difficult to measure, resulting in missing data. Furthermore, a large informal economy can be associated with institutional weaknesses that would make it also less likely to be measured due to capacity constraints. However, when we look at survey data, we see that data are available for large informal economies such as Burundi and Niger. Therefore, at least in practice, the missing at random assumption is somewhat validated, but would have to be checked through sensitivity analyses.

The results, which are rankings of the size of informal economies size as percent of GDP from lowest to highest, are summarized in the Table A3.2.1.

**Table Annex 3.2.1. Selected Sub-Saharan African Countries: Informal Economy, Average 2000–12**

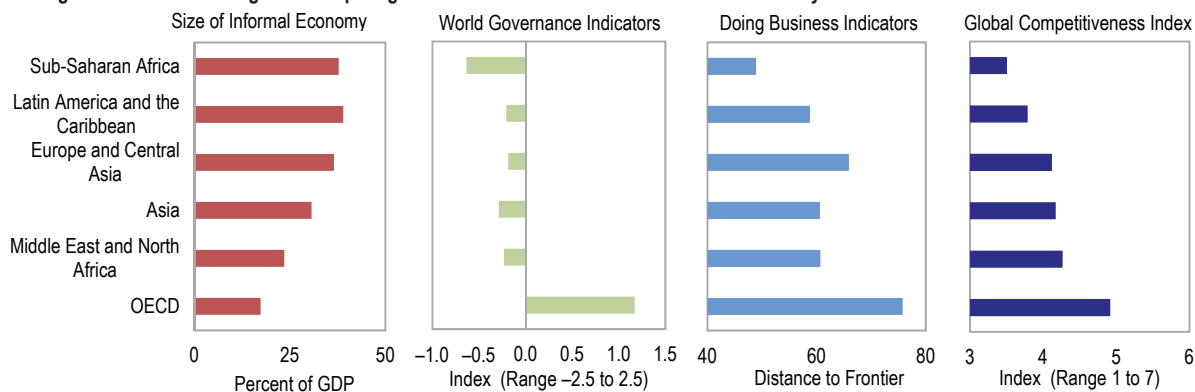
Low-Size Countries (0-20 percent)	High-Size Countries (>40 percent)
Mauritius	Congo, Republic of
South Africa	Togo*
Botswana	Guinea-Bissau
Lesotho	Nigeria*
Swaziland	Mali
	Senegal*
<b>Middle-Size Countries (20-40 percent)</b>	Comoros
Cabo Verde	Congo, Democratic Republic of*
Namibia	Zambia
Kenya	Ghana
Zimbabwe	Guinea
Eritrea	Tanzania
Gabon	Ethiopia
The Gambia	Mauritania
Uganda	Central African Republic
Sierra Leone*	Angola
Cameroon*	Côte D'Ivoire
Malawi	Liberia
	Madagascar
	Equatorial Guinea
	Niger*
	Mozambique
	Burkina Faso
	Chad
	Burundi*

Sources: Survey estimates and Predictive Mean Matching Analysis.

\*Based on survey estimates.

### Annex 3.3. Association of Governance, Doing Business, and Competitiveness Indicators with the Size of the Informal Economy

**Annex Figure 3.3.1. Selected Regions: Comparing Indicators with the Share of the Informal Economy**



Sources: World Bank; World Economic Forum, and IMF staff calculations.

Note: OECD = Organisation for Economic Co-operation and Development.

## Annex 3.4. Country Classifications

Annex Table 3.4.1. Country Classifications

Country	Oil exporters	Upper-middle income	Lower-middle income	Low-income	Fragile states
Angola	X		X		
Benin				X	
Botswana		X			
Burkina Faso				X	
Burundi				X	X
Cameroon			X		
Cabo Verde		X			
Central African Republic				X	X
Chad	X			X	X
Comoros				X	X
Democratic Republic of Congo				X	X
Republic of Congo	X		X		X
Côte d'Ivoire			X		X
Equatorial Guinea	X	X			
Eritrea				X	X
Ethiopia				X	
Gabon	X	X			
The Gambia				X	
Ghana			X		
Guinea				X	X
Guinea-Bissau				X	X
Kenya				X	
Lesotho			X		
Liberia				X	X
Madagascar				X	X
Malawi				X	X
Mali				X	X
Mauritius		X			
Mozambique				X	
Namibia		X			
Niger				X	
Nigeria	X		X		
Rwanda				X	
São Tomé and Príncipe			X		X
Senegal			X		
Seychelles		X			
Sierra Leone				X	X
South Africa		X			
Swaziland			X		
Tanzania				X	
Togo				X	X
Uganda				X	
Zambia			X		
Zimbabwe				X	X

## REFERENCES

- Abdih, Y., and L. Medina. 2016. "The Informal Economy in the Caucasus and Central Asia: Size and Determinants." In *Entrepreneurship and the Shadow Economy*, edited by A. Sauka, F. Schneider, and C.C. Williams. Cheltenham, UK: Edward Elgar Publishing.
- Boeschoten, W., and M. Fase. 1984. *The Volume of Payments and the Informal Economy in the Netherlands 1965–1982*. M. Nijhoff, Dordrecht.
- Cagan, P. 1958. "The Demand for Currency Relative to the Money Supply." *Journal of Political Economy* 66: 302–28.
- Contini, B. 1981. "Labor Market Segmentation and the Development of the Parallel Economy- the Italian Experience." *Oxford Economic Papers* 33: 401–12.
- Del Boca, D. 1981. "Parallel Economy and Allocation of Time." *Micros: Quarterly Journal of Microeconomics* 4: 13–18.
- Del Boca, D., and F. Forte. 1982. "Recent Empirical Surveys and Theoretical Interpretations of the Parallel Economy in Italy." In *The Underground Economy in the United States and Abroad*, edited by V. Tanzi. Lexington, MA: D.C. Heath.
- Feige, E. 1979. "How Big Is the Irregular Economy?" *Challenge* 22: 5–13.
- Feige, E. 1997. "Underground Activity and Institutional Change: Productive, Protective and Predatory Behavior in Transition Economies." In *Transforming Post-Communist Political Economies*, edited by J. Nelson, C. Tilly, and L. Walker. Washington, DC: National Academy Press.
- Fox, L., C. Haines, J.H. Munoz, and A.H. Thomas. 2013. "Africa's Got Work to Do; Employment Prospects in the New Century." IMF Working Paper 13/201. International Monetary Fund, Washington, DC.
- Frey, B., and H. Weck-Hanneman. 1984. "The Hidden Economy as 'Unobserved Variable.'" *European Economic Review* 26: 33–53.
- Gutmann, P. 1977. "Subterranean Economy." *Financial Analysis Journal* 33: 26–27.
- Henderson, J., A. Storeygard, and D.N. Weil. 2012. "Measuring Economic Growth from Outer Space." *American Economic Review* 102(2): 994–1028.
- Hsieh, C.-T., and P. Klenow, P. 2009. "Misallocation and Manufacturing TFP in China and India." *Quarterly Journal of Economics* 124(4): 1403–448.
- International Monetary Fund (IMF). 2011. "Revenue Mobilization in Developing Countries." Fiscal Affairs Department, Washington, DC.
- Isachsen, A., and S. Strom. 1985. "The Size and Growth of the Hidden Economy in Norway." *Review of Income and Wealth* 31: 21–38.
- Johnson, S., D. Kaufmann, and A. Shleifer. 1997. "The Unofficial Economy in Transition." *Brookings Papers on Economic Activity*: Fall. Brookings Institution, Washington, DC.
- Kanbur, R., and M. Keen. 2014. "Thresholds, Informality, and Partitions of Compliance." *International Tax Public Finance* 21: 536–59.
- . 2015. "Reducing Informality." *Finance and Development* 52(1): 52–54.
- Kaufmann, D., and A. Kaliberda. 1996. "Integrating the Unofficial Economy into the Dynamics of Post-Socialist Economies: A Framework of Analysis and Evidence." In *Economic Transition in Russia and the New States of Eurasia*, edited by B. Kaminski. Armonk, NY: M.E. Sharpe.
- Langfeldt, E. 1984. "The Unobserved Economy in the Federal Republic of Germany." In *The Unobserved Economy*, edited by E. Feige. Cambridge, UK: Cambridge University Press.
- La Porta, R., and A. Shleifer. 2008. "The Unofficial Economy and Economic Development." *Brookings Papers on Economic Activity*: Fall. The Brookings Institution, Washington, DC.
- . 2014. "Informality and Development." *Journal of Economic Perspectives* 28(3): 109–26.
- Little, R.J.A., and D.B. Rubin. 1998. *Journal of Educational Statistics* 16: 150–155.
- . 1988. "Missing-Data Adjustment in Large Surveys." *Journal of Business and Economic Statistics*, 6 (3): 287–296.
- Loayza, N. 1997. "The Economics of the Informal Sector: a Simple Model and Some Empirical Evidence from Latin America." World Bank Policy Research Working Paper No. 1727. World Bank, Washington, DC.
- Loayza, N., A.M. Oviedo, and L. Servén. 2005. "The Impact of Regulation on Growth and Informality: Cross-country Evidence." World Bank Policy Research Working Paper No. 3623. World Bank, Washington, DC.
- MacAfee, K. 1980. "A Glimpse of the Hidden Economy in the National Accounts." *Economic Trends* 136: 81–87.
- Mogensen, G., H. Kvist, E. Körmendi, and S. Pedersen. 1995. "The Shadow Economy in Denmark 1994: Measurement and Results." Study No. 3. The Rockwool Foundation Research Unit, Copenhagen.
- O'Neill, D. 1983. "Growth of the Underground Economy 1950–81: Some Evidence from the Current Population Survey," Study for the Joint Economic Committee 98: 122. U.S. Congress Joint Committee. U.S. Government. Printing Office, Washington, DC.
- Portes, A. 1996. "The Informal Economy." In *Exploring the Underground Economy*, edited by S. Pozo. W.E. Upjohn Institute for Employment Research: Kalamazoo, MI.

- Rubin, D.B. 1987. *Multiple Imputation for Nonresponse in Surveys*. New York: Wiley.
- Russell, B. 2010. "Revenue Administration: Managing the Shadow Economy." IMF Technical Notes and Manuals. International Monetary Fund, Washington, DC.
- Schneider, F. 1997. "The Shadow Economies of Western Europe." *Journal of the Institute of Economic Affairs* 17: 42–48.
- Schneider, F. 2007. "Shadow Economies and Corruption All over the World: New Estimates for 145 Countries." *Economics* (July).
- Schneider, F., and D. Enste. 2002. *The Shadow Economy: An International Survey*. Cambridge, UK: Cambridge University Press.
- Schneider, F., A. Buehn, and C. Montenegro. 2010. "Shadow Economies All over the World: New Estimates for 162 Countries from 1999 to 2007." World Bank Policy Research Working Paper No. 5356. World Bank, Washington, DC.
- Tanzi, V. 1980. "The Underground Economy in the United States: Estimates and Implications." *Banca Nazionale del Lavoro* 135: 427–53.
- Vuletin, G. 2009. "What Is the Size of the Pie? Measuring the Informal Economy in Latin America and the Caribbean." *Money Affairs* 21: 161–91.
- Witte, A. 1987. "The Nature and Extent of Unreported Activity: A Survey Concentrating on Recent U.S. Research." In *The Unofficial Economy: Consequences and Perspectives in Different Economic Systems*, edited by S. Alessandrini and B. Dallago. Surrey, UK: Gower, Publishing Company.
- Yoo, T., and J. Hyun. 1998. "International Comparison of the Black Economy: Empirical Evidence Using Micro-Level Data." Paper presented at the 1998 Congress of the International Institute of Public Finance, Cordoba, Argentina.

## Statistical Appendix

Unless otherwise noted, data and projections presented in this *Regional Economic Outlook* are IMF staff estimates as of 31 March, 2017, consistent with the projections underlying the April 2017 *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 countries in fragile situations (see table on page 71 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 World Bank, Country Policy and Institutional Assessment (CPIA) score, (averaged over three years).

- 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 2013–15 of more than US\$1,025.00 (World Bank, using the Atlas method).
- The low-income countries had average per capita gross national income in the years 2013–15 equal to or lower than US\$1,025.00 (World Bank, Atlas method).
- The countries in fragile situations had average CPIA scores of 3.2 or less in the years 2013–15

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

**Sub-Saharan Africa: Member Countries of Regional Groupings**

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



## Sub-Saharan Africa: Country Classifications

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

**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, 31 March, 2017.

<sup>1</sup> Fiscal year data.

<sup>2</sup> 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, 31 March, 2017.

<sup>1</sup> 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, 31 March, 2017.

<sup>1</sup> Including grants.

<sup>2</sup> Fiscal year data.

<sup>3</sup> 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.

<sup>1</sup> An increase indicates appreciation.

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

**Table SA27**

Source: IMF, International Financial Statistics.

<sup>1</sup> Includes offshore banking assets.

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

**Table SA28**

Source: IMF, International Financial Statistics.

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

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

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**Table SA1. Real GDP Growth**  
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	17.3	2.4	3.4	3.9	5.2	6.8	4.8	3.0	0.0	1.3	1.5
Benin	4.2	2.3	2.1	3.0	4.8	7.2	6.4	2.1	4.0	5.4	6.0
Botswana	6.0	-7.7	8.6	6.0	4.5	11.3	4.1	-1.7	2.9	4.1	4.2
Burkina Faso	5.9	3.0	8.4	6.6	6.5	5.7	4.2	4.0	5.4	6.1	6.3
Burundi	4.4	3.8	5.1	4.0	4.4	5.9	4.5	-4.0	-1.0	0.0	0.1
Cabo Verde	7.1	-1.3	1.5	4.0	1.1	0.8	0.6	1.1	4.0	4.0	4.1
Cameroon	3.1	1.9	3.3	4.1	4.6	5.6	5.9	5.8	4.4	3.7	4.3
Central African Rep.	3.3	1.7	3.0	3.3	4.1	-36.7	1.0	4.8	4.5	4.7	5.0
Chad	9.8	4.1	13.6	0.1	8.8	5.8	6.9	1.8	-6.4	0.3	2.4
Comoros	1.3	1.8	2.1	2.2	3.0	3.5	2.0	1.0	2.2	3.3	4.0
Congo, Dem. Rep. of	6.1	2.9	7.1	6.9	7.1	8.5	9.5	6.9	2.4	2.8	3.5
Congo, Rep. of	4.3	7.8	8.7	3.4	3.8	3.3	6.8	2.6	-2.7	0.6	8.8
Côte d'Ivoire	1.8	3.3	2.0	-4.2	10.1	9.3	8.8	8.9	7.5	6.9	7.2
Equatorial Guinea	15.2	1.3	-8.9	6.5	8.3	-4.1	-0.5	-7.4	-10.0	-5.0	-5.1
Eritrea	-2.1	3.9	2.2	8.7	7.0	3.1	5.0	4.8	3.7	3.3	3.6
Ethiopia <sup>1</sup>	11.8	10.0	10.6	11.4	8.7	9.9	10.3	10.4	8.0	7.5	7.5
Gabon	1.3	-2.3	6.3	7.1	5.3	5.5	4.4	3.9	2.3	1.0	2.7
Gambia, The	3.3	6.4	6.5	-4.3	5.6	4.8	0.9	4.3	2.5	3.0	3.5
Ghana	6.2	4.8	7.9	14.0	9.3	7.3	4.0	3.9	4.0	5.8	9.2
Guinea	2.9	-0.3	1.9	3.3	3.2	1.5	1.1	0.1	5.2	4.3	4.9
Guinea-Bissau	3.2	3.4	4.6	8.1	-1.7	3.3	1.0	5.1	5.2	5.0	5.0
Kenya	4.6	3.3	8.4	6.1	4.6	5.7	5.3	5.6	6.0	5.3	5.8
Lesotho	4.0	4.5	6.9	4.5	5.3	3.6	3.4	2.5	2.9	2.2	2.4
Liberia	7.3	5.1	6.1	7.4	8.2	8.7	0.7	0.0	-1.2	3.0	5.3
Madagascar	5.8	-4.7	0.3	1.5	3.0	2.3	3.3	3.1	4.1	4.5	4.8
Malawi	6.1	8.3	6.9	4.9	1.9	5.2	5.7	2.9	2.3	4.5	5.0
Mali	4.2	4.7	5.4	3.2	-0.8	2.3	7.0	6.0	5.4	5.2	4.7
Mauritius	4.3	3.0	4.1	3.9	3.2	3.2	3.6	3.5	3.6	3.9	4.0
Mozambique	8.1	6.4	6.7	7.1	7.2	7.1	7.4	6.6	3.4	4.5	5.5
Namibia	4.3	0.3	6.0	5.1	5.1	5.7	6.5	5.3	0.1	3.5	4.8
Niger	5.2	-0.7	8.4	2.2	11.8	5.3	7.0	3.5	4.6	5.2	5.5
Nigeria	7.7	8.4	11.3	4.9	4.3	5.4	6.3	2.7	-1.5	0.8	1.9
Rwanda	9.0	6.3	7.3	7.8	8.8	4.7	7.6	8.9	5.9	6.1	6.8
São Tomé & Príncipe	5.7	4.0	4.5	4.8	4.5	4.3	4.1	4.0	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	7.0
Seychelles	4.8	-1.1	5.9	5.4	3.7	5.0	6.2	5.7	4.4	4.1	3.4
Sierra Leone	5.8	3.2	5.3	6.3	15.2	20.7	4.6	-20.6	4.9	5.0	6.6
South Africa	4.8	-1.5	3.0	3.3	2.2	2.5	1.7	1.3	0.3	0.8	1.6
South Sudan	...	...	...	...	-52.4	29.3	2.9	-0.2	-13.8	-3.5	-1.1
Swaziland	4.2	4.5	3.5	2.0	3.5	4.8	3.6	1.1	-0.4	0.3	0.3
Tanzania	6.5	5.4	6.4	7.9	5.1	7.3	7.0	7.0	6.6	6.8	6.9
Togo	2.4	3.5	4.1	4.8	5.9	6.1	5.4	5.3	5.0	5.0	5.3
Uganda	8.3	8.1	7.7	6.8	2.6	4.0	5.2	5.0	4.7	5.0	5.8
Zambia	7.7	9.2	10.3	5.6	7.6	5.1	4.7	2.9	3.0	3.5	4.0
Zimbabwe <sup>2</sup>	-7.5	7.5	11.4	11.9	10.6	4.5	3.8	1.1	0.5	2.0	-1.5
<b>Sub-Saharan Africa</b>	<b>6.6</b>	<b>3.9</b>	<b>7.0</b>	<b>5.0</b>	<b>4.3</b>	<b>5.3</b>	<b>5.1</b>	<b>3.4</b>	<b>1.4</b>	<b>2.6</b>	<b>3.5</b>
<i>Median</i>	4.8	3.3	6.0	4.8	4.8	5.2	4.6	3.5	3.7	4.1	4.8
Excluding Nigeria and South Africa	6.9	3.9	6.0	6.0	5.4	6.5	5.8	4.7	3.7	4.4	5.2
<b>Oil-exporting countries</b>	<b>8.7</b>	<b>6.7</b>	<b>9.2</b>	<b>4.7</b>	<b>3.9</b>	<b>5.7</b>	<b>5.9</b>	<b>2.6</b>	<b>-1.4</b>	<b>0.9</b>	<b>2.0</b>
Excluding Nigeria	11.0	2.3	3.5	4.2	2.7	6.4	4.7	2.4	-1.1	0.9	2.2
<b>Oil-importing countries</b>	<b>5.3</b>	<b>2.0</b>	<b>5.3</b>	<b>5.3</b>	<b>4.7</b>	<b>5.0</b>	<b>4.5</b>	<b>3.9</b>	<b>3.4</b>	<b>3.9</b>	<b>4.5</b>
Excluding South Africa	5.6	4.4	6.9	6.6	6.2	6.5	6.2	5.4	5.1	5.4	6.0
<b>Middle-income countries</b>	<b>6.6</b>	<b>3.6</b>	<b>6.9</b>	<b>4.5</b>	<b>4.3</b>	<b>4.7</b>	<b>4.6</b>	<b>2.7</b>	<b>0.5</b>	<b>1.8</b>	<b>2.8</b>
Excluding Nigeria and South Africa	7.3	2.8	5.1	5.3	6.1	5.9	5.0	3.9	3.0	3.7	4.8
<b>Low-income countries</b>	<b>6.3</b>	<b>5.2</b>	<b>7.2</b>	<b>6.9</b>	<b>4.5</b>	<b>7.2</b>	<b>6.8</b>	<b>5.6</b>	<b>4.4</b>	<b>5.2</b>	<b>5.6</b>
Excluding low-income countries in fragile situations	8.1	6.7	7.8	8.1	6.4	7.2	7.6	7.3	6.2	6.4	6.7
<b>Countries in fragile situations</b>	<b>3.5</b>	<b>3.3</b>	<b>5.6</b>	<b>3.0</b>	<b>3.3</b>	<b>7.3</b>	<b>6.2</b>	<b>3.9</b>	<b>2.2</b>	<b>3.6</b>	<b>4.6</b>
CFA franc zone	4.9	2.6	4.0	2.8	6.1	4.5	5.7	4.3	3.1	3.9	5.0
CEMAC	6.3	2.3	3.6	4.4	5.9	2.7	4.7	2.1	-0.7	1.1	3.2
WAEMU	3.6	2.9	4.4	1.3	6.3	6.1	6.6	6.2	6.1	6.1	6.4
COMESA (SSA members)	6.2	5.7	7.9	7.1	5.9	6.2	6.6	6.0	5.0	5.1	5.3
EAC-5	6.2	5.2	7.4	6.9	4.6	5.8	6.0	6.0	5.8	5.7	6.1
ECOWAS	6.8	7.0	9.7	5.0	5.1	5.7	6.1	3.1	0.4	2.3	3.4
SACU	4.8	-1.6	3.4	3.4	2.4	3.0	2.0	1.3	0.4	1.1	1.8
SADC	6.2	0.5	4.2	4.3	3.7	4.3	3.6	2.7	1.5	2.2	2.7

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	17.6	8.1	7.6	9.5	5.5	10.9	8.2	1.6	-0.4	1.3	1.5
Benin	4.2	2.3	2.1	3.0	4.8	7.2	6.4	2.1	4.0	5.4	6.0
Botswana	6.0	-7.7	8.6	6.0	4.5	11.3	4.1	-1.7	2.9	4.1	4.2
Burkina Faso	5.9	3.0	8.4	6.6	6.5	5.7	4.2	4.0	5.4	6.1	6.3
Burundi	4.4	3.8	5.1	4.0	4.4	5.9	4.5	-4.0	-1.0	0.0	0.1
Cabo Verde	7.1	-1.3	1.5	4.0	1.1	0.8	0.6	1.1	4.0	4.0	4.1
Cameroon	3.6	2.9	4.1	4.6	4.6	5.4	5.6	4.9	4.8	3.9	4.4
Central African Rep.	3.3	1.7	3.0	3.3	4.1	-36.7	1.0	4.8	4.5	4.7	5.0
Chad	6.3	6.3	17.3	0.2	11.5	8.1	7.1	-2.9	-6.0	0.4	1.9
Comoros	1.3	1.8	2.1	2.2	3.0	3.5	2.0	1.0	2.2	3.3	4.0
Congo, Dem. Rep. of	5.9	2.8	7.2	7.0	7.2	8.6	9.5	7.0	2.4	2.8	3.5
Congo, Rep. of	5.7	3.9	6.4	7.5	9.7	8.2	7.9	5.3	-3.3	-0.5	2.1
Côte d'Ivoire	1.8	2.1	2.6	-4.8	12.5	9.0	9.4	8.2	7.1	6.3	7.0
Equatorial Guinea	34.8	19.0	-10.3	15.7	6.7	1.8	-2.0	-7.0	-2.6	-2.9	-4.3
Eritrea	-2.1	3.9	2.2	8.7	7.0	3.1	5.0	4.8	3.7	3.3	3.6
Ethiopia <sup>1</sup>	11.8	10.0	10.6	11.4	8.7	9.9	10.3	10.4	8.0	7.5	7.5
Gabon	5.0	-3.3	13.1	10.5	7.1	7.7	5.1	3.8	3.3	1.7	3.3
Gambia, The	3.3	6.4	6.5	-4.3	5.6	4.8	0.9	4.3	2.5	3.0	3.5
Ghana	6.2	4.8	7.6	8.6	8.6	6.7	4.0	4.1	5.0	4.0	5.0
Guinea	2.9	-0.3	1.9	3.3	3.2	1.5	1.1	0.1	5.2	4.3	4.9
Guinea-Bissau	3.2	3.4	4.6	8.1	-1.7	3.3	1.0	5.1	5.2	5.0	5.0
Kenya	4.6	3.3	8.4	6.1	4.6	5.7	5.3	5.6	6.0	5.3	5.8
Lesotho	4.0	4.5	6.9	4.5	5.3	3.6	3.4	2.5	2.9	2.2	2.4
Liberia	7.3	5.1	6.1	7.4	8.2	8.7	0.7	0.0	-1.2	3.0	5.3
Madagascar	5.8	-4.7	0.3	1.5	3.0	2.3	3.3	3.1	4.1	4.5	4.8
Malawi	6.1	8.3	6.9	4.9	1.9	5.2	5.7	2.9	2.3	4.5	5.0
Mali	4.2	4.7	5.4	3.2	-0.8	2.3	7.0	6.0	5.4	5.2	4.7
Mauritius	4.3	3.0	4.1	3.9	3.2	3.2	3.6	3.5	3.6	3.9	4.0
Mozambique	8.1	6.4	6.7	7.1	7.2	7.1	7.4	6.6	3.4	4.5	5.5
Namibia	4.3	0.3	6.0	5.1	5.1	5.7	6.5	5.3	0.1	3.5	4.8
Niger	5.2	-0.7	8.4	1.3	4.2	3.2	8.1	4.9	3.4	4.8	5.6
Nigeria	10.8	10.0	12.4	5.3	5.9	8.3	7.3	3.6	-0.3	0.2	1.1
Rwanda	9.0	6.3	7.3	7.8	8.8	4.7	7.6	8.9	5.9	6.1	6.8
São Tomé & Príncipe	5.7	4.0	4.5	4.8	4.5	4.3	4.1	4.0	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	7.0
Seychelles	4.8	-1.1	5.9	5.4	3.7	5.0	6.2	5.7	4.4	4.1	3.4
Sierra Leone	5.8	3.2	5.3	6.3	15.2	20.7	4.6	-20.6	4.9	5.0	6.6
South Africa	4.8	-1.5	3.0	3.3	2.2	2.5	1.7	1.3	0.3	0.8	1.6
South Sudan	...	...	...	...	-0.8	4.1	-17.5	-1.2	-7.0	-3.0	-2.0
Swaziland	4.2	4.5	3.5	2.0	3.5	4.8	3.6	1.1	-0.4	0.3	0.3
Tanzania	6.5	5.4	6.4	7.9	5.1	7.3	7.0	7.0	6.6	6.8	6.9
Togo	2.4	3.5	4.1	4.8	5.9	6.1	5.4	5.3	5.0	5.0	5.3
Uganda	8.3	8.1	7.7	6.8	2.6	4.0	5.2	5.0	4.7	5.0	5.8
Zambia	7.7	9.2	10.3	5.6	7.6	5.1	4.7	2.9	3.0	3.5	4.0
Zimbabwe <sup>2</sup>	-7.5	7.5	11.4	11.9	10.6	4.5	3.8	1.1	0.5	2.0	-1.5
<b>Sub-Saharan Africa</b>	<b>7.8</b>	<b>4.9</b>	<b>7.6</b>	<b>5.5</b>	<b>5.2</b>	<b>6.3</b>	<b>5.4</b>	<b>3.5</b>	<b>1.9</b>	<b>2.4</b>	<b>3.1</b>
<i>Median</i>	5.1	3.7	6.1	5.2	5.1	5.1	4.7	4.0	3.6	4.0	4.7
Excluding Nigeria and South Africa	7.6	5.0	6.7	6.6	6.2	6.8	5.9	4.5	3.9	4.3	4.8
<b>Oil-exporting countries</b>	<b>11.7</b>	<b>9.2</b>	<b>10.8</b>	<b>6.2</b>	<b>5.9</b>	<b>8.2</b>	<b>6.6</b>	<b>3.0</b>	<b>-0.2</b>	<b>0.5</b>	<b>1.3</b>
Excluding Nigeria	5.1	7.1	6.2	8.5	6.1	8.0	4.9	1.4	-0.2	1.1	1.8
<b>Oil-importing countries</b>	<b>5.3</b>	<b>1.9</b>	<b>5.3</b>	<b>5.0</b>	<b>4.7</b>	<b>4.9</b>	<b>4.6</b>	<b>3.9</b>	<b>3.4</b>	<b>3.7</b>	<b>4.3</b>
Excluding South Africa	5.6	4.3	6.9	6.0	6.2	6.4	6.2	5.4	5.1	5.2	5.6
<b>Middle-income countries</b>	<b>8.2</b>	<b>4.8</b>	<b>7.7</b>	<b>5.1</b>	<b>5.0</b>	<b>6.3</b>	<b>5.2</b>	<b>3.0</b>	<b>1.1</b>	<b>1.5</b>	<b>2.3</b>
Excluding Nigeria and South Africa	8.7	4.8	6.2	6.5	6.4	7.1	5.7	3.6	3.3	3.5	4.1
<b>Low-income countries</b>	<b>6.2</b>	<b>5.3</b>	<b>7.4</b>	<b>6.8</b>	<b>5.8</b>	<b>6.5</b>	<b>6.2</b>	<b>5.4</b>	<b>4.6</b>	<b>5.2</b>	<b>5.5</b>
Excluding low-income countries in fragile situations	8.1	6.7	7.8	8.1	6.1	7.1	7.6	7.3	6.2	6.4	6.7
<b>Countries in fragile situations</b>	<b>3.3</b>	<b>3.0</b>	<b>5.8</b>	<b>3.3</b>	<b>7.0</b>	<b>6.2</b>	<b>5.2</b>	<b>3.5</b>	<b>2.4</b>	<b>3.5</b>	<b>4.0</b>
CFA franc zone	7.1	4.3	4.7	4.2	6.8	5.6	5.8	4.0	3.6	4.0	4.6
CEMAC	10.8	6.1	4.8	7.6	7.1	5.3	4.6	1.6	0.7	1.4	2.4
WAEMU	3.6	2.6	4.6	1.0	6.4	5.9	6.9	6.1	5.8	5.9	6.3
COMESA (SSA members)	6.2	5.7	7.9	7.1	5.9	6.2	6.6	6.0	5.0	5.1	5.3
EAC-5	6.2	5.2	7.4	6.9	4.6	5.8	6.0	6.0	5.8	5.7	6.1
ECOWAS	9.0	8.2	10.6	4.9	6.2	7.8	6.8	3.8	1.3	1.6	2.5
SACU	4.8	-1.6	3.4	3.4	2.4	3.0	2.0	1.3	0.4	1.1	1.8
SADC	6.3	1.2	4.8	5.0	3.8	4.9	4.0	2.5	1.4	2.2	2.7

See sources and footnotes on page 72.

**Table SA3. Real Per Capita GDP Growth**  
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	13.8	-0.6	0.4	0.9	2.1	3.7	1.8	0.0	-2.9	-1.6	-1.4
Benin	1.0	-0.6	-0.8	0.1	2.0	4.4	3.6	-0.4	1.5	2.9	3.6
Botswana	4.6	-8.9	7.2	4.8	3.2	10.0	2.9	-2.9	1.7	2.9	3.0
Burkina Faso	2.8	0.2	5.6	3.3	3.2	3.2	1.1	1.2	2.5	3.2	3.5
Burundi	2.4	1.4	2.7	1.6	2.0	3.5	2.0	-6.2	-3.4	-2.3	-2.2
Cabo Verde	6.4	-1.5	1.1	3.3	-2.0	-0.4	-0.6	-0.2	2.8	2.7	2.8
Cameroon	0.3	-0.8	0.8	1.6	2.0	3.0	3.3	3.2	1.9	1.1	1.8
Central African Rep.	1.5	-0.2	1.1	1.3	2.1	-37.9	-0.9	2.8	2.5	2.7	3.0
Chad	7.1	1.6	10.8	-2.3	6.2	3.2	4.3	-0.7	-8.7	-2.4	-0.1
Comoros	-1.1	-1.2	-0.9	-0.8	-0.0	0.5	-1.0	-1.9	-0.8	0.3	1.0
Congo, Dem. Rep. of	3.0	-0.1	4.0	3.8	4.0	5.3	6.3	3.8	-0.6	-0.2	0.4
Congo, Rep. of	1.4	4.8	5.6	0.5	0.9	1.0	4.5	0.4	-4.7	-1.5	6.6
Côte d'Ivoire	-0.8	0.6	-0.6	-6.6	7.3	6.5	6.1	6.2	4.8	4.1	4.5
Equatorial Guinea	11.8	-1.5	-11.5	3.6	5.3	-6.8	-3.2	-9.9	-12.4	-7.4	-7.5
Eritrea	-5.2	0.6	-1.1	5.2	3.6	-0.2	1.6	1.4	0.4	-0.0	0.3
Ethiopia <sup>1</sup>	9.2	8.3	8.8	9.6	7.0	8.2	8.6	8.7	6.3	5.8	5.8
Gabon	-1.5	-5.9	2.4	3.2	1.4	1.5	2.9	2.4	0.8	-0.4	1.3
Gambia, The	0.0	3.1	3.1	-7.4	2.2	1.4	-2.3	1.0	-0.8	-0.3	0.2
Ghana	3.6	2.2	5.2	11.2	6.6	4.6	1.4	1.3	1.4	3.1	6.4
Guinea	0.6	-2.9	-0.7	0.6	0.6	-1.0	-1.4	-2.4	2.7	1.7	2.3
Guinea-Bissau	1.0	1.1	3.8	5.8	-3.8	1.0	-1.2	2.8	2.9	2.7	2.7
Kenya	1.8	0.5	6.1	3.4	1.5	2.9	2.4	2.8	3.1	2.4	2.9
Lesotho	3.7	4.3	6.6	4.3	5.0	3.3	3.2	2.3	2.6	1.9	2.1
Liberia	5.7	0.8	1.8	4.7	5.5	5.9	-1.9	-2.5	-3.5	0.6	2.9
Madagascar	2.8	-7.4	-2.5	-1.4	0.2	-0.6	0.5	0.3	1.3	1.7	2.0
Malawi	3.5	5.3	3.9	1.9	-1.0	2.3	2.7	0.1	-0.6	1.6	2.1
Mali	1.0	1.4	2.2	0.2	-3.8	-0.7	3.7	2.7	2.1	1.9	1.5
Mauritius	3.8	2.8	3.9	3.7	2.9	3.0	3.4	3.4	3.2	3.5	3.6
Mozambique	5.0	3.4	3.7	4.1	4.2	4.2	4.5	3.7	0.6	1.7	2.7
Namibia	2.9	-1.2	4.5	3.5	3.1	3.7	4.5	3.3	-0.7	2.6	4.0
Niger	1.5	-4.1	5.1	-0.9	8.5	2.1	3.8	0.4	1.5	2.0	2.4
Nigeria	4.9	5.5	8.3	2.1	1.5	2.6	3.5	-0.1	-4.2	-1.9	-0.8
Rwanda	6.8	4.1	4.1	5.7	5.7	2.3	5.1	6.0	3.8	3.5	4.1
São Tomé & Príncipe	3.0	1.0	1.5	1.9	1.8	1.7	1.6	1.4	1.5	2.6	3.1
Senegal	1.7	-0.4	1.3	-1.1	1.5	0.6	1.4	3.5	3.5	3.7	4.0
Seychelles	3.7	-1.5	3.0	8.2	2.7	3.1	4.6	3.4	3.7	3.3	2.3
Sierra Leone	2.4	1.2	3.3	4.3	13.0	18.2	2.4	-21.7	2.9	3.0	4.6
South Africa	3.4	-2.9	1.6	1.8	0.7	0.9	0.1	-0.3	-1.3	-0.8	-0.1
South Sudan	...	...	...	...	-54.7	23.4	-1.6	-4.4	-18.0	-8.2	-5.9
Swaziland	3.2	3.4	2.4	0.8	2.2	3.6	2.4	-0.1	-1.6	-1.0	-1.0
Tanzania	3.6	2.7	3.8	5.3	2.7	5.2	4.9	4.9	4.5	4.7	4.8
Togo	-0.7	0.7	1.3	2.0	3.1	3.3	2.6	2.5	2.2	2.2	2.5
Uganda	4.6	4.5	4.2	3.5	-0.8	0.4	2.1	1.9	1.6	2.0	2.7
Zambia	4.7	6.0	7.1	2.4	4.4	1.9	1.5	-0.2	-0.1	0.4	0.9
Zimbabwe <sup>2</sup>	-8.3	6.6	10.4	10.8	5.5	1.6	1.2	-1.4	-2.0	-0.5	-4.0
<b>Sub-Saharan Africa</b>	<b>4.1</b>	<b>1.5</b>	<b>4.5</b>	<b>2.6</b>	<b>1.8</b>	<b>2.8</b>	<b>2.6</b>	<b>1.0</b>	<b>-1.0</b>	<b>0.2</b>	<b>1.1</b>
<i>Median</i>	2.9	0.8	3.2	2.8	2.2	2.9	2.4	1.2	1.5	1.9	2.4
Excluding Nigeria and South Africa	4.1	1.3	3.4	3.4	2.6	3.8	3.2	2.1	1.2	1.9	2.7
<b>Oil-exporting countries</b>	<b>5.7</b>	<b>3.8</b>	<b>6.2</b>	<b>1.9</b>	<b>1.0</b>	<b>2.8</b>	<b>3.0</b>	<b>-0.2</b>	<b>-4.0</b>	<b>-1.8</b>	<b>-0.7</b>
Excluding Nigeria	7.9	-0.6	0.6	1.2	-0.2	3.3	1.9	-0.3	-3.7	-1.8	-0.5
<b>Oil-importing countries</b>	<b>3.2</b>	<b>-0.1</b>	<b>3.2</b>	<b>3.2</b>	<b>2.4</b>	<b>2.8</b>	<b>2.4</b>	<b>1.8</b>	<b>1.2</b>	<b>1.7</b>	<b>2.3</b>
Excluding South Africa	3.0	1.9	4.4	4.1	3.5	4.0	3.7	2.9	2.6	2.9	3.5
<b>Middle-income countries</b>	<b>4.3</b>	<b>1.2</b>	<b>4.5</b>	<b>2.2</b>	<b>1.9</b>	<b>2.3</b>	<b>2.2</b>	<b>0.3</b>	<b>-1.8</b>	<b>-0.5</b>	<b>0.5</b>
Excluding Nigeria and South Africa	4.6	0.2	2.5	2.6	3.3	3.2	2.4	1.4	0.5	1.2	2.3
<b>Low-income countries</b>	<b>3.5</b>	<b>2.6</b>	<b>4.5</b>	<b>4.3</b>	<b>1.8</b>	<b>4.5</b>	<b>4.2</b>	<b>3.0</b>	<b>1.9</b>	<b>2.7</b>	<b>3.0</b>
Excluding low-income countries in fragile situations	5.1	4.1	5.2	5.6	3.8	4.8	5.2	5.0	4.0	4.1	4.4
<b>Countries in fragile situations</b>	<b>0.9</b>	<b>0.7</b>	<b>2.8</b>	<b>0.4</b>	<b>0.3</b>	<b>4.3</b>	<b>3.3</b>	<b>1.0</b>	<b>-0.6</b>	<b>0.8</b>	<b>1.7</b>
CFA franc zone	2.0	-0.3	1.1	-0.1	3.2	1.7	3.0	1.7	0.5	1.3	2.4
CEMAC	3.4	-0.6	0.7	1.6	3.0	-0.0	2.3	-0.1	-2.9	-1.2	0.9
WAEMU	0.7	0.1	1.5	-1.6	3.4	3.3	3.7	3.3	3.2	3.3	3.5
COMESA (SSA members)	3.5	3.2	5.5	4.7	3.2	3.6	4.0	3.5	2.5	2.6	2.8
EAC-5	3.3	2.3	4.7	4.2	1.6	3.1	3.3	3.3	3.2	3.1	3.5
ECOWAS	3.9	4.2	6.8	2.2	2.3	2.9	3.2	0.4	-2.3	-0.4	0.7
SACU	3.5	-2.9	1.9	2.0	0.9	1.5	0.4	-0.3	-1.1	-0.5	0.2
SADC	4.4	-1.3	2.3	2.4	1.7	2.3	1.5	0.6	-0.5	0.2	0.7

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	20.9	13.7	14.5	13.5	10.3	8.8	7.3	10.3	32.4	27.0	17.8
Benin	3.9	0.4	2.2	2.7	6.7	1.0	-1.1	0.3	-0.8	2.0	2.1
Botswana	9.4	8.1	6.9	8.5	7.5	5.9	4.4	3.1	2.8	3.5	4.2
Burkina Faso	3.8	0.9	-0.6	2.8	3.8	0.5	-0.3	0.9	0.7	1.5	2.0
Burundi	11.4	10.6	6.5	9.6	18.2	7.9	4.4	5.6	5.5	12.4	16.4
Cabo Verde	2.9	1.0	2.1	4.5	2.5	1.5	-0.2	0.1	-1.5	1.0	1.5
Cameroon	2.7	3.0	1.3	2.9	2.4	2.1	1.9	2.7	0.9	1.0	1.4
Central African Rep.	3.5	3.5	1.5	1.2	5.9	6.6	11.6	4.5	4.6	3.8	3.7
Chad	1.5	10.1	-2.1	1.9	7.7	0.2	1.7	6.8	-1.1	0.2	1.8
Comoros	4.0	4.8	3.9	2.2	5.9	1.6	1.3	2.0	2.0	2.0	2.0
Congo, Dem. Rep. of	14.6	46.1	23.5	14.9	0.9	0.9	1.2	1.0	22.4	15.0	10.0
Congo, Rep. of	3.7	4.3	0.4	1.8	5.0	4.6	0.9	2.7	3.6	1.3	2.1
Côte d'Ivoire	3.2	1.0	1.4	4.9	1.3	2.6	0.4	1.2	1.0	1.5	2.0
Equatorial Guinea	4.4	5.7	5.3	4.8	3.4	3.2	4.3	1.7	1.4	1.6	1.5
Eritrea	16.4	33.0	11.2	3.9	6.0	6.5	10.0	9.0	9.0	9.0	9.0
Ethiopia	18.0	8.5	8.1	33.2	24.1	8.1	7.4	10.1	7.3	6.3	7.5
Gabon	0.9	1.9	1.4	1.3	2.7	0.5	4.5	-0.1	2.1	2.5	2.5
Gambia, The	6.2	4.6	5.0	4.8	4.6	5.2	6.3	6.8	7.2	8.1	6.2
Ghana	13.3	13.1	6.7	7.7	7.1	11.7	15.5	17.2	17.5	12.0	9.0
Guinea	25.0	4.7	15.5	21.4	15.2	11.9	9.7	8.2	8.2	8.4	7.0
Guinea-Bissau	4.2	-1.6	1.1	5.1	2.1	0.8	-1.0	1.5	1.5	2.0	2.2
Kenya	8.3	10.6	4.3	14.0	9.4	5.7	6.9	6.6	6.3	6.5	5.2
Lesotho	6.9	5.9	3.4	6.0	5.5	5.0	4.0	5.0	7.0	6.6	6.2
Liberia	9.8	7.4	7.3	8.5	6.8	7.6	9.9	7.7	8.8	11.0	9.5
Madagascar	12.5	9.0	9.2	9.5	5.7	5.8	6.1	7.4	6.7	6.9	6.4
Malawi	11.5	8.4	7.4	7.6	21.3	28.3	23.8	21.9	21.7	12.9	10.6
Mali	3.1	2.2	1.3	3.1	5.3	-0.6	0.9	1.4	-1.8	0.2	1.2
Mauritius	7.4	2.5	2.9	6.5	3.9	3.5	3.2	1.3	1.0	3.2	2.8
Mozambique	10.2	3.3	12.7	10.4	2.1	4.2	2.3	2.4	19.2	19.0	10.6
Namibia	5.4	9.5	4.9	5.0	6.7	5.6	5.3	3.4	6.7	6.0	5.8
Niger	4.0	4.3	-2.8	2.9	0.5	2.3	-0.9	1.0	1.1	2.0	2.1
Nigeria	11.6	12.5	13.7	10.8	12.2	8.5	8.0	9.0	15.7	17.4	17.5
Rwanda	10.9	10.3	2.3	5.7	6.3	4.2	1.8	2.5	5.7	7.1	6.0
São Tomé & Príncipe	20.8	17.0	13.3	14.3	10.6	8.1	7.0	5.3	5.4	3.2	3.0
Senegal	3.3	-2.2	1.2	3.4	1.4	0.7	-1.1	0.1	0.9	1.9	2.0
Seychelles	9.0	31.8	-2.4	2.6	7.1	4.3	1.4	4.0	-1.0	2.2	3.7
Sierra Leone	12.5	9.2	17.8	18.5	13.8	9.8	8.3	9.0	11.3	14.7	8.5
South Africa	5.5	7.1	4.3	5.0	5.6	5.8	6.1	4.6	6.3	6.2	5.5
South Sudan	...	...	...	...	45.1	-0.0	1.7	52.8	379.8	143.0	28.5
Swaziland	6.2	7.4	4.5	6.1	8.9	5.6	5.7	5.0	8.0	7.6	6.2
Tanzania	6.6	12.1	7.2	12.7	16.0	7.9	6.1	5.6	5.2	5.1	5.0
Togo	3.6	3.7	1.4	3.6	2.6	1.8	0.2	1.8	0.9	1.5	1.9
Uganda	7.5	13.0	3.7	15.0	12.7	4.9	3.1	5.4	5.5	6.3	6.0
Zambia	13.7	13.4	8.5	8.7	6.6	7.0	7.8	10.1	17.9	9.0	8.0
Zimbabwe <sup>1</sup>	39.9	6.2	3.0	3.5	3.7	1.6	-0.2	-2.4	-1.6	3.0	6.6
<b>Sub-Saharan Africa</b>	<b>8.8</b>	<b>9.8</b>	<b>8.1</b>	<b>9.4</b>	<b>9.3</b>	<b>6.6</b>	<b>6.3</b>	<b>7.0</b>	<b>11.4</b>	<b>10.7</b>	<b>9.5</b>
<i>Median</i>	7.2	7.3	4.3	5.4	6.0	4.9	4.3	4.5	5.5	6.0	5.5
Excluding Nigeria and South Africa	9.2	9.5	6.5	10.6	9.1	5.7	5.3	6.7	11.0	8.8	6.8
<b>Oil-exporting countries</b>	<b>10.9</b>	<b>11.5</b>	<b>12.0</b>	<b>10.0</b>	<b>11.2</b>	<b>7.5</b>	<b>7.1</b>	<b>8.9</b>	<b>17.8</b>	<b>17.3</b>	<b>15.3</b>
Excluding Nigeria	9.1	8.8	7.4	7.6	8.4	4.9	4.6	8.5	23.7	17.2	9.9
<b>Oil-importing countries</b>	<b>7.6</b>	<b>8.6</b>	<b>5.4</b>	<b>8.9</b>	<b>7.9</b>	<b>5.9</b>	<b>5.7</b>	<b>5.6</b>	<b>7.1</b>	<b>6.5</b>	<b>5.8</b>
Excluding South Africa	9.3	9.7	6.2	11.6	9.3	6.0	5.5	6.2	7.5	6.6	5.9
<b>Middle-income countries</b>	<b>8.6</b>	<b>9.5</b>	<b>8.5</b>	<b>8.3</b>	<b>8.4</b>	<b>6.9</b>	<b>6.9</b>	<b>7.1</b>	<b>11.6</b>	<b>11.5</b>	<b>10.5</b>
Excluding Nigeria and South Africa	8.8	8.3	6.1	8.3	6.4	6.0	6.1	6.7	11.3	9.2	7.0
<b>Low-income countries</b>	<b>9.7</b>	<b>10.8</b>	<b>6.9</b>	<b>13.4</b>	<b>12.3</b>	<b>5.4</b>	<b>4.5</b>	<b>6.7</b>	<b>10.7</b>	<b>8.5</b>	<b>6.6</b>
Excluding low-income countries in fragile situations	9.4	8.9	5.8	16.6	14.4	6.0	4.6	5.9	6.1	6.1	5.9
<b>Countries in fragile situations</b>	<b>8.1</b>	<b>10.5</b>	<b>6.6</b>	<b>7.2</b>	<b>7.3</b>	<b>4.1</b>	<b>3.3</b>	<b>6.2</b>	<b>14.3</b>	<b>9.7</b>	<b>6.1</b>
CFA franc zone	3.1	2.7	1.1	3.2	3.3	1.7	1.2	1.8	0.8	1.4	1.9
CEMAC	2.7	4.6	1.5	2.7	3.8	2.2	2.7	2.7	1.3	1.3	1.8
WAEMU	3.4	0.9	0.8	3.6	2.8	1.3	-0.1	1.0	0.4	1.5	1.9
COMESA (SSA members)	11.5	13.0	7.3	15.5	11.3	6.2	5.9	6.8	8.8	7.4	6.9
EAC-5	7.8	11.6	5.1	13.2	12.3	6.3	5.5	5.7	5.7	6.1	5.5
ECOWAS	10.3	10.4	11.1	9.6	10.3	7.6	7.3	8.2	12.9	13.7	13.4
SACU	5.7	7.2	4.4	5.1	5.8	5.8	6.0	4.5	6.2	6.1	5.5
SADC	7.9	9.8	6.9	7.6	7.1	6.3	6.0	5.5	10.7	9.3	7.4

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	17.3	14.0	15.3	11.4	9.0	7.7	7.5	14.3	41.9	20.0	16.0
Benin	4.1	-0.5	4.0	1.8	6.8	-1.8	-0.8	2.3	-2.7	2.2	2.0
Botswana	9.9	5.8	7.4	9.2	7.4	4.1	3.8	3.1	3.0	3.9	4.5
Burkina Faso	4.1	-1.8	-0.3	5.1	1.7	0.1	-0.1	1.3	0.6	2.0	2.0
Burundi	12.5	4.6	4.1	14.9	11.8	9.0	3.7	7.1	9.5	14.9	17.7
Cabo Verde	3.5	-0.4	3.4	3.6	4.1	0.1	-0.4	-0.5	-1.2	1.2	1.8
Cameroon	3.1	0.9	2.6	2.7	2.5	1.7	2.6	1.5	0.3	1.5	1.4
Central African Rep.	4.7	-1.2	2.3	4.3	5.9	5.9	9.7	4.8	4.7	3.6	3.6
Chad	3.3	4.7	-2.2	10.7	2.1	0.9	3.7	4.1	-4.9	7.8	-2.9
Comoros	4.4	2.2	6.7	4.9	1.0	3.5	0.0	2.0	2.0	2.0	2.0
Congo, Dem. Rep. of	17.2	53.4	9.8	8.7	2.8	1.1	1.0	0.9	22.9	17.0	12.0
Congo, Rep. of	4.4	2.5	5.4	1.8	7.5	2.1	0.5	3.2	0.8	0.4	3.6
Côte d'Ivoire	3.9	-1.7	5.1	2.0	3.4	0.4	0.9	1.4	1.2	1.7	2.0
Equatorial Guinea	4.3	5.0	5.4	4.9	2.6	4.9	2.6	1.6	1.6	1.5	1.5
Eritrea	17.5	22.2	14.2	12.3	2.9	9.5	10.0	9.0	9.0	9.0	9.0
Ethiopia	19.3	7.1	14.6	35.9	15.0	7.7	7.1	10.0	6.7	6.9	7.5
Gabon	1.1	0.9	0.7	2.3	2.2	3.3	1.7	-1.2	4.1	2.5	2.5
Gambia, The	5.2	2.7	5.8	4.4	4.9	5.6	6.9	6.7	7.9	7.0	5.4
Ghana	13.7	9.5	6.9	8.4	8.1	13.5	17.0	17.7	15.4	10.0	8.0
Guinea	24.6	7.9	20.8	19.0	12.8	10.5	9.0	7.3	8.7	8.1	6.0
Guinea-Bissau	4.9	-6.4	5.7	3.4	1.6	-0.1	-0.1	2.4	1.6	2.0	2.2
Kenya	9.0	8.0	5.8	18.9	3.2	7.1	6.0	8.0	6.3	6.0	5.0
Lesotho	7.2	3.8	3.6	7.2	5.0	5.6	2.9	5.2	6.7	6.5	6.0
Liberia	9.5	9.7	6.6	11.4	7.7	8.5	7.7	8.0	12.5	10.0	9.1
Madagascar	13.6	8.0	10.2	6.9	5.8	6.3	6.0	7.6	7.1	7.1	6.3
Malawi	11.6	7.6	6.3	9.8	34.6	23.5	24.2	24.9	19.5	11.8	9.5
Mali	3.7	1.7	1.9	5.3	2.4	0.0	1.2	1.0	-0.8	1.0	1.4
Mauritius	7.3	1.5	6.1	4.9	3.2	4.1	0.2	1.3	2.3	2.7	3.0
Mozambique	9.2	4.2	16.6	5.5	2.2	3.0	1.1	11.1	24.6	13.5	7.0
Namibia	6.1	7.9	3.1	7.4	6.4	4.9	4.6	3.7	7.3	6.0	5.8
Niger	5.3	-3.1	1.4	1.4	0.7	1.1	-0.6	2.2	1.2	2.2	2.0
Nigeria	10.3	13.9	11.8	10.3	12.0	8.0	8.0	9.6	18.6	17.5	17.5
Rwanda	11.4	5.7	0.2	8.3	3.9	3.6	2.1	4.5	7.3	7.0	5.0
São Tomé & Príncipe	21.9	16.1	12.9	11.9	10.4	7.1	6.4	4.0	5.1	3.0	3.0
Senegal	3.8	-4.5	4.3	2.7	1.1	-0.1	-0.8	0.4	2.1	1.9	2.0
Seychelles	16.1	-2.5	0.4	5.5	5.8	3.4	0.5	3.2	-0.2	3.8	3.4
Sierra Leone	12.4	10.8	18.4	16.9	12.0	8.5	9.8	10.1	16.7	9.0	8.0
South Africa	6.4	6.3	3.5	6.2	5.7	5.4	5.3	5.3	6.7	5.9	5.5
South Sudan	...	...	...	...	25.2	-8.8	9.9	109.9	479.7	119.9	20.0
Swaziland	7.7	4.5	4.5	7.8	8.3	4.4	6.2	4.9	9.0	6.5	5.9
Tanzania	7.1	12.2	5.6	19.8	12.1	5.6	4.8	6.8	5.0	5.0	5.0
Togo	4.9	0.6	3.8	1.5	2.9	-0.4	1.8	1.8	2.3	2.5	1.9
Uganda	8.4	10.9	1.5	23.6	4.3	5.5	2.1	8.4	5.7	6.9	5.1
Zambia	13.4	9.9	7.9	7.2	7.3	7.1	7.9	21.1	7.5	8.5	7.5
Zimbabwe <sup>1</sup>	...	-7.7	3.2	4.9	2.9	0.3	-0.8	-2.5	-0.9	5.0	8.0
<b>Sub-Saharan Africa</b>	<b>8.9</b>	<b>9.2</b>	<b>7.7</b>	<b>10.0</b>	<b>8.2</b>	<b>6.1</b>	<b>6.1</b>	<b>8.2</b>	<b>12.7</b>	<b>10.4</b>	<b>9.3</b>
<i>Median</i>	7.3	4.7	5.4	7.0	5.0	4.4	3.7	4.5	5.7	6.0	5.0
Excluding Nigeria and South Africa	9.5	7.7	7.2	11.8	6.9	5.2	5.2	8.5	11.7	8.1	6.3
<b>Oil-exporting countries</b>	<b>9.8</b>	<b>12.2</b>	<b>10.9</b>	<b>9.5</b>	<b>10.5</b>	<b>6.9</b>	<b>7.2</b>	<b>10.1</b>	<b>21.2</b>	<b>16.6</b>	<b>15.0</b>
Excluding Nigeria	8.3	7.8	8.3	7.4	6.7	4.0	5.0	11.7	28.4	14.2	8.6
<b>Oil-importing countries</b>	<b>8.4</b>	<b>7.1</b>	<b>5.4</b>	<b>10.4</b>	<b>6.5</b>	<b>5.5</b>	<b>5.3</b>	<b>6.7</b>	<b>7.0</b>	<b>6.3</b>	<b>5.7</b>
Excluding South Africa	9.9	7.7	6.8	13.3	7.0	5.6	5.2	7.5	7.1	6.5	5.7
<b>Middle-income countries</b>	<b>8.5</b>	<b>9.1</b>	<b>7.9</b>	<b>8.5</b>	<b>8.1</b>	<b>6.6</b>	<b>6.6</b>	<b>8.0</b>	<b>13.1</b>	<b>10.9</b>	<b>10.4</b>
Excluding Nigeria and South Africa	8.7	6.4	7.3	8.5	5.6	6.0	5.9	8.4	11.9	7.6	6.5
<b>Low-income countries</b>	<b>10.6</b>	<b>9.3</b>	<b>7.0</b>	<b>16.0</b>	<b>8.5</b>	<b>4.4</b>	<b>4.4</b>	<b>8.7</b>	<b>11.4</b>	<b>8.7</b>	<b>6.1</b>
Excluding low-income countries in fragile situations	10.1	7.5	7.1	20.6	9.1	5.0	3.9	7.5	6.2	6.1	5.5
<b>Countries in fragile situations</b>	<b>9.0</b>	<b>8.6</b>	<b>6.4</b>	<b>6.8</b>	<b>6.9</b>	<b>2.7</b>	<b>4.0</b>	<b>8.2</b>	<b>15.3</b>	<b>10.0</b>	<b>5.8</b>
CFA franc zone	3.6	0.4	2.9	3.5	2.9	1.2	1.3	1.5	0.6	2.1	1.7
CEMAC	3.2	2.5	2.5	4.1	3.2	2.6	2.4	1.7	0.5	2.4	1.3
WAEMU	4.0	-1.6	3.3	3.0	2.7	0.0	0.3	1.3	0.7	1.8	1.9
COMESA (SSA members)	12.5	10.7	7.6	17.6	7.4	6.4	5.3	8.5	7.9	7.7	6.9
EAC-5	8.4	9.9	4.4	19.6	6.6	6.1	4.5	7.5	5.9	6.0	5.2
ECOWAS	9.6	10.7	10.2	9.1	10.1	7.1	7.4	8.7	14.8	13.7	13.4
SACU	6.5	6.3	3.6	6.3	5.8	5.3	5.2	5.1	6.6	5.8	5.5
SADC	8.4	9.0	6.1	8.2	6.9	5.6	5.4	7.2	11.6	8.3	7.2

See sources and footnotes on page 72.



**Table SA6. Total Investment**  
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	12.6	15.2	14.4	12.9	14.9	14.7	15.3	9.6	8.4	7.9	7.3
Benin	20.7	21.9	23.1	24.1	22.6	27.8	28.6	26.0	24.6	29.3	27.4
Botswana	30.0	37.3	35.4	38.7	38.1	32.9	27.9	32.1	21.3	32.3	31.9
Burkina Faso	18.5	17.9	18.0	15.4	14.9	18.2	20.8	13.3	13.6	16.6	17.7
Burundi	14.6	14.2	15.1	14.7	14.3	15.4	15.9	11.0	9.0	7.0	6.0
Cabo Verde	36.7	36.5	37.7	37.2	40.7	39.3	37.3	41.5	41.8	45.1	46.4
Cameroon	16.5	21.0	20.3	20.5	20.7	21.6	22.9	21.3	20.1	19.6	20.6
Central African Rep.	10.1	13.2	14.3	12.2	15.0	8.7	10.2	13.9	13.5	17.5	17.9
Chad	22.5	30.1	34.4	28.4	31.4	27.4	30.4	26.9	20.7	25.4	20.9
Comoros	10.7	12.4	15.4	14.9	16.8	20.4	18.6	18.4	20.9	21.6	21.6
Congo, Dem. Rep. of	11.0	13.9	13.7	10.1	14.2	16.8	17.9	20.4	11.4	11.8	13.1
Congo, Rep. of	22.0	23.0	19.8	24.6	25.0	29.4	40.2	34.8	24.2	17.7	18.7
Côte d'Ivoire	12.8	11.6	14.9	9.7	17.2	18.1	17.1	17.8	18.6	19.5	20.3
Equatorial Guinea	31.8	68.2	70.4	50.4	53.5	48.7	55.9	74.2	56.8	45.7	42.7
Eritrea	15.9	9.3	9.3	10.0	9.5	8.7	7.9	7.6	7.4	7.2	6.7
Ethiopia <sup>1</sup>	22.7	24.7	25.5	32.1	37.1	34.1	38.0	39.4	38.5	35.7	35.3
Gabon	23.2	29.1	26.1	25.3	29.2	33.4	36.1	34.8	36.7	36.7	36.5
Gambia, The	21.1	19.6	21.3	18.9	27.8	20.0	20.9	19.7	18.7	16.9	16.5
Ghana	22.2	21.4	25.9	27.4	32.0	28.0	26.6	24.8	24.4	24.3	25.7
Guinea	17.3	10.3	9.4	13.4	24.7	20.4	9.3	10.5	17.1	17.1	17.0
Guinea-Bissau	6.8	6.0	6.6	5.4	7.4	6.7	7.8	9.9	11.4	12.2	12.4
Kenya	18.9	19.3	20.7	21.7	21.5	20.2	22.5	21.2	20.2	18.2	19.9
Lesotho	...	...	...	...	...	...	...	...	...	...	...
Liberia	...	...	...	...	...	...	...	...	...	...	...
Madagascar	29.7	35.6	23.4	17.6	17.6	15.9	15.6	13.1	15.3	18.2	18.2
Malawi	19.4	24.5	22.8	12.4	12.1	12.7	12.0	12.1	11.3	13.7	12.1
Mali	22.4	22.0	24.0	19.7	17.2	17.8	17.6	17.4	19.0	20.0	19.5
Mauritius	25.6	21.3	23.7	26.0	24.8	25.2	23.0	21.2	21.6	22.1	22.6
Mozambique	19.9	15.2	18.7	29.8	59.6	69.6	67.7	53.6	38.6	34.1	70.7
Namibia	22.6	26.5	24.1	22.4	26.7	25.2	33.0	34.2	27.8	25.1	23.4
Niger	23.2	32.1	49.5	43.9	39.5	40.2	39.3	42.6	39.6	42.0	43.0
Nigeria	16.5	19.4	17.3	16.2	14.9	14.9	15.8	15.5	12.6	12.5	12.8
Rwanda	18.1	23.4	23.0	23.5	25.8	26.5	25.3	26.5	26.1	25.5	24.8
São Tomé & Príncipe	43.5	38.9	55.9	44.6	35.6	28.2	25.2	32.3	25.8	28.5	28.0
Senegal	26.3	22.1	22.1	25.6	29.3	27.8	25.1	24.0	26.9	27.2	27.0
Seychelles	28.6	27.3	36.6	35.4	38.1	38.5	37.7	33.9	30.3	35.4	33.5
Sierra Leone	10.2	10.0	31.1	41.9	27.9	12.7	13.1	16.0	16.1	17.5	18.8
South Africa	20.2	20.7	19.5	19.7	20.0	21.2	20.8	20.9	19.5	19.2	19.3
South Sudan	...	...	...	5.5	10.7	12.8	20.6	14.5	17.2	7.3	17.7
Swaziland	16.6	15.2	14.3	12.8	12.1	12.7	12.9	12.2	12.3	10.1	9.7
Tanzania	26.3	25.1	27.3	33.2	28.5	30.3	30.1	27.9	27.6	27.8	27.9
Togo	19.2	22.8	23.9	23.5	23.8	24.5	25.7	27.0	27.4	26.4	24.6
Uganda	29.3	27.1	26.7	28.7	29.7	27.3	25.5	24.5	25.7	27.8	30.0
Zambia	33.2	30.3	29.9	33.6	31.8	34.0	34.0	42.8	38.4	38.3	38.2
Zimbabwe <sup>2</sup>	...	15.1	23.9	22.4	13.5	13.0	13.2	13.8	17.2	15.4	15.3
<b>Sub-Saharan Africa</b>	<b>19.6</b>	<b>21.4</b>	<b>20.8</b>	<b>20.5</b>	<b>21.1</b>	<b>21.2</b>	<b>21.8</b>	<b>21.4</b>	<b>19.4</b>	<b>19.3</b>	<b>20.0</b>
<i>Median</i>	20.7	21.7	23.0	22.4	24.7	21.6	22.9	21.2	20.7	20.0	20.6
Excluding Nigeria and South Africa	21.1	23.0	23.8	23.7	25.8	25.3	26.2	25.4	23.6	23.4	24.5
<b>Oil-exporting countries</b>	<b>17.1</b>	<b>21.2</b>	<b>19.2</b>	<b>17.3</b>	<b>17.2</b>	<b>17.0</b>	<b>18.4</b>	<b>17.4</b>	<b>14.4</b>	<b>13.9</b>	<b>14.0</b>
Excluding Nigeria	18.5	25.6	24.6	20.0	23.0	22.6	25.4	22.7	19.2	17.3	17.2
<b>Oil-importing countries</b>	<b>21.2</b>	<b>21.6</b>	<b>21.9</b>	<b>22.9</b>	<b>24.1</b>	<b>24.3</b>	<b>24.4</b>	<b>24.3</b>	<b>23.0</b>	<b>23.1</b>	<b>24.1</b>
Excluding South Africa	22.0	22.2	23.5	25.0	26.7	26.2	26.4	26.3	24.9	25.1	26.5
<b>Middle-income countries</b>	<b>19.0</b>	<b>21.0</b>	<b>19.9</b>	<b>19.4</b>	<b>19.6</b>	<b>19.7</b>	<b>20.2</b>	<b>19.9</b>	<b>17.6</b>	<b>17.4</b>	<b>17.7</b>
Excluding Nigeria and South Africa	20.4	23.1	23.5	23.0	25.0	24.1	25.0	24.3	22.0	21.4	21.8
<b>Low-income countries</b>	<b>22.1</b>	<b>22.9</b>	<b>24.2</b>	<b>24.5</b>	<b>26.7</b>	<b>26.7</b>	<b>27.5</b>	<b>26.6</b>	<b>25.5</b>	<b>25.5</b>	<b>27.3</b>
Excluding low-income countries in fragile situations	24.1	24.2	26.0	30.3	32.5	32.9	33.8	32.3	31.0	30.6	33.1
<b>Countries in fragile situations</b>	<b>17.9</b>	<b>19.1</b>	<b>19.9</b>	<b>15.8</b>	<b>18.2</b>	<b>18.0</b>	<b>19.1</b>	<b>18.5</b>	<b>16.9</b>	<b>16.9</b>	<b>17.4</b>
CFA franc zone	20.4	26.2	27.1	24.0	26.0	26.4	28.1	27.7	25.1	24.8	24.5
CEMAC	22.1	34.2	33.0	28.9	30.9	30.6	34.7	35.2	29.2	26.9	26.0
WAEMU	18.9	18.7	21.7	19.4	21.3	22.5	22.1	21.2	21.8	23.3	23.4
COMESA (SSA members)	22.5	23.0	23.0	24.3	25.3	24.5	25.7	26.7	25.5	24.9	25.5
EAC-5	23.3	23.1	24.2	27.1	25.7	25.4	25.8	24.3	24.1	23.8	24.9
ECOWAS	17.4	19.3	18.7	17.8	17.5	17.2	17.6	17.2	15.3	15.6	16.1
SACU	20.5	21.3	20.1	20.4	20.7	21.6	21.3	21.6	19.6	19.8	19.8
SADC	20.6	21.2	20.4	20.9	21.5	22.6	22.4	21.8	19.7	19.8	20.8

See sources and footnotes on page 72.

**Table SA7. Gross National Savings**  
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	27.3	5.2	23.5	25.5	26.9	21.4	12.4	-0.4	4.0	4.1	4.1
Benin	14.0	13.6	14.9	16.8	15.1	20.4	20.0	17.6	17.4	20.2	20.0
Botswana	40.9	29.9	32.2	41.5	39.6	41.8	43.2	40.0	36.1	34.0	30.8
Burkina Faso	8.1	13.2	15.8	13.9	7.9	7.0	12.7	5.3	6.0	8.6	9.9
Burundi	1.5	9.2	3.7	1.0	-3.8	-4.3	-3.4	-11.0	-8.1	-7.1	-8.2
Cabo Verde	27.2	21.9	25.3	20.9	28.2	34.4	28.2	37.1	34.6	36.6	38.4
Cameroon	15.5	17.6	17.5	17.5	17.1	17.7	18.6	17.1	16.4	16.5	17.6
Central African Rep.	4.6	4.1	4.1	4.6	10.4	5.7	4.6	4.9	4.6	9.8	8.0
Chad	23.0	21.9	25.9	22.6	23.6	18.2	21.5	14.6	11.9	20.7	14.7
Comoros	4.4	6.2	15.2	10.0	12.2	12.2	12.8	19.2	11.9	11.8	11.4
Congo, Dem. Rep. of	7.0	7.9	15.6	8.1	6.0	11.5	12.9	16.5	7.0	8.0	10.2
Congo, Rep. of	19.1	8.9	27.7	21.5	42.8	31.1	28.6	-8.0	-4.3	13.0	30.8
Côte d'Ivoire	13.9	18.3	16.8	20.1	16.0	16.7	18.6	16.8	16.4	15.5	16.8
Equatorial Guinea	54.1	50.0	41.2	48.4	49.6	49.5	47.9	54.9	46.6	42.4	36.7
Eritrea	-19.9	-9.7	-9.3	1.2	5.9	3.6	4.0	1.3	4.0	4.4	4.0
Ethiopia <sup>1</sup>	19.7	15.4	24.5	33.1	31.2	28.1	30.7	31.3	32.0	25.7	26.2
Gabon	39.5	33.5	41.0	46.3	46.9	40.4	43.4	29.3	27.7	28.4	30.2
Gambia, The	12.6	7.1	5.0	6.7	19.9	9.8	10.1	4.7	8.7	6.0	6.0
Ghana	14.1	16.0	17.3	18.5	20.3	16.0	17.0	17.1	17.9	18.3	20.8
Guinea	11.4	2.0	0.1	-11.4	-1.3	3.3	-8.3	-9.7	4.2	2.8	4.8
Guinea-Bissau	5.6	0.7	-2.1	1.1	-4.5	-0.5	5.0	9.4	14.0	8.7	7.8
Kenya	16.3	14.9	14.8	12.5	13.2	11.4	12.7	14.4	14.6	12.3	14.2
Lesotho	...	...	...	...	...	...	...	...	...	...	...
Liberia	...	...	...	...	...	...	...	...	...	...	...
Madagascar	20.4	14.5	13.7	10.8	10.7	10.0	15.3	11.1	13.0	14.5	14.0
Malawi	12.8	20.5	26.2	3.8	2.8	4.3	3.6	2.7	-4.1	1.2	3.0
Mali	15.6	15.6	13.3	14.7	15.0	14.9	12.9	10.1	11.0	12.0	13.1
Mauritius	20.0	15.0	14.3	13.2	18.5	19.0	17.0	16.3	16.3	13.0	15.9
Mozambique	9.4	4.4	8.1	4.4	14.9	26.6	29.5	14.2	-0.3	-0.7	6.5
Namibia	30.4	25.0	20.7	17.1	21.2	21.2	25.4	20.5	16.6	20.9	18.8
Niger	14.1	7.7	25.5	21.5	24.8	25.2	23.8	24.5	24.1	24.0	24.3
Nigeria	30.6	24.1	20.8	18.8	18.7	18.6	16.0	12.3	13.1	13.5	13.8
Rwanda	11.1	6.6	6.4	4.9	7.3	10.5	8.6	8.7	7.5	11.0	9.6
São Tomé & Príncipe	16.2	14.2	33.0	16.9	13.7	14.5	3.3	19.4	17.9	20.0	21.3
Senegal	16.4	15.4	17.7	17.6	18.5	17.3	16.1	16.6	19.8	19.4	19.3
Seychelles	14.8	12.4	17.2	12.4	17.0	26.5	14.7	15.0	13.1	16.3	14.8
Sierra Leone	4.5	-1.7	9.6	-16.9	-4.0	-4.8	-7.2	0.9	-1.1	1.5	2.7
South Africa	16.0	18.0	18.0	17.5	14.8	15.3	15.5	16.5	16.2	15.8	15.7
South Sudan	...	...	...	23.3	-5.2	8.9	18.9	7.3	20.2	7.4	7.8
Swaziland	15.2	6.4	3.2	7.6	15.3	13.7	11.6	23.0	7.1	9.2	7.8
Tanzania	20.9	18.3	21.2	21.6	19.3	14.9	21.8	24.1	21.3	20.6	20.9
Togo	10.4	17.2	17.6	15.4	16.3	11.4	15.7	15.9	17.6	17.3	16.3
Uganda	26.5	21.4	18.7	18.7	23.0	20.3	17.1	17.9	19.8	20.8	21.9
Zambia	32.1	36.2	37.4	38.3	37.1	33.5	36.2	39.2	32.9	35.1	35.6
Zimbabwe <sup>2</sup>	...	-16.8	16.1	-0.1	-2.6	-5.7	-1.0	5.6	17.0	18.1	18.4
<b>Sub-Saharan Africa</b>	<b>22.1</b>	<b>18.9</b>	<b>19.9</b>	<b>19.3</b>	<b>18.9</b>	<b>18.2</b>	<b>17.6</b>	<b>15.5</b>	<b>15.6</b>	<b>15.6</b>	<b>16.2</b>
<i>Median</i>	15.5	14.7	17.3	16.8	16.0	15.3	15.7	15.9	14.6	14.5	14.8
Excluding Nigeria and South Africa	20.3	15.9	20.3	20.4	20.9	19.2	19.6	17.2	16.9	16.7	17.7
<b>Oil-exporting countries</b>	<b>30.0</b>	<b>22.0</b>	<b>22.3</b>	<b>21.3</b>	<b>21.5</b>	<b>20.3</b>	<b>17.5</b>	<b>11.9</b>	<b>12.9</b>	<b>13.5</b>	<b>13.9</b>
Excluding Nigeria	28.4	16.8	26.4	27.4	28.7	24.8	21.6	10.9	12.5	13.3	14.2
<b>Oil-importing countries</b>	<b>16.9</b>	<b>16.6</b>	<b>18.2</b>	<b>17.8</b>	<b>17.0</b>	<b>16.6</b>	<b>17.7</b>	<b>18.2</b>	<b>17.5</b>	<b>17.0</b>	<b>17.7</b>
Excluding South Africa	17.7	15.7	18.3	17.9	18.4	17.3	19.0	19.2	18.2	17.6	18.6
<b>Middle-income countries</b>	<b>23.5</b>	<b>20.3</b>	<b>20.5</b>	<b>19.9</b>	<b>19.6</b>	<b>18.9</b>	<b>17.5</b>	<b>14.9</b>	<b>15.1</b>	<b>15.3</b>	<b>15.8</b>
Excluding Nigeria and South Africa	23.6	18.2	22.5	23.6	25.0	22.2	21.0	16.9	16.7	16.8	18.0
<b>Low-income countries</b>	<b>16.1</b>	<b>13.1</b>	<b>17.6</b>	<b>16.8</b>	<b>16.2</b>	<b>15.7</b>	<b>18.1</b>	<b>17.6</b>	<b>17.2</b>	<b>16.6</b>	<b>17.3</b>
Excluding low-income countries in fragile situations	18.8	15.6	19.7	21.9	21.9	20.5	23.2	22.7	21.6	20.0	20.9
<b>Countries in fragile situations</b>	<b>12.9</b>	<b>10.9</b>	<b>15.9</b>	<b>12.1</b>	<b>11.4</b>	<b>11.3</b>	<b>12.9</b>	<b>9.2</b>	<b>9.9</b>	<b>11.6</b>	<b>13.3</b>
CFA franc zone	20.8	20.6	22.2	23.2	24.1	22.3	23.0	17.8	17.2	18.6	19.6
CEMAC	28.5	26.4	28.3	29.4	33.0	29.5	29.8	21.3	19.2	22.3	23.7
WAEMU	13.6	15.2	16.5	17.3	15.5	15.8	16.9	14.9	15.5	15.8	16.5
COMESA (SSA members)	18.0	15.3	19.0	18.2	18.6	17.4	18.6	20.1	19.3	18.1	19.1
EAC-5	19.3	16.9	17.2	16.3	16.7	14.1	16.3	17.7	17.2	16.6	17.6
ECOWAS	25.7	21.5	19.6	17.9	17.9	17.6	15.7	12.8	13.8	14.2	14.8
SACU	17.4	18.5	18.4	18.3	16.1	16.7	17.0	17.8	17.0	16.7	16.4
SADC	18.8	16.1	19.7	18.8	17.6	17.1	17.2	16.2	15.2	15.2	15.5

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	4.6	-7.4	3.4	8.7	4.6	-0.3	-6.6	-3.3	-4.1	-5.8	-3.9
Benin	-0.6	-3.1	-0.4	-1.3	-0.3	-1.9	-2.3	-7.6	-6.1	-7.9	-4.0
Botswana	4.5	-13.3	-7.5	-0.1	0.8	5.6	3.7	-4.6	-1.9	-3.3	-3.8
Burkina Faso	-0.8	-4.7	-3.0	-1.4	-3.1	-4.0	-2.0	-2.3	-2.5	-3.6	-3.3
Burundi	-8.2	-5.1	-3.6	-3.5	-3.8	-1.8	-3.6	-5.3	-6.2	-8.3	-9.1
Cabo Verde	-3.3	-5.9	-10.7	-7.7	-10.3	-8.9	-7.6	-4.2	-3.2	-2.8	-1.7
Cameroon	8.6	-0.0	-1.1	-2.6	-1.6	-4.0	-4.6	-2.7	-4.7	-3.2	-2.6
Central African Rep.	0.5	-0.6	-1.5	-2.4	-0.0	-6.5	3.0	-0.6	1.7	0.9	-2.3
Chad	1.2	-9.2	-4.2	2.4	0.5	-2.1	-4.2	-3.1	-1.3	-0.0	0.0
Comoros	-1.7	0.6	7.0	1.4	3.3	17.8	-0.5	4.4	-7.2	-6.5	-3.8
Congo, Dem. Rep. of	-0.0	0.9	2.4	-1.0	1.9	3.1	5.0	-0.1	-0.8	-1.0	0.1
Congo, Rep. of	14.6	4.9	15.7	16.0	7.3	-1.9	-7.7	-18.7	-17.2	-0.3	2.8
Côte d'Ivoire	-1.0	-1.4	-1.8	-4.0	-3.1	-2.2	-2.2	-2.9	-4.0	-4.5	-3.7
Equatorial Guinea	16.0	-6.5	-4.5	0.8	-7.2	-5.8	-7.2	-19.1	-16.4	-10.6	-7.6
Eritrea	-17.9	-14.7	-16.0	-16.2	-15.3	-15.1	-14.4	-14.2	-14.0	-13.8	-12.6
Ethiopia <sup>1</sup>	-3.4	-0.9	-1.3	-1.6	-1.2	-1.9	-2.6	-1.9	-2.4	-3.1	-3.0
Gabon	8.5	6.8	2.7	1.7	6.2	-3.1	6.0	-1.2	-4.6	-2.6	-1.6
Gambia, The	-3.2	-2.7	-4.7	-4.7	-4.4	-8.5	-5.9	-8.7	-10.2	-8.5	-6.4
Ghana	-5.2	-7.2	-10.1	-7.4	-11.3	-12.0	-10.9	-5.3	-8.3	-5.0	-4.1
Guinea	-1.5	-7.1	-14.0	-1.3	-3.3	-5.3	-4.2	-9.0	-0.4	-2.1	-1.7
Guinea-Bissau	-4.0	4.1	1.6	-0.8	-2.3	-1.8	-1.5	-1.8	-3.7	-1.1	-2.0
Kenya	-1.9	-4.3	-4.4	-4.1	-5.0	-5.7	-7.4	-8.2	-7.3	-6.5	-5.4
Lesotho	7.8	-3.4	-3.7	-9.1	4.3	-2.2	1.8	0.6	-7.7	-2.8	-0.4
Liberia	-0.5	-10.1	-5.7	-3.1	-1.6	-4.7	-1.8	-10.2	-5.9	-7.1	-5.7
Madagascar	-2.6	-2.5	-0.9	-2.4	-2.6	-4.0	-2.3	-3.3	-3.2	-4.4	-4.4
Malawi	-2.3	-3.6	1.8	-4.1	-1.8	-6.4	-4.8	-6.4	-7.8	-5.3	-2.8
Mali	3.6	-3.7	-2.6	-3.4	-1.0	-2.4	-2.9	-1.8	-4.0	-3.5	-3.4
Mauritius	-3.9	-3.6	-3.2	-3.2	-1.8	-3.5	-3.2	-3.6	-3.3	-2.6	-1.7
Mozambique	-2.9	-4.9	-3.8	-4.8	-3.9	-2.7	-10.7	-7.4	-6.0	-6.2	-5.7
Namibia	2.0	-0.1	-4.5	-6.7	-2.3	-3.2	-5.9	-8.1	-7.8	-4.8	-5.8
Niger	7.1	-5.3	-2.4	-1.5	-1.1	-2.6	-8.0	-9.1	-6.5	-7.4	-6.0
Nigeria	4.7	-5.4	-4.2	0.2	0.1	-2.5	-2.2	-3.5	-4.4	-5.0	-4.2
Rwanda	0.6	0.3	-0.7	-0.9	-2.5	-1.3	-4.0	-2.8	-2.4	-2.8	-1.9
São Tomé & Príncipe	30.7	-19.3	-11.7	-12.5	-11.2	1.9	-5.3	-6.3	-2.8	-5.4	-4.6
Senegal	-2.5	-4.6	-4.9	-6.1	-5.2	-5.5	-5.0	-4.8	-4.2	-3.7	-3.0
Seychelles	-0.7	4.8	0.5	3.4	2.9	0.4	3.7	1.9	-0.0	1.6	1.7
Sierra Leone	2.2	-2.3	-5.0	-4.5	-5.2	-2.4	-3.6	-4.3	-4.8	-5.1	-5.0
South Africa	-0.1	-5.0	-4.7	-3.7	-4.0	-3.9	-3.6	-3.6	-3.5	-3.5	-3.4
South Sudan	...	...	...	4.6	-14.8	-2.9	-7.0	-18.4	-19.8	-0.7	-8.4
Swaziland	1.3	-2.9	-9.0	-3.8	3.5	0.8	-1.1	-4.6	-12.4	-8.0	-10.1
Tanzania	-2.5	-4.5	-4.8	-3.6	-4.1	-3.9	-3.0	-3.3	-3.8	-4.3	-4.6
Togo	-1.6	-3.9	-2.5	-6.5	-6.4	-5.2	-6.8	-8.9	-9.6	-5.1	-2.6
Uganda	-0.8	-2.1	-5.7	-2.7	-3.0	-3.9	-3.3	-2.7	-3.6	-4.3	-4.4
Zambia	2.1	-2.1	-2.4	-1.8	-2.8	-6.2	-5.8	-9.5	-6.1	-7.5	-7.0
Zimbabwe <sup>2</sup>	-3.5	-2.1	0.7	-1.2	-0.5	-1.9	-1.5	-1.1	-10.2	-6.9	-5.4
<b>Sub-Saharan Africa</b>	<b>1.7</b>	<b>-4.5</b>	<b>-3.4</b>	<b>-1.1</b>	<b>-1.8</b>	<b>-3.1</b>	<b>-3.5</b>	<b>-4.1</b>	<b>-4.5</b>	<b>-4.5</b>	<b>-3.9</b>
<i>Median</i>	-0.7	-3.6	-3.4	-2.6	-2.3	-2.9	-3.6	-4.2	-4.6	-4.4	-3.8
Excluding Nigeria and South Africa	1.2	-3.7	-2.0	-0.4	-1.7	-3.2	-4.4	-4.8	-5.0	-4.6	-3.9
<b>Oil-exporting countries</b>	<b>5.5</b>	<b>-5.0</b>	<b>-2.3</b>	<b>2.1</b>	<b>0.6</b>	<b>-2.3</b>	<b>-3.2</b>	<b>-4.2</b>	<b>-4.8</b>	<b>-5.0</b>	<b>-4.0</b>
Excluding Nigeria	7.2	-4.2	2.3	5.7	1.7	-1.9	-5.4	-5.9	-5.8	-4.8	-3.4
<b>Oil-importing countries</b>	<b>-2.6</b>	<b>-4.2</b>	<b>-4.3</b>	<b>-3.6</b>	<b>-3.6</b>	<b>-3.9</b>	<b>-3.8</b>	<b>-4.1</b>	<b>-4.3</b>	<b>-4.2</b>	<b>-3.8</b>
Excluding South Africa	-1.2	-3.5	-3.8	-3.5	-3.3	-3.8	-3.9	-4.5	-4.8	-4.6	-4.0
<b>Middle-income countries</b>	<b>2.2</b>	<b>-4.9</b>	<b>-3.6</b>	<b>-1.0</b>	<b>-1.6</b>	<b>-3.3</b>	<b>-3.6</b>	<b>-4.2</b>	<b>-4.8</b>	<b>-4.7</b>	<b>-4.0</b>
Excluding Nigeria and South Africa	2.8	-4.2	-1.5	0.6	-1.1	-3.7	-5.4	-5.6	-6.0	-5.2	-4.1
<b>Low-income countries</b>	<b>-1.3</b>	<b>-3.1</b>	<b>-2.6</b>	<b>-1.9</b>	<b>-2.6</b>	<b>-2.5</b>	<b>-2.9</b>	<b>-3.9</b>	<b>-3.8</b>	<b>-3.9</b>	<b>-3.6</b>
Excluding low-income countries in fragile situations	-1.6	-2.9	-3.3	-2.5	-2.6	-3.0	-3.8	-3.4	-3.4	-4.1	-3.9
<b>Countries in fragile situations</b>	<b>0.4</b>	<b>-2.3</b>	<b>-0.0</b>	<b>-0.0</b>	<b>-1.8</b>	<b>-1.9</b>	<b>-2.3</b>	<b>-4.9</b>	<b>-4.9</b>	<b>-3.6</b>	<b>-3.0</b>
CFA franc zone	4.8	-2.0	-0.7	-0.3	-1.3	-3.4	-3.4	-5.5	-5.7	-4.1	-3.0
CEMAC	9.5	-0.8	1.1	2.5	0.1	-3.7	-3.5	-7.1	-7.2	-3.4	-2.2
WAEMU	-0.1	-3.2	-2.5	-3.6	-2.9	-3.1	-3.4	-4.1	-4.5	-4.6	-3.6
COMESA (SSA members)	-1.7	-2.3	-2.4	-2.6	-2.2	-3.1	-3.2	-4.2	-4.6	-4.6	-4.0
EAC-5	-1.9	-3.7	-4.5	-3.4	-4.2	-4.5	-4.9	-5.3	-5.3	-5.3	-4.9
ECOWAS	3.0	-5.1	-4.5	-1.0	-1.2	-3.3	-2.9	-3.8	-4.7	-4.9	-4.1
SACU	0.2	-5.1	-4.8	-3.7	-3.6	-3.5	-3.3	-3.7	-3.7	-3.6	-3.5
SADC	0.2	-5.0	-3.1	-1.6	-1.9	-2.7	-3.7	-3.6	-3.9	-4.2	-3.6

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	4.4	-7.4	3.4	8.7	4.6	-0.3	-6.6	-3.3	-4.1	-5.8	-3.9
Benin	-2.7	-6.0	-1.8	-3.7	-2.1	-2.8	-3.2	-8.2	-6.6	-9.3	-5.9
Botswana	3.8	-14.3	-7.8	-0.6	0.8	5.4	3.4	-4.7	-2.0	-3.5	-3.9
Burkina Faso	-10.2	-10.6	-7.5	-6.4	-8.0	-9.5	-6.2	-5.8	-6.3	-7.6	-7.3
Burundi	-24.2	-24.0	-26.3	-25.3	-21.9	-19.2	-17.3	-14.9	-9.1	-11.1	-11.8
Cabo Verde	-9.0	-11.0	-17.0	-10.6	-13.1	-11.4	-9.4	-6.7	-7.0	-4.6	-3.2
Cameroon	2.3	-0.8	-1.7	-3.1	-2.0	-4.3	-4.9	-2.8	-5.1	-3.6	-2.9
Central African Rep.	-5.5	-5.9	-7.0	-4.9	-4.9	-9.3	-7.8	-7.8	-4.2	-7.5	-6.6
Chad	-0.7	-11.8	-5.5	0.8	-2.2	-4.3	-6.1	-6.5	-5.1	-4.5	-3.9
Comoros	-7.8	-9.1	-7.8	-6.0	-6.0	-9.7	-9.9	-10.7	-15.5	-14.8	-11.6
Congo, Dem. Rep. of	-1.1	-2.0	4.6	-2.9	-0.3	1.3	0.7	-3.5	-2.8	-3.5	-1.4
Congo, Rep. of	14.2	4.6	15.7	15.5	7.1	-2.3	-8.2	-19.5	-18.1	-1.1	2.0
Côte d'Ivoire	-2.0	-1.9	-2.3	-4.3	-3.7	-3.5	-3.9	-4.3	-5.4	-6.0	-5.3
Equatorial Guinea	16.0	-6.5	-4.5	0.8	-7.2	-5.8	-7.2	-19.1	-16.4	-10.6	-7.6
Eritrea	-24.8	-17.3	-21.3	-19.4	-16.5	-15.6	-14.8	-14.6	-14.3	-14.0	-12.9
Ethiopia <sup>1</sup>	-7.5	-5.2	-4.5	-4.8	-2.9	-3.4	-3.7	-3.0	-3.2	-4.0	-3.9
Gabon	8.5	6.8	2.7	1.7	6.2	-3.1	6.0	-1.2	-4.6	-2.6	-1.6
Gambia, The	-4.8	-6.9	-8.7	-9.9	-13.3	-10.8	-9.6	-10.5	-11.8	-10.5	-8.3
Ghana	-8.6	-10.2	-12.4	-9.5	-12.8	-12.5	-11.7	-7.2	-9.0	-5.7	-4.6
Guinea	-2.5	-7.5	-14.4	-4.7	-6.0	-6.8	-8.3	-10.5	-1.9	-4.6	-4.3
Guinea-Bissau	-12.7	-11.8	-7.9	-7.4	-4.7	-5.2	-11.0	-8.3	-7.4	-5.7	-7.0
Kenya	-2.9	-5.0	-5.0	-4.6	-5.5	-6.2	-7.9	-8.6	-7.8	-7.1	-6.0
Lesotho	6.3	-6.0	-10.0	-15.9	-3.1	-6.3	0.0	-2.6	-10.2	-5.8	-3.7
Liberia	-0.7	-12.6	-7.5	-4.7	-4.1	-7.8	-8.6	-20.3	-15.4	-13.6	-9.1
Madagascar	-9.2	-4.2	-2.8	-4.3	-3.8	-5.3	-4.6	-4.8	-5.2	-7.1	-5.9
Malawi	-12.3	-11.1	-8.2	-7.7	-10.6	-13.1	-8.0	-10.0	-12.8	-8.9	-5.8
Mali	-6.2	-7.8	-5.1	-6.6	-1.2	-5.2	-5.1	-4.5	-5.6	-5.8	-5.5
Mauritius	-4.2	-5.2	-3.9	-3.9	-2.5	-3.9	-3.4	-3.7	-4.6	-4.4	-2.6
Mozambique	-9.7	-13.3	-12.0	-12.3	-8.9	-7.9	-15.0	-10.4	-7.4	-8.2	-8.5
Namibia	1.9	-0.4	-4.6	-6.8	-2.4	-3.4	-6.0	-8.2	-7.9	-4.9	-5.9
Niger	-7.6	-9.7	-7.0	-5.2	-7.2	-10.6	-13.5	-14.6	-11.3	-11.9	-10.5
Nigeria	4.7	-5.4	-4.2	0.2	0.1	-2.5	-2.2	-3.5	-4.4	-5.0	-4.2
Rwanda	-9.8	-11.1	-12.5	-12.3	-10.2	-10.6	-11.7	-9.1	-7.5	-7.2	-6.3
São Tomé & Príncipe	-7.9	-34.6	-31.4	-32.0	-29.4	-11.0	-15.3	-17.7	-16.3	-21.4	-20.3
Senegal	-4.5	-7.6	-7.4	-8.3	-8.0	-8.1	-8.4	-7.7	-7.0	-6.3	-5.8
Seychelles	-1.8	0.8	-0.3	0.9	-1.9	-4.0	0.5	1.1	-1.3	-1.8	-0.5
Sierra Leone	-7.5	-8.4	-10.3	-10.1	-9.0	-5.0	-7.8	-9.3	-7.6	-8.1	-7.9
South Africa	-0.1	-5.0	-4.7	-3.7	-4.0	-3.9	-3.6	-3.6	-3.5	-3.5	-3.4
South Sudan	...	...	...	1.7	-20.9	-9.4	-13.3	-24.8	-20.4	-2.2	-10.9
Swaziland	0.8	-3.4	-9.0	-3.8	3.4	0.3	-2.8	-5.3	-13.9	-9.4	-11.4
Tanzania	-7.2	-8.1	-8.2	-6.9	-7.0	-6.3	-4.7	-4.1	-4.7	-5.6	-5.7
Togo	-2.7	-5.4	-4.5	-9.6	-8.8	-8.6	-9.1	-11.2	-12.5	-9.6	-6.8
Uganda	-6.0	-4.5	-8.2	-4.4	-4.9	-5.0	-4.5	-4.1	-4.6	-6.1	-5.7
Zambia	-5.7	-4.5	-3.9	-2.4	-4.5	-7.7	-6.6	-9.7	-6.4	-8.4	-7.7
Zimbabwe <sup>2</sup>	-3.5	-2.6	0.7	-1.2	-0.5	-1.9	-1.5	-1.1	-10.2	-6.9	-5.4
<b>Sub-Saharan Africa</b>	<b>0.4</b>	<b>-5.5</b>	<b>-4.3</b>	<b>-1.9</b>	<b>-2.5</b>	<b>-3.8</b>	<b>-4.2</b>	<b>-4.8</b>	<b>-5.1</b>	<b>-5.1</b>	<b>-4.4</b>
<i>Median</i>	-4.4	-6.7	-7.0	-4.7	-4.7	-5.8	-6.6	-7.7	-7.0	-6.1	-5.8
Excluding Nigeria and South Africa	-1.9	-5.9	-4.0	-2.1	-3.3	-4.7	-5.9	-6.2	-6.1	-5.9	-4.9
<b>Oil-exporting countries</b>	<b>5.1</b>	<b>-5.1</b>	<b>-2.3</b>	<b>2.0</b>	<b>0.4</b>	<b>-2.5</b>	<b>-3.3</b>	<b>-4.4</b>	<b>-4.9</b>	<b>-5.1</b>	<b>-4.1</b>
Excluding Nigeria	5.8	-4.6	2.1	5.3	1.2	-2.5	-6.0	-6.5	-6.2	-5.2	-3.7
<b>Oil-importing countries</b>	<b>-2.4</b>	<b>-5.8</b>	<b>-5.7</b>	<b>-4.8</b>	<b>-4.8</b>	<b>-5.0</b>	<b>-4.9</b>	<b>-5.2</b>	<b>-5.2</b>	<b>-5.2</b>	<b>-4.7</b>
Excluding South Africa	-5.0	-6.5	-6.7	-5.9	-5.4	-5.7	-5.8	-6.1	-6.1	-6.1	-5.4
<b>Middle-income countries</b>	<b>1.7</b>	<b>-5.2</b>	<b>-3.8</b>	<b>-1.2</b>	<b>-1.8</b>	<b>-3.4</b>	<b>-3.8</b>	<b>-4.4</b>	<b>-5.0</b>	<b>-4.9</b>	<b>-4.2</b>
Excluding Nigeria and South Africa	1.0	-5.1	-2.3	0.0	-1.7	-4.2	-5.9	-6.2	-6.6	-5.9	-4.7
<b>Low-income countries</b>	<b>-6.5</b>	<b>-7.2</b>	<b>-6.8</b>	<b>-5.3</b>	<b>-5.6</b>	<b>-5.4</b>	<b>-5.7</b>	<b>-6.3</b>	<b>-5.5</b>	<b>-5.9</b>	<b>-5.3</b>
Excluding low-income countries in fragile situations	-7.4	-7.5	-7.3	-6.5	-5.7	-5.9	-6.0	-5.1	-4.8	-5.8	-5.5
<b>Countries in fragile situations</b>	<b>-2.8</b>	<b>-4.9</b>	<b>-3.2</b>	<b>-2.2</b>	<b>-4.1</b>	<b>-4.4</b>	<b>-5.4</b>	<b>-7.7</b>	<b>-6.9</b>	<b>-5.9</b>	<b>-4.8</b>
CFA franc zone	1.4	-3.8	-2.0	-1.6	-2.6	-5.1	-5.1	-7.2	-7.3	-6.0	-4.8
CEMAC	7.0	-1.6	0.6	2.1	-0.5	-4.2	-4.1	-7.9	-8.1	-4.5	-3.0
WAEMU	-4.6	-6.0	-4.7	-5.9	-5.0	-6.0	-6.1	-6.5	-6.7	-7.1	-6.2
COMESA (SSA members)	-5.3	-5.2	-5.5	-4.7	-4.1	-4.8	-5.0	-5.7	-5.8	-6.0	-5.1
EAC-5	-5.6	-6.6	-7.5	-6.2	-6.4	-6.5	-6.6	-6.6	-6.3	-6.6	-6.0
ECOWAS	1.8	-5.9	-5.0	-1.6	-1.7	-3.8	-3.4	-4.4	-5.2	-5.5	-4.6
SACU	0.2	-5.2	-4.9	-3.7	-3.7	-3.5	-3.4	-3.8	-3.8	-3.6	-3.6
SADC	-0.6	-5.7	-3.9	-2.1	-2.5	-3.2	-4.3	-4.1	-4.3	-4.6	-4.0

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	45.5	34.5	43.5	48.8	45.9	40.2	35.3	27.3	19.6	19.8	19.5
Benin	16.6	17.2	17.5	16.4	17.4	17.6	16.3	16.7	14.7	15.4	16.0
Botswana	41.5	36.1	32.1	35.7	36.2	37.5	38.1	31.5	31.9	31.3	29.6
Burkina Faso	13.1	13.6	15.3	15.7	17.5	19.0	17.5	15.9	18.3	18.9	19.5
Burundi	13.9	13.9	14.5	16.9	15.6	14.0	14.4	12.3	12.1	11.2	10.8
Cabo Verde	22.7	21.9	21.7	22.7	21.6	22.0	21.1	24.3	23.9	24.6	25.0
Cameroon	18.2	16.7	16.0	17.5	17.5	17.6	17.8	17.8	16.2	16.7	17.3
Central African Rep.	9.4	10.8	11.6	10.8	11.5	5.6	4.9	7.1	8.2	8.8	9.4
Chad	14.1	12.3	18.9	23.2	21.7	18.5	15.8	10.5	9.2	11.3	11.3
Comoros	14.1	13.9	14.3	16.1	19.3	15.5	14.5	16.5	14.4	16.0	16.5
Congo, Dem. Rep. of	8.6	10.7	12.1	11.8	14.4	12.9	13.3	12.5	8.2	8.4	9.1
Congo, Rep. of	42.2	29.9	36.6	40.9	42.5	44.7	40.2	28.8	26.5	25.3	26.5
Côte d'Ivoire	17.5	18.0	17.7	14.0	18.6	18.4	17.1	18.8	18.5	18.7	19.2
Equatorial Guinea	33.2	33.4	26.6	28.3	28.0	24.9	24.3	25.3	15.8	16.7	16.9
Eritrea	22.3	13.3	13.3	14.2	14.2	14.1	14.1	13.9	13.9	14.0	14.4
Ethiopia <sup>1</sup>	13.9	11.9	14.0	13.4	13.8	14.3	13.8	14.4	15.2	14.5	14.4
Gabon	28.7	29.4	25.8	23.5	30.2	31.6	29.7	21.2	17.1	18.2	18.4
Gambia, The	15.8	16.2	14.9	16.1	16.4	16.3	18.5	19.7	18.1	16.4	18.7
Ghana	13.6	13.4	14.4	17.1	17.0	16.3	17.7	17.4	16.4	18.2	18.4
Guinea	14.1	16.2	15.3	16.9	20.1	18.7	18.2	17.8	19.5	19.6	19.8
Guinea-Bissau	9.4	9.1	10.8	10.1	9.1	8.0	12.6	13.8	12.6	13.3	13.3
Kenya	18.7	18.1	19.2	19.0	18.7	19.2	19.3	18.8	19.7	20.6	20.8
Lesotho	49.3	52.2	38.6	38.4	50.0	48.1	50.3	48.5	39.6	42.9	43.5
Liberia	15.1	20.6	25.0	24.3	26.0	25.0	23.5	22.0	20.7	19.5	19.9
Madagascar	11.7	9.9	11.2	9.7	9.6	9.6	10.1	10.4	11.0	11.2	11.7
Malawi	16.4	19.4	21.8	18.4	18.3	21.6	21.8	21.0	20.2	20.7	20.8
Mali	15.0	15.1	15.2	14.0	14.4	14.5	14.9	16.4	20.0	18.3	17.7
Mauritius	19.4	21.2	21.2	20.7	20.8	21.0	20.5	21.8	22.1	22.2	22.6
Mozambique	12.7	15.6	17.9	19.8	21.9	26.2	27.5	25.0	23.3	23.4	23.2
Namibia	28.5	30.8	27.8	29.8	31.3	32.0	33.9	34.5	31.4	31.9	30.8
Niger	13.7	14.3	13.6	14.2	15.3	16.6	17.5	18.1	15.3	16.1	16.9
Nigeria	21.2	10.1	12.4	17.7	14.3	11.0	10.5	7.6	4.8	5.7	5.9
Rwanda	12.7	12.4	12.8	13.9	15.5	16.2	16.5	18.4	18.5	17.3	17.4
São Tomé & Príncipe	32.1	17.4	18.5	20.2	16.8	20.6	15.1	16.5	14.6	15.5	15.9
Senegal	20.8	19.0	19.6	20.5	20.5	20.1	21.4	22.2	23.9	22.4	22.0
Seychelles	36.5	32.9	34.2	37.2	36.7	34.2	34.1	33.9	37.7	37.5	37.4
Sierra Leone	8.8	9.1	9.9	11.4	11.3	10.7	9.8	10.1	10.5	11.9	13.3
South Africa	27.3	26.7	26.7	27.2	27.4	27.6	28.2	29.6	29.4	29.6	29.9
South Sudan	...	...	...	22.7	10.8	15.4	20.8	14.6	29.9	21.8	19.4
Swaziland	29.6	29.0	20.8	20.6	30.4	29.1	29.5	27.8	23.1	25.8	24.6
Tanzania	10.8	12.1	12.0	12.3	12.7	13.1	13.3	13.7	14.9	15.4	15.5
Togo	16.3	15.8	18.0	16.7	17.6	18.1	18.2	19.6	18.9	20.2	21.0
Uganda	12.2	10.8	10.6	12.8	11.5	11.5	12.1	13.5	13.4	14.5	14.7
Zambia	15.2	13.3	14.2	17.1	17.0	16.2	18.1	18.6	17.6	16.1	16.9
Zimbabwe <sup>2</sup>	6.1	11.4	23.3	26.7	28.0	27.7	26.6	27.5	24.7	23.8	21.8
<b>Sub-Saharan Africa</b>	<b>23.4</b>	<b>19.1</b>	<b>20.6</b>	<b>23.1</b>	<b>21.9</b>	<b>20.1</b>	<b>19.3</b>	<b>17.7</b>	<b>16.5</b>	<b>17.2</b>	<b>17.0</b>
<i>Median</i>	16.1	16.0	17.6	17.5	17.6	18.4	18.1	18.4	18.3	18.2	18.4
Excluding Nigeria and South Africa	21.8	20.0	21.9	23.9	23.8	22.7	21.8	19.5	17.8	18.1	18.2
<b>Oil-exporting countries</b>	<b>25.4</b>	<b>16.4</b>	<b>18.9</b>	<b>24.2</b>	<b>21.3</b>	<b>17.9</b>	<b>16.3</b>	<b>12.1</b>	<b>8.9</b>	<b>10.1</b>	<b>10.0</b>
Excluding Nigeria	34.3	29.4	33.9	36.6	36.0	32.8	29.8	23.6	18.4	18.9	18.9
<b>Oil-importing countries</b>	<b>22.2</b>	<b>21.0</b>	<b>21.8</b>	<b>22.3</b>	<b>22.3</b>	<b>22.0</b>	<b>22.1</b>	<b>22.4</b>	<b>21.8</b>	<b>22.1</b>	<b>22.1</b>
Excluding South Africa	16.6	16.0	16.8	17.3	18.0	17.9	18.1	18.0	17.6	17.8	17.9
<b>Middle-income countries</b>	<b>25.5</b>	<b>20.5</b>	<b>21.8</b>	<b>24.6</b>	<b>23.3</b>	<b>21.1</b>	<b>20.2</b>	<b>18.3</b>	<b>16.9</b>	<b>17.8</b>	<b>17.4</b>
Excluding Nigeria and South Africa	27.7	24.9	26.7	29.4	29.5	27.6	26.3	22.9	20.0	20.4	20.4
<b>Low-income countries</b>	<b>12.4</b>	<b>12.8</b>	<b>14.5</b>	<b>15.5</b>	<b>15.4</b>	<b>15.7</b>	<b>15.8</b>	<b>15.4</b>	<b>15.1</b>	<b>15.2</b>	<b>15.3</b>
Excluding low-income countries in fragile situations	12.7	12.7	13.5	14.1	14.5	15.4	15.3	15.5	15.7	15.7	15.8
<b>Countries in fragile situations</b>	<b>15.9</b>	<b>15.4</b>	<b>18.2</b>	<b>18.8</b>	<b>19.1</b>	<b>18.7</b>	<b>18.3</b>	<b>16.6</b>	<b>15.7</b>	<b>15.8</b>	<b>16.0</b>
CFA franc zone	21.2	20.0	20.3	20.8	22.2	21.8	20.7	19.0	17.7	18.0	18.4
CEMAC	25.4	23.4	23.4	25.3	26.3	25.6	24.0	19.7	16.3	17.0	17.5
WEMU	16.8	16.7	17.0	15.6	17.6	17.8	17.4	18.3	18.8	18.8	19.0
COMESA (SSA members)	15.0	14.3	15.8	16.3	16.6	16.5	16.7	16.8	16.2	16.3	16.5
EAC-5	14.5	14.3	14.7	15.2	15.1	15.5	15.7	16.1	17.0	17.6	17.8
ECOWAS	19.6	11.6	13.3	17.4	15.0	12.5	12.0	9.9	8.5	9.3	9.4
SACU	28.0	27.3	27.0	27.6	28.0	28.3	28.9	30.0	29.6	29.8	29.9
SADC	27.1	25.5	26.9	28.5	28.6	27.7	27.2	26.1	24.1	24.2	24.1

See sources and footnotes on page 72.

**Table SA11. Government Expenditure**  
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	41.1	41.9	40.0	40.2	41.3	40.5	41.9	30.6	23.7	25.6	23.5
Benin	19.4	23.2	19.2	20.1	19.5	20.4	19.4	24.9	21.3	24.7	21.9
Botswana	37.6	50.3	39.9	36.3	35.4	32.2	34.7	36.2	33.9	34.8	33.5
Burkina Faso	23.3	24.2	22.8	22.1	25.5	28.4	23.7	21.7	24.5	26.5	26.8
Burundi	38.1	38.0	40.8	42.2	37.5	33.2	31.8	27.2	21.2	22.3	22.6
Cabo Verde	31.7	32.8	38.7	33.3	34.7	33.4	30.5	30.9	31.0	29.2	28.2
Cameroon	15.9	17.5	17.7	20.5	19.5	21.9	22.7	20.6	21.3	20.3	20.2
Central African Rep.	14.9	16.6	18.6	15.7	16.4	14.9	12.7	14.9	12.4	16.3	16.0
Chad	14.8	24.1	24.4	22.4	23.9	22.8	22.0	17.0	14.3	15.8	15.2
Comoros	21.9	23.0	22.1	22.1	25.3	25.2	24.4	27.3	29.9	30.8	28.1
Congo, Dem. Rep. of	9.8	12.7	16.6	14.7	14.6	11.6	12.6	16.0	10.9	11.9	10.4
Congo, Rep. of	28.0	25.3	21.0	25.4	35.4	47.0	48.4	48.3	44.6	26.4	24.6
Côte d'Ivoire	19.5	19.9	20.0	18.2	22.3	21.9	21.0	23.1	23.8	24.7	24.5
Equatorial Guinea	17.3	39.8	31.2	27.5	35.2	30.7	31.5	44.5	32.2	27.3	24.6
Eritrea	47.1	30.6	34.6	33.6	30.7	29.7	28.9	28.5	28.2	28.0	27.3
Ethiopia <sup>1</sup>	21.5	17.1	18.5	18.2	16.6	17.8	17.5	17.3	18.4	18.5	18.3
Gabon	20.2	22.6	23.1	21.7	23.9	34.7	23.8	22.4	21.7	20.8	20.0
Gambia, The	20.6	23.1	23.6	26.0	29.7	27.1	28.1	30.3	29.9	26.9	27.0
Ghana	22.1	23.6	26.8	26.6	29.8	28.7	29.4	24.6	25.4	23.9	22.9
Guinea	16.5	23.7	29.7	21.6	26.1	25.5	26.5	28.3	21.4	24.1	24.1
Guinea-Bissau	22.1	20.8	18.7	17.6	13.8	13.2	23.6	22.1	20.1	19.0	20.3
Kenya	21.6	23.1	24.2	23.6	24.2	25.4	27.2	27.5	27.5	27.7	26.8
Lesotho	43.0	58.3	48.6	54.2	53.1	54.4	50.3	51.0	49.8	48.7	47.2
Liberia	15.8	33.2	32.5	29.0	30.1	32.8	32.1	42.3	36.0	33.1	29.0
Madagascar	20.9	14.1	14.0	14.1	13.4	14.9	14.7	15.1	16.2	18.3	17.6
Malawi	28.6	30.5	30.0	26.1	28.9	34.7	29.8	31.0	33.0	29.6	26.6
Mali	21.2	22.8	20.3	20.6	15.5	19.7	20.0	20.9	25.6	24.1	23.1
Mauritius	23.7	26.3	25.1	24.6	23.3	24.9	23.9	25.5	26.7	26.6	25.2
Mozambique	22.5	28.9	29.9	32.2	30.8	34.1	42.5	35.4	30.7	31.6	31.7
Namibia	26.6	31.1	32.4	36.7	33.8	35.4	39.9	42.8	39.4	36.8	36.7
Niger	21.3	23.9	20.6	19.4	22.5	27.2	31.0	32.7	26.5	28.1	27.3
Nigeria	16.5	15.5	16.7	17.5	14.2	13.5	12.7	11.1	9.3	10.7	10.2
Rwanda	22.5	23.5	25.3	26.2	25.7	26.8	28.3	27.5	26.0	24.5	23.8
São Tomé & Príncipe	40.0	51.9	49.9	52.2	46.2	31.5	30.5	34.3	30.9	37.0	36.1
Senegal	25.3	26.6	27.0	28.8	28.5	28.1	29.8	29.9	30.9	28.7	27.7
Seychelles	38.3	32.1	34.6	36.3	38.6	38.2	33.6	32.8	39.0	39.4	37.9
Sierra Leone	16.4	17.5	20.2	21.5	20.3	15.7	17.6	19.4	18.1	20.0	21.1
South Africa	27.4	31.7	31.4	30.9	31.4	31.5	31.8	33.2	33.0	33.2	33.2
South Sudan	...	...	...	21.0	31.6	24.8	34.1	39.4	50.3	24.1	30.2
Swaziland	28.8	32.4	29.8	24.4	27.0	28.8	32.2	33.0	36.9	35.2	36.0
Tanzania	18.0	20.2	20.2	19.1	19.8	19.4	17.9	17.8	19.6	21.0	21.2
Togo	19.0	21.2	22.5	26.2	26.4	26.7	27.3	30.8	31.4	29.8	27.8
Uganda	18.1	15.3	18.8	17.2	16.4	16.5	16.5	17.6	18.0	20.6	20.5
Zambia	21.0	17.8	18.1	19.5	21.5	23.8	24.7	28.3	24.0	24.5	24.6
Zimbabwe <sup>2</sup>	9.6	14.0	22.6	27.8	28.5	29.6	28.1	28.6	35.0	30.7	27.2
<b>Sub-Saharan Africa</b>	<b>23.0</b>	<b>24.6</b>	<b>24.9</b>	<b>25.0</b>	<b>24.3</b>	<b>23.9</b>	<b>23.5</b>	<b>22.5</b>	<b>21.6</b>	<b>22.4</b>	<b>21.4</b>
<i>Median</i>	21.5	23.7	23.9	24.4	26.1	27.1	28.1	28.3	26.5	26.4	24.6
Excluding Nigeria and South Africa	23.7	25.9	26.0	26.0	27.1	27.4	27.7	25.7	23.9	24.0	23.1
<b>Oil-exporting countries</b>	<b>20.3</b>	<b>21.5</b>	<b>21.2</b>	<b>22.2</b>	<b>20.8</b>	<b>20.4</b>	<b>19.6</b>	<b>16.4</b>	<b>13.8</b>	<b>15.2</b>	<b>14.1</b>
Excluding Nigeria	28.5	33.9	31.8	31.3	34.8	35.3	35.8	30.1	24.6	24.1	22.6
<b>Oil-importing countries</b>	<b>24.6</b>	<b>26.8</b>	<b>27.5</b>	<b>27.0</b>	<b>27.1</b>	<b>27.0</b>	<b>27.1</b>	<b>27.6</b>	<b>27.0</b>	<b>27.3</b>	<b>26.8</b>
Excluding South Africa	21.6	22.5	23.5	23.2	23.4	23.7	23.9	24.1	23.7	24.0	23.3
<b>Middle-income countries</b>	<b>23.8</b>	<b>25.7</b>	<b>25.6</b>	<b>25.8</b>	<b>25.0</b>	<b>24.6</b>	<b>24.0</b>	<b>22.7</b>	<b>21.9</b>	<b>22.7</b>	<b>21.6</b>
Excluding Nigeria and South Africa	26.7	30.0	29.0	29.3	31.2	31.8	32.2	29.1	26.6	26.3	25.1
<b>Low-income countries</b>	<b>18.9</b>	<b>20.0</b>	<b>21.3</b>	<b>20.8</b>	<b>20.9</b>	<b>21.1</b>	<b>21.5</b>	<b>21.7</b>	<b>20.7</b>	<b>21.1</b>	<b>20.6</b>
Excluding low-income countries in fragile situations	20.1	20.2	20.8	20.6	20.2	21.2	21.3	20.6	20.5	21.5	21.3
<b>Countries in fragile situations</b>	<b>18.7</b>	<b>20.3</b>	<b>21.5</b>	<b>21.1</b>	<b>23.2</b>	<b>23.1</b>	<b>23.7</b>	<b>24.4</b>	<b>22.6</b>	<b>21.7</b>	<b>20.9</b>
CFA franc zone	19.8	23.8	22.3	22.4	24.9	26.9	25.8	26.1	25.0	24.0	23.2
CEMAC	18.4	25.0	22.9	23.2	26.9	29.8	28.1	27.6	24.4	21.5	20.6
WAEMU	21.3	22.7	21.7	21.6	22.6	23.8	23.5	24.9	25.5	25.9	25.2
COMESA (SSA members)	20.3	19.5	21.3	20.9	20.7	21.3	21.6	22.4	22.0	22.3	21.6
EAC-5	20.2	20.9	22.3	21.4	21.6	21.9	22.3	22.7	23.3	24.2	23.8
ECOWAS	17.8	17.5	18.4	18.9	16.8	16.3	15.4	14.3	13.7	14.9	14.0
SACU	27.9	32.5	31.9	31.3	31.7	31.8	32.3	33.7	33.4	33.5	33.5
SADC	27.7	31.2	30.8	30.6	31.1	31.0	31.4	30.2	28.3	28.8	28.1

See sources and footnotes on page 72.

**Table SA12. Government Debt**  
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	27.8	22.7	44.3	33.8	29.5	32.9	40.7	65.4	71.9	61.3	62.4
Benin	24.4	25.6	28.7	29.9	26.7	25.3	30.5	42.4	50.3	55.6	56.1
Botswana	7.7	17.6	19.4	20.3	18.9	17.5	17.3	15.9	13.9	13.3	11.1
Burkina Faso	32.6	28.5	29.3	29.8	28.3	29.3	30.6	32.5	32.5	33.3	33.6
Burundi	134.4	25.7	46.9	42.7	41.4	36.1	35.7	46.0	47.2	57.1	65.7
Cabo Verde	73.8	65.2	72.4	78.8	91.1	102.5	115.9	127.9	133.8	134.7	133.0
Cameroon	30.1	10.1	11.5	13.2	15.4	19.0	26.2	27.1	32.8	33.9	35.5
Central African Rep.	69.6	21.1	21.4	21.8	23.5	38.5	51.1	48.5	42.5	31.9	27.7
Chad	24.8	31.6	30.1	30.6	28.8	30.4	39.2	42.8	51.2	50.4	48.5
Comoros	65.1	53.6	50.7	45.7	42.6	18.1	22.6	25.2	26.3	28.6	28.1
Congo, Dem. Rep. of	105.0	93.2	31.9	26.3	23.2	19.1	16.8	18.8	21.5	24.3	27.6
Congo, Rep. of	119.1	63.3	22.4	32.2	34.2	36.7	45.2	70.6	83.0	73.8	67.5
Côte d'Ivoire	76.6	64.2	63.0	69.2	45.1	43.3	44.8	47.8	48.8	52.1	52.7
Equatorial Guinea	1.9	4.3	7.9	5.9	7.3	6.1	8.7	14.0	21.7	24.5	27.6
Eritrea	158.9	144.6	143.8	133.0	127.6	128.4	126.5	127.1	125.5	127.4	127.9
Ethiopia <sup>1</sup>	67.8	37.6	40.5	44.0	36.9	42.4	46.3	54.6	54.9	56.9	57.0
Gabon	41.1	24.4	20.0	20.3	20.4	29.9	33.0	41.4	62.0	62.0	61.8
Gambia, The	107.3	62.6	69.6	77.3	77.0	83.3	105.0	110.2	116.1	114.9	112.0
Ghana	39.2	36.1	46.3	42.6	47.9	57.2	70.2	71.5	72.4	71.7	66.8
Guinea	117.9	89.3	99.6	78.3	35.4	46.5	46.1	54.7	56.0	51.6	49.1
Guinea-Bissau	197.4	159.0	65.9	49.8	52.4	52.6	53.3	46.8	46.3	44.5	43.1
Kenya	45.2	41.1	44.4	43.0	41.7	44.0	48.6	52.4	54.4	54.7	54.4
Lesotho	49.7	32.5	30.4	31.7	35.7	38.1	43.2	49.5	47.8	46.9	45.7
Liberia	548.8	173.9	33.4	29.6	27.0	27.5	33.2	39.5	44.8	53.3	55.3
Madagascar	56.6	33.7	31.7	32.2	33.0	33.9	34.7	35.5	42.3	43.2	44.0
Malawi	62.9	35.6	29.6	30.6	43.9	59.3	55.0	61.1	62.1	59.5	56.4
Mali	29.2	21.9	25.3	24.0	25.4	26.4	27.3	30.9	30.5	31.2	32.4
Mauritius	49.5	52.3	52.0	52.2	51.5	53.9	56.2	62.3	62.7	62.1	60.5
Mozambique	49.7	41.9	43.3	38.0	40.1	53.1	62.4	88.1	115.2	106.9	103.6
Namibia	23.3	15.5	16.0	26.2	23.7	24.2	25.5	39.9	42.1	42.8	45.3
Niger	43.3	27.7	24.3	27.8	26.9	26.3	31.9	41.3	45.9	51.5	53.2
Nigeria	15.5	8.6	9.6	12.6	12.5	12.6	10.6	12.1	18.6	23.3	24.1
Rwanda	45.2	19.5	20.0	19.9	20.0	26.7	29.1	33.4	37.6	41.4	43.5
São Tomé & Príncipe	207.5	72.4	79.5	78.0	81.0	71.1	66.2	82.2	92.8	97.1	96.1
Senegal	32.5	34.2	35.5	40.7	42.8	46.9	54.2	56.9	57.4	57.1	55.6
Seychelles	155.7	106.1	82.2	82.5	80.1	68.8	72.4	67.8	68.6	64.1	58.0
Sierra Leone	94.1	48.1	46.8	44.8	36.8	30.5	35.0	42.4	53.4	51.7	53.1
South Africa	30.5	30.1	34.7	38.2	41.0	44.0	46.9	49.8	50.5	52.4	54.0
South Sudan	...	...	...	0.0	8.9	17.6	34.8	65.7	33.0	17.9	21.9
Swaziland	14.1	10.2	13.7	14.2	14.8	15.3	14.3	18.6	27.5	33.9	42.0
Tanzania	33.5	24.4	27.3	27.8	29.2	30.9	33.8	36.9	39.0	40.3	41.2
Togo	93.8	85.8	48.8	42.4	44.7	56.4	65.2	75.6	79.1	76.6	72.4
Uganda	39.4	19.2	22.4	23.4	24.3	27.2	30.1	33.2	36.9	40.1	41.6
Zambia	54.4	20.5	18.9	20.8	24.9	25.9	33.3	57.5	53.1	57.7	61.5
Zimbabwe <sup>2</sup>	50.6	68.3	63.2	43.7	50.1	54.6	55.3	58.9	75.3	75.7	79.2
<b>Sub-Saharan Africa</b>	<b>33.4</b>	<b>26.5</b>	<b>27.9</b>	<b>28.7</b>	<b>28.5</b>	<b>30.0</b>	<b>31.6</b>	<b>37.4</b>	<b>42.5</b>	<b>44.6</b>	<b>44.9</b>
<i>Median</i>	49.7	33.9	32.7	32.2	34.2	33.9	39.2	47.8	50.3	52.1	53.2
Excluding Nigeria and South Africa	47.6	35.2	35.8	32.9	32.0	35.2	40.0	49.7	52.9	52.6	53.2
<b>Oil-exporting countries</b>	<b>21.2</b>	<b>13.0</b>	<b>16.0</b>	<b>16.6</b>	<b>16.2</b>	<b>17.3</b>	<b>17.9</b>	<b>23.6</b>	<b>30.8</b>	<b>33.6</b>	<b>33.9</b>
Excluding Nigeria	33.7	22.1	30.9	24.3	24.0	27.6	35.1	53.2	59.6	54.1	55.3
<b>Oil-importing countries</b>	<b>41.1</b>	<b>35.8</b>	<b>36.3</b>	<b>37.8</b>	<b>38.2</b>	<b>41.0</b>	<b>44.1</b>	<b>48.9</b>	<b>50.6</b>	<b>52.1</b>	<b>52.9</b>
Excluding South Africa	53.2	40.8	37.9	37.3	35.8	38.8	42.3	48.4	50.7	52.0	52.4
<b>Middle-income countries</b>	<b>28.4</b>	<b>23.0</b>	<b>26.4</b>	<b>28.1</b>	<b>27.8</b>	<b>28.9</b>	<b>29.9</b>	<b>35.3</b>	<b>40.9</b>	<b>43.3</b>	<b>43.3</b>
Excluding Nigeria and South Africa	39.8	30.5	35.8	33.7	32.1	35.5	41.3	53.1	57.0	55.2	55.4
<b>Low-income countries</b>	<b>59.7</b>	<b>42.0</b>	<b>35.8</b>	<b>31.7</b>	<b>31.8</b>	<b>34.7</b>	<b>38.4</b>	<b>45.5</b>	<b>47.9</b>	<b>49.3</b>	<b>50.3</b>
Excluding low-income countries in fragile situations	43.6	29.2	30.9	32.0	30.9	34.8	38.8	46.7	49.4	50.9	51.5
<b>Countries in fragile situations</b>	<b>82.4</b>	<b>61.8</b>	<b>44.7</b>	<b>37.6</b>	<b>35.3</b>	<b>36.4</b>	<b>39.6</b>	<b>46.0</b>	<b>48.2</b>	<b>49.2</b>	<b>50.5</b>
CFA franc zone	45.0	32.9	28.9	30.1	27.3	29.7	34.6	40.4	45.8	46.9	47.1
CEMAC	38.7	21.4	16.7	18.3	19.1	22.4	28.6	34.9	44.6	44.2	44.4
WAEMU	51.9	44.3	41.9	43.7	36.4	37.3	40.6	45.1	46.8	48.9	49.1
COMESA (SSA members)	59.8	43.1	37.1	35.9	35.6	37.8	40.8	47.4	49.7	52.0	53.4
EAC-5	42.1	29.8	33.2	32.8	33.0	35.4	39.0	43.0	45.6	47.2	47.9
ECOWAS	27.5	18.7	18.4	20.6	19.1	20.0	18.9	21.5	28.9	32.8	32.5
SACU	29.4	29.1	33.4	37.0	39.4	42.0	44.6	47.7	48.2	50.1	51.5
SADC	34.2	31.5	35.0	35.4	36.4	38.7	42.1	49.9	51.9	51.9	53.4

See sources and footnotes on page 72.

**Table SA13. Broad Money**  
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	21.9	42.5	35.3	37.6	35.0	36.5	41.0	46.4	40.6	35.5	36.1
Benin	30.4	38.7	41.9	42.8	41.3	44.6	49.0	51.8	52.9	54.9	56.1
Botswana	46.7	52.7	43.5	37.7	35.4	32.3	27.3	27.9	27.1	29.1	29.5
Burkina Faso	23.9	28.0	29.7	29.7	30.5	32.6	35.2	39.0	41.3	45.2	48.4
Burundi	22.3	24.3	23.9	22.6	21.0	20.1	19.4	19.6	19.9	19.6	19.6
Cabo Verde	75.1	77.5	80.1	78.5	82.1	89.4	95.6	100.3	102.0	102.8	102.9
Cameroon	19.4	22.3	23.4	24.2	22.7	23.3	23.8	24.5	25.0	24.9	24.8
Central African Rep.	15.9	16.1	17.8	19.2	18.3	28.5	29.1	27.5	26.3	26.4	26.4
Chad	8.9	11.0	11.4	12.0	12.4	13.3	15.6	15.9	16.3	16.7	17.0
Comoros	25.6	30.4	34.1	34.9	38.3	36.9	38.4	43.6	43.6	43.6	43.6
Congo, Dem. Rep. of	6.6	10.1	10.5	10.6	11.6	11.5	11.8	12.1	11.7	12.3	12.4
Congo, Rep. of	17.1	23.3	23.3	27.2	33.1	33.5	37.7	46.1	41.8	41.3	38.9
Côte d'Ivoire	11.3	14.1	15.7	18.7	15.3	14.9	15.0	15.8	15.6	15.3	15.8
Equatorial Guinea	6.4	10.5	12.3	10.6	14.8	16.7	14.6	17.0	16.8	15.7	16.3
Eritrea	130.2	121.6	123.2	114.7	114.1	118.3	119.9	118.6	119.7	122.1	123.4
Ethiopia <sup>1</sup>	34.6	24.8	27.0	27.6	25.3	27.1	28.1	28.5	29.1	27.2	26.1
Gabon	17.0	20.3	19.5	20.5	23.2	24.8	24.4	25.7	24.0	25.3	26.1
Gambia, The	39.0	48.7	49.9	55.7	54.5	56.6	58.6	52.3	55.0	55.8	56.7
Ghana	22.8	28.0	29.9	30.4	30.0	28.8	32.5	32.7	33.6	32.8	31.9
Guinea	20.2	26.9	38.2	33.8	28.9	30.9	31.3	35.0	33.7	35.7	35.8
Guinea-Bissau	19.1	24.6	29.6	33.4	32.2	38.6	46.9	51.1	52.2	52.2	52.2
Kenya	35.7	36.5	40.1	40.6	40.5	42.1	43.2	42.7	39.7	40.9	41.3
Lesotho	28.2	33.8	34.5	31.3	31.2	34.1	32.3	32.6	31.1	31.3	31.7
Liberia	19.5	31.4	35.5	42.0	36.3	34.8	34.6	34.8	32.1	31.7	31.7
Madagascar	23.6	24.5	24.7	26.1	25.7	25.2	25.4	26.2	27.8	28.1	28.3
Malawi	15.8	19.8	22.1	25.1	25.7	26.0	24.5	24.3	23.6	24.1	25.5
Mali	25.6	24.7	24.5	24.4	27.0	28.2	27.8	28.9	29.0	31.5	32.6
Mauritius	98.5	99.5	100.4	98.8	100.5	99.8	102.9	108.5	110.0	110.0	110.0
Mozambique	17.0	24.2	24.7	27.7	30.6	33.4	38.5	42.1	40.5	38.5	38.3
Namibia	39.7	63.5	62.4	64.0	57.4	56.2	53.3	55.9	55.3	55.3	55.3
Niger	15.6	18.5	20.3	20.2	22.6	23.3	27.2	27.1	28.9	29.8	30.7
Nigeria	16.0	24.3	20.8	18.8	21.3	19.3	20.9	20.9	23.0	23.1	23.3
Rwanda	16.6	17.2	18.3	20.0	19.8	20.9	22.4	24.9	24.1	24.1	24.4
São Tomé & Príncipe	33.4	37.1	38.7	38.0	39.0	38.3	38.8	40.3	34.7	34.9	34.9
Senegal	34.7	36.9	39.7	40.0	39.9	42.6	46.0	48.9	50.8	51.3	51.3
Seychelles	84.6	55.5	62.1	60.2	52.0	58.9	68.8	67.2	72.9	72.9	72.9
Sierra Leone	16.7	22.6	23.5	23.1	21.9	19.8	21.7	23.8	23.0	21.3	21.9
South Africa	72.5	77.7	75.8	74.6	72.9	70.8	70.7	74.1	72.9	72.9	72.9
South Sudan	...	...	...	9.5	19.8	14.7	17.6	38.2	28.2	9.2	9.6
Swaziland	19.3	25.1	25.3	24.8	24.7	26.2	25.0	26.4	25.7	26.4	26.4
Tanzania	21.8	23.3	25.1	24.7	23.8	22.7	23.3	24.3	23.2	23.3	23.5
Togo	33.3	41.3	45.6	46.9	45.3	46.8	48.2	53.6	56.7	60.1	63.5
Uganda	18.5	17.9	21.7	19.8	19.5	19.6	20.6	21.0	21.2	21.8	22.4
Zambia	18.0	17.8	18.4	19.1	19.6	20.5	20.9	25.8	21.6	21.4	21.8
Zimbabwe <sup>2</sup>	10.7	16.9	24.7	28.3	29.8	28.8	30.8	33.4	39.8	54.2	61.3
<b>Sub-Saharan Africa</b>	<b>34.9</b>	<b>39.3</b>	<b>37.6</b>	<b>36.4</b>	<b>36.6</b>	<b>35.5</b>	<b>36.3</b>	<b>37.9</b>	<b>37.8</b>	<b>37.5</b>	<b>37.6</b>
<i>Median</i>	21.8	24.8	26.1	27.7	29.8	28.8	30.8	32.7	31.1	31.5	31.7
Excluding Nigeria and South Africa	25.0	28.9	29.5	29.5	29.3	29.8	31.2	33.3	32.2	31.8	32.1
<b>Oil-exporting countries</b>	<b>16.5</b>	<b>25.8</b>	<b>22.3</b>	<b>20.9</b>	<b>22.9</b>	<b>21.7</b>	<b>23.6</b>	<b>24.9</b>	<b>25.5</b>	<b>24.7</b>	<b>25.0</b>
Excluding Nigeria	17.7	29.4	26.5	26.0	27.2	28.1	30.7	35.5	32.2	29.0	29.3
<b>Oil-importing countries</b>	<b>46.6</b>	<b>48.8</b>	<b>48.7</b>	<b>48.1</b>	<b>46.6</b>	<b>45.6</b>	<b>45.8</b>	<b>47.4</b>	<b>46.4</b>	<b>46.3</b>	<b>46.0</b>
Excluding South Africa	27.2	28.7	30.5	30.7	30.0	30.4	31.4	32.5	32.2	32.7	32.9
<b>Middle-income countries</b>	<b>38.0</b>	<b>43.4</b>	<b>40.7</b>	<b>39.7</b>	<b>39.7</b>	<b>38.3</b>	<b>39.0</b>	<b>40.6</b>	<b>40.6</b>	<b>40.3</b>	<b>40.3</b>
Excluding Nigeria and South Africa	26.6	33.3	32.9	33.7	32.9	33.5	35.1	37.5	35.5	34.7	34.8
<b>Low-income countries</b>	<b>22.8</b>	<b>23.4</b>	<b>25.5</b>	<b>24.8</b>	<b>25.2</b>	<b>25.6</b>	<b>26.9</b>	<b>28.5</b>	<b>28.6</b>	<b>28.7</b>	<b>29.2</b>
Excluding low-income countries in fragile situations	24.2	23.5	25.7	25.7	25.0	25.8	27.4	28.5	28.5	28.2	28.3
<b>Countries in fragile situations</b>	<b>18.8</b>	<b>21.6</b>	<b>23.2</b>	<b>23.1</b>	<b>24.3</b>	<b>24.0</b>	<b>24.8</b>	<b>27.4</b>	<b>26.9</b>	<b>27.4</b>	<b>28.1</b>
CFA franc zone	18.5	21.7	23.1	24.1	24.5	25.8	27.0	29.1	29.4	30.2	30.9
CEMAC	14.6	17.9	18.7	19.5	21.0	22.3	23.1	25.4	24.8	24.9	25.0
WAEMU	22.1	25.3	27.2	28.6	27.8	29.0	30.5	32.3	33.1	34.3	35.3
COMESA (SSA members)	29.9	28.5	30.7	30.9	30.4	31.2	31.9	32.8	32.3	32.8	33.0
EAC-5	26.3	26.7	29.6	29.2	28.8	29.0	29.9	30.3	28.8	29.4	29.7
ECOWAS	17.9	25.0	22.9	21.7	23.4	22.0	23.7	24.1	26.0	26.3	26.7
SACU	69.6	75.4	73.2	71.8	70.0	67.8	67.3	70.5	69.3	69.4	69.3
SADC	53.3	58.5	56.4	55.7	54.0	52.5	52.8	55.6	53.7	53.1	53.1

See sources and footnotes on page 72.



**Table SA14. Broad Money Growth**  
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	64.6	21.5	5.3	37.1	4.9	14.1	16.2	11.8	11.5	13.1	19.3
Benin	15.6	6.2	11.6	9.1	9.0	17.3	16.7	7.9	5.9	11.5	10.7
Botswana	17.4	-1.3	4.9	-3.1	0.7	1.3	-0.7	2.0	9.2	9.5	10.8
Burkina Faso	6.9	18.2	19.1	13.8	15.9	10.6	11.3	19.7	13.5	18.6	16.1
Burundi	21.1	19.8	12.5	6.6	11.3	13.2	9.8	4.9	12.0	11.0	18.0
Cabo Verde	12.5	3.5	5.4	4.6	6.3	11.4	7.4	6.3	5.9	6.0	6.0
Cameroon	10.5	6.9	11.3	10.6	1.4	10.8	10.8	9.1	5.4	4.8	5.3
Central African Rep.	7.5	11.7	16.1	13.8	1.6	5.6	14.6	5.3	6.2	11.0	10.8
Chad	23.6	-4.6	25.3	14.2	13.4	8.6	26.5	-4.7	-4.8	2.4	5.8
Comoros	8.1	13.3	19.4	9.6	16.0	2.8	8.1	17.1	5.1	5.4	6.1
Congo, Dem. Rep. of	52.5	49.7	31.2	22.6	21.8	18.6	13.2	10.0	20.5	25.6	14.8
Congo, Rep. of	30.1	5.3	37.6	34.5	21.1	0.7	13.1	-11.2	-15.4	7.8	4.4
Côte d'Ivoire	12.0	24.4	19.3	17.2	-7.6	9.7	13.8	17.0	7.0	6.5	12.8
Equatorial Guinea	30.7	29.9	33.5	7.7	57.8	7.3	-14.1	-10.9	-16.4	-2.5	2.7
Eritrea	11.2	15.7	15.6	14.6	17.9	17.5	17.2	13.9	15.7	15.4	14.6
Ethiopia <sup>1</sup>	18.1	19.9	24.4	36.5	32.9	24.2	26.9	24.2	20.4	6.9	9.9
Gabon	14.2	2.2	19.2	26.5	15.7	6.1	1.6	-0.5	-7.0	9.3	6.6
Gambia, The	16.5	19.4	13.7	11.0	7.8	15.1	11.2	-0.9	15.3	13.0	12.0
Ghana	31.3	26.0	34.4	32.2	24.3	19.1	36.8	23.3	25.1	17.4	15.5
Guinea	35.5	25.9	74.4	9.4	1.0	14.1	12.3	20.3	11.6	19.8	11.7
Guinea-Bissau	25.7	4.4	29.6	39.1	-6.0	22.5	22.4	28.9	13.5	5.2	6.4
Kenya	14.9	16.0	21.6	19.1	14.1	15.6	16.7	14.1	4.4	14.7	12.5
Lesotho	16.8	17.7	14.5	1.6	7.0	21.2	4.0	9.2	5.4	10.6	10.2
Liberia	33.6	30.6	28.0	41.3	-2.1	7.6	2.1	1.7	-4.5	3.9	6.0
Madagascar	17.2	10.2	9.6	16.4	6.9	5.3	11.1	14.6	17.9	12.7	12.5
Malawi	27.6	23.9	33.9	35.7	22.9	35.1	20.7	23.7	18.8	19.4	21.8
Mali	5.6	16.0	9.0	15.3	15.2	7.4	7.1	13.2	7.3	16.3	9.9
Mauritius	13.0	2.4	6.9	6.4	8.2	5.8	8.7	10.2	8.2	6.4	6.6
Mozambique	22.2	34.6	17.6	23.9	25.6	21.2	27.3	21.7	12.1	9.2	12.4
Namibia	16.7	63.2	8.0	11.9	6.3	12.4	7.8	10.2	5.7	9.7	10.9
Niger	15.7	18.3	22.0	6.2	31.2	10.1	25.7	3.6	11.3	11.2	10.9
Nigeria	37.2	17.1	6.9	4.0	29.1	1.0	20.4	5.9	18.7	19.2	18.7
Rwanda	23.6	13.0	16.9	26.7	14.1	15.8	18.8	21.1	7.5	14.1	14.3
São Tomé & Príncipe	29.8	8.2	25.1	10.4	20.3	13.9	16.8	13.1	-4.9	6.8	7.2
Senegal	9.5	10.9	14.1	6.7	6.8	8.0	11.4	13.4	12.5	9.8	9.1
Seychelles	7.9	7.0	13.5	4.5	-0.6	23.7	26.6	2.9	12.1	6.9	7.2
Sierra Leone	24.5	31.3	28.5	22.6	22.5	16.7	16.6	11.3	11.8	11.8	16.7
South Africa	18.9	1.8	6.9	8.3	5.2	5.9	7.3	10.3	6.1	7.1	7.3
South Sudan	...	...	...	...	33.9	-1.6	21.2	117.4	142.5	-2.9	26.1
Swaziland	15.7	26.8	7.9	5.5	10.0	15.9	3.9	13.6	7.9	9.3	6.2
Tanzania	22.0	17.7	25.4	18.2	12.5	10.0	15.6	18.8	7.8	12.8	13.3
Togo	15.7	16.2	16.3	15.9	8.9	10.3	9.8	20.2	12.9	13.4	13.5
Uganda	19.1	16.6	41.5	10.5	14.9	9.5	15.2	11.7	11.1	15.3	15.0
Zambia	25.6	7.7	29.9	21.7	17.9	20.8	12.6	35.2	0.7	13.6	13.8
Zimbabwe <sup>2</sup>	1.4	340.0	68.6	33.1	19.9	4.6	12.6	8.2	19.0	47.0	19.0
<b>Sub-Saharan Africa</b>	<b>25.4</b>	<b>14.7</b>	<b>13.3</b>	<b>12.5</b>	<b>16.7</b>	<b>7.7</b>	<b>15.3</b>	<b>11.2</b>	<b>12.1</b>	<b>13.1</b>	<b>13.3</b>
<i>Median</i>	17.3	16.4	18.4	14.0	13.4	10.8	13.1	11.7	9.2	11.0	10.9
Excluding Nigeria and South Africa	22.6	20.5	21.4	20.9	14.6	13.2	15.7	15.0	10.8	12.1	12.6
<b>Oil-exporting countries</b>	<b>36.7</b>	<b>16.4</b>	<b>8.8</b>	<b>9.3</b>	<b>24.5</b>	<b>3.4</b>	<b>17.9</b>	<b>6.8</b>	<b>15.4</b>	<b>16.0</b>	<b>16.9</b>
Excluding Nigeria	36.3	14.8	14.2	25.6	13.1	9.8	11.6	9.2	7.1	8.0	12.3
<b>Oil-importing countries</b>	<b>18.7</b>	<b>13.5</b>	<b>16.7</b>	<b>14.9</b>	<b>11.2</b>	<b>11.1</b>	<b>13.4</b>	<b>14.5</b>	<b>9.9</b>	<b>11.2</b>	<b>10.9</b>
Excluding South Africa	18.6	22.4	23.9	19.5	15.1	14.3	17.1	16.9	12.0	13.3	12.7
<b>Middle-income countries</b>	<b>27.0</b>	<b>12.2</b>	<b>10.2</b>	<b>10.4</b>	<b>16.2</b>	<b>6.1</b>	<b>14.6</b>	<b>9.2</b>	<b>11.2</b>	<b>13.1</b>	<b>13.4</b>
Excluding Nigeria and South Africa	25.3	17.1	17.6	21.1	11.4	12.7	13.9	12.4	7.1	11.1	12.3
<b>Low-income countries</b>	<b>19.3</b>	<b>24.7</b>	<b>26.2</b>	<b>20.7</b>	<b>18.5</b>	<b>13.8</b>	<b>17.8</b>	<b>17.9</b>	<b>15.1</b>	<b>13.3</b>	<b>13.0</b>
Excluding low-income countries in fragile situations	18.7	18.4	25.6	21.2	20.3	15.4	20.0	18.6	12.9	11.2	12.4
<b>Countries in fragile situations</b>	<b>19.2</b>	<b>30.5</b>	<b>26.4</b>	<b>20.5</b>	<b>11.6</b>	<b>10.3</b>	<b>14.2</b>	<b>14.5</b>	<b>13.7</b>	<b>14.1</b>	<b>13.1</b>
CFA franc zone	14.5	13.2	19.2	14.6	12.0	8.9	10.0	6.9	2.7	8.2	8.9
CEMAC	18.8	9.2	22.5	16.2	18.3	7.5	6.6	-1.4	-4.9	4.7	5.2
WAEMU	10.7	17.1	16.1	13.2	6.3	10.1	13.2	14.5	9.3	11.0	11.8
COMESA (SSA members)	19.1	24.5	26.1	22.0	18.8	16.5	17.1	17.6	12.3	14.2	12.7
EAC-5	18.6	16.7	26.5	17.0	13.6	12.3	15.9	15.4	7.3	14.0	13.5
ECOWAS	31.2	17.9	10.9	7.6	24.3	4.0	20.2	8.7	17.3	17.4	17.0
SACU	18.7	3.4	6.9	7.8	5.2	6.1	6.9	10.0	6.2	7.4	7.6
SADC	23.6	11.9	11.4	14.5	7.9	9.3	10.3	12.6	8.3	10.8	10.9

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Angola	71.9	60.5	19.2	28.8	24.2	15.0	1.1	17.6	6.4
Benin	16.4	11.9	8.5	11.5	9.4	10.6	6.0	-1.8	7.4
Botswana	21.2	10.3	11.1	21.8	21.5	13.8	13.7	9.0	9.1
Burkina Faso	14.4	1.7	14.7	23.5	24.1	26.3	18.9	7.0	-0.0
Burundi	8.4	25.5	27.0	51.1	2.5	7.8	9.4	6.0	17.3
Cabo Verde	20.3	11.8	9.0	13.3	-0.6	2.0	-0.9	0.4	2.9
Cameroon	8.2	9.1	8.2	28.3	2.6	14.9	14.4	12.8	6.4
Central African Rep.	8.7	8.7	30.2	19.2	31.0	-18.1	5.4	-2.1	-23.5
Chad	17.3	21.0	30.2	24.4	32.1	6.1	37.8	19.9	-20.1
Comoros	11.4	44.1	25.9	8.9	22.4	12.6	10.0	16.2	13.5
Congo, Dem. Rep. of	91.1	41.1	18.0	17.1	25.2	26.5	22.9	17.4	28.1
Congo, Rep. of	19.1	31.0	50.4	40.6	44.2	17.0	26.3	9.3	7.1
Côte d'Ivoire	10.0	10.8	8.7	0.4	12.2	22.9	21.7	29.7	15.4
Equatorial Guinea	50.1	13.8	30.6	30.7	-13.6	34.3	18.4	14.1	4.2
Eritrea	6.3	1.2	1.6	14.6	-1.5	4.4	7.3	7.5	7.7
Ethiopia <sup>1</sup>	42.1	11.0	28.1	25.0	37.7	10.8	19.9	31.0	23.0
Gabon	10.0	-7.9	1.9	42.0	24.1	23.6	-2.0	-9.8	-10.0
Gambia, The	13.2	10.3	14.8	8.8	4.3	20.5	-7.5	-7.9	-12.3
Ghana	44.1	16.2	24.8	29.0	32.9	29.0	41.8	31.7	9.1
Guinea	19.2	15.8	43.8	93.4	-3.2	35.0	44.0	27.1	9.4
Guinea-Bissau	50.9	24.9	58.2	46.7	27.2	3.6	-8.2	55.5	0.5
Kenya	19.9	13.9	20.3	30.9	10.4	20.1	22.2	17.8	4.0
Lesotho	29.2	20.7	26.9	25.1	42.2	10.3	11.8	8.2	8.0
Liberia	36.0	31.5	40.1	32.4	11.2	27.2	5.6	8.1	2.3
Madagascar	24.8	6.5	11.2	7.0	4.8	16.2	18.4	16.5	9.1
Malawi	41.2	39.5	52.4	20.5	25.4	14.4	20.0	29.9	19.8
Mali	7.2	11.0	13.5	24.1	4.8	11.7	18.7	19.9	18.8
Mauritius	15.4	0.5	12.5	12.3	17.4	14.2	-2.2	8.7	-0.6
Mozambique	27.5	58.6	29.3	6.4	19.9	15.4	25.2	22.1	24.8
Namibia	14.9	9.9	10.9	9.5	16.9	14.5	16.5	13.8	8.0
Niger	26.1	18.4	11.7	16.0	24.2	4.0	10.4	13.2	11.7
Nigeria	47.0	22.0	-5.6	2.6	6.6	9.4	18.0	4.4	22.1
Rwanda	30.2	5.7	9.9	27.6	35.0	11.4	19.3	30.1	7.8
São Tomé & Príncipe	53.5	39.3	35.8	15.4	11.0	-3.3	-1.4	7.3	6.2
Senegal	13.1	3.8	10.1	19.0	10.0	12.6	6.4	7.1	7.9
Seychelles	21.9	-9.2	23.6	5.2	8.5	4.5	26.2	7.8	10.3
Sierra Leone	35.5	45.4	31.5	21.8	-6.9	11.9	5.4	3.2	9.1
South Africa	17.8	3.0	3.3	5.7	9.3	6.6	7.2	8.3	5.7
South Sudan	...	...	...	-34.0	125.7	45.4	49.8	51.2	221.5
Swaziland	21.4	13.1	-0.5	26.0	-1.7	20.2	9.8	4.2	8.3
Tanzania	35.8	9.6	20.0	27.2	18.2	15.3	19.4	24.8	12.7
Togo	8.4	21.3	21.6	41.1	18.9	13.5	11.6	16.2	16.6
Uganda	27.5	17.3	41.8	28.3	11.8	6.2	14.1	15.1	6.4
Zambia	43.2	-5.7	15.4	28.2	37.0	12.6	26.4	29.3	-5.3
Zimbabwe <sup>2</sup>	5.8	388.2	143.3	62.8	27.1	3.7	4.7	-2.3	-9.5
<b>Sub-Saharan Africa</b>	<b>30.3</b>	<b>16.5</b>	<b>8.3</b>	<b>12.6</b>	<b>13.3</b>	<b>12.2</b>	<b>15.4</b>	<b>12.1</b>	<b>12.7</b>
<i>Median</i>	20.8	13.4	19.6	23.5	17.4	13.5	14.1	13.2	7.9
Excluding Nigeria and South Africa	28.8	20.6	21.6	23.3	20.0	16.6	17.6	19.0	10.2
<b>Oil-exporting countries</b>	<b>44.0</b>	<b>24.8</b>	<b>0.6</b>	<b>7.7</b>	<b>10.4</b>	<b>11.8</b>	<b>16.1</b>	<b>7.2</b>	<b>18.2</b>
Excluding Nigeria	37.5	32.3	19.7	21.7	20.9	18.6	11.3	15.1	8.5
<b>Oil-importing countries</b>	<b>22.4</b>	<b>11.0</b>	<b>14.3</b>	<b>16.3</b>	<b>15.5</b>	<b>12.4</b>	<b>14.9</b>	<b>15.9</b>	<b>8.9</b>
Excluding South Africa	26.2	16.9	22.2	23.8	19.7	16.0	19.7	20.3	10.7
<b>Middle-income countries</b>	<b>31.1</b>	<b>14.9</b>	<b>3.8</b>	<b>10.4</b>	<b>10.9</b>	<b>11.6</b>	<b>14.4</b>	<b>9.7</b>	<b>11.8</b>
Excluding Nigeria and South Africa	30.0	18.9	17.3	25.6	18.0	18.9	16.2	17.6	5.6
<b>Low-income countries</b>	<b>27.4</b>	<b>22.7</b>	<b>27.1</b>	<b>20.7</b>	<b>22.3</b>	<b>14.1</b>	<b>19.1</b>	<b>20.6</b>	<b>15.4</b>
Excluding low-income countries in fragile situations	30.4	13.9	24.7	23.8	23.5	12.2	18.0	22.3	14.4
<b>Countries in fragile situations</b>	<b>21.7</b>	<b>31.5</b>	<b>27.9</b>	<b>15.3</b>	<b>20.6</b>	<b>18.0</b>	<b>21.5</b>	<b>19.4</b>	<b>16.2</b>
CFA franc zone	15.0	10.6	15.8	22.8	12.5	17.3	15.9	13.1	5.5
CEMAC	18.4	11.5	20.4	31.9	11.6	18.2	16.9	9.1	-1.4
WAEMU	12.4	9.8	11.7	14.7	13.3	16.4	15.0	16.7	11.5
COMESA (SSA members)	28.6	20.0	26.5	26.0	21.2	13.9	18.3	20.3	10.3
EAC-5	26.7	12.9	24.2	29.3	14.4	14.7	19.1	20.1	8.0
ECOWAS	39.1	19.5	-0.2	7.2	9.2	12.2	19.2	8.4	18.7
SACU	17.9	3.7	4.0	6.8	10.0	7.4	7.8	8.4	6.0
SADC	26.4	15.2	11.1	13.5	14.9	10.5	9.9	13.0	7.3

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Angola	8.5	21.5	20.2	20.2	22.3	23.4	22.9	27.2	22.8
Benin	16.3	20.8	22.0	22.9	22.2	22.6	22.6	21.7	22.5
Botswana	22.1	28.9	25.3	27.5	31.3	32.0	31.0	33.8	32.9
Burkina Faso	16.7	17.0	17.3	18.8	20.7	25.3	29.1	28.9	26.9
Burundi	14.1	13.7	15.2	20.3	17.4	15.8	15.3	15.5	16.6
Cabo Verde	41.4	58.0	61.9	65.7	64.3	64.2	63.3	62.7	61.9
Cameroon	9.5	10.8	11.0	13.1	12.5	13.3	14.0	14.9	15.3
Central African Rep.	6.9	7.2	8.9	10.1	12.3	14.9	14.0	12.3	8.5
Chad	2.6	3.9	4.2	4.8	5.8	6.1	7.8	9.9	8.6
Comoros	8.9	14.8	17.5	17.8	20.6	21.7	23.0	25.9	28.0
Congo, Dem. Rep. of	2.1	4.4	4.1	4.0	4.5	4.8	5.3	5.8	6.0
Congo, Rep. of	2.8	5.0	5.4	6.6	9.6	11.3	14.2	21.3	24.5
Côte d'Ivoire	14.3	16.4	16.6	16.9	16.8	18.3	19.7	23.0	24.4
Equatorial Guinea	2.7	5.8	6.7	7.0	5.3	7.5	9.1	13.5	16.7
Eritrea	24.5	16.6	14.8	13.7	11.4	10.5	9.8	9.1	8.6
Ethiopia <sup>1</sup>	10.9	9.3	10.4	9.8	9.3	8.8	8.7	9.3	9.7
Gabon	9.1	10.1	8.3	9.8	11.9	14.8	14.0	13.4	12.1
Gambia, The	12.6	15.4	15.9	17.4	16.5	17.9	15.4	12.8	10.2
Ghana	11.7	15.5	15.4	15.3	16.1	16.8	19.6	21.1	18.9
Guinea	5.8	5.2	6.0	9.5	7.8	9.8	12.7	15.0	14.2
Guinea-Bissau	2.3	5.6	8.2	9.7	12.7	12.9	11.7	15.4	13.9
Kenya	23.5	25.8	28.0	31.2	30.1	32.5	34.9	35.7	33.0
Lesotho	8.1	10.8	12.2	13.6	18.1	17.9	18.3	18.3	17.9
Liberia	6.9	12.0	14.8	16.4	16.1	18.3	18.8	20.1	19.8
Madagascar	10.1	11.3	11.5	11.2	10.8	11.7	12.6	13.2	13.0
Malawi	6.7	10.9	13.8	13.9	14.6	12.5	11.7	12.2	11.9
Mali	15.9	15.5	16.0	17.1	17.3	18.8	20.5	22.6	25.1
Mauritius	75.1	82.7	87.9	91.3	100.8	108.1	100.3	104.3	97.2
Mozambique	12.4	23.8	26.8	25.7	27.2	28.2	32.0	35.1	37.6
Namibia	48.6	48.6	49.1	49.3	48.6	48.5	49.7	53.8	54.4
Niger	8.4	12.2	12.3	13.3	14.1	13.7	14.1	15.3	16.4
Nigeria	12.0	21.1	15.9	14.2	13.3	13.0	13.8	13.7	15.4
Rwanda	9.9	11.8	11.7	12.9	15.2	15.4	16.6	19.8	19.2
São Tomé & Príncipe	25.0	34.9	39.5	40.6	38.4	32.0	27.4	27.0	25.9
Senegal	22.5	24.7	25.6	28.8	29.5	32.9	33.9	34.1	33.9
Seychelles	25.1	20.1	24.4	23.9	22.5	21.5	25.0	25.7	27.4
Sierra Leone	4.0	7.2	7.7	7.5	5.4	4.7	4.7	4.7	4.5
South Africa	71.4	74.6	70.4	67.6	68.6	67.1	66.9	68.9	67.5
South Sudan	...	...	...	0.2	0.6	0.7	1.0	1.5	1.5
Swaziland	18.2	20.3	18.9	22.1	19.7	21.7	21.8	21.1	20.7
Tanzania	10.4	13.2	13.7	14.4	14.7	14.6	15.6	17.1	17.0
Togo	18.0	19.8	22.8	28.6	30.1	32.0	33.5	36.0	39.3
Uganda	9.2	10.6	12.9	13.7	13.1	12.8	13.3	13.9	13.5
Zambia	8.8	10.0	9.2	10.0	12.0	11.7	13.4	15.7	12.4
Zimbabwe <sup>2</sup>	3.8	8.4	17.6	24.7	27.6	26.5	26.4	25.8	23.4
<b>Sub-Saharan Africa</b>	<b>28.2</b>	<b>31.9</b>	<b>29.2</b>	<b>27.9</b>	<b>28.0</b>	<b>27.7</b>	<b>27.9</b>	<b>29.0</b>	<b>28.8</b>
<i>Median</i>	10.7	14.2	15.3	15.3	16.1	16.8	16.6	19.8	18.9
Excluding Nigeria and South Africa	13.4	16.6	17.2	17.7	18.5	19.3	20.0	21.8	20.9
<b>Oil-exporting countries</b>	<b>10.7</b>	<b>19.2</b>	<b>15.3</b>	<b>13.8</b>	<b>13.7</b>	<b>13.8</b>	<b>14.5</b>	<b>15.3</b>	<b>16.2</b>
Excluding Nigeria	7.2	14.2	13.6	12.9	14.7	15.9	16.3	19.5	18.0
<b>Oil-importing countries</b>	<b>39.4</b>	<b>40.9</b>	<b>39.2</b>	<b>38.4</b>	<b>38.6</b>	<b>38.0</b>	<b>38.0</b>	<b>39.1</b>	<b>37.7</b>
Excluding South Africa	15.4	17.4	18.3	19.4	19.7	20.4	21.3	22.5	21.8
<b>Middle-income countries</b>	<b>33.0</b>	<b>37.2</b>	<b>33.4</b>	<b>32.2</b>	<b>32.1</b>	<b>31.8</b>	<b>31.9</b>	<b>33.1</b>	<b>33.0</b>
Excluding Nigeria and South Africa	16.3	20.6	20.8	22.0	22.8	24.3	25.2	27.7	26.1
<b>Low-income countries</b>	<b>9.9</b>	<b>11.6</b>	<b>12.8</b>	<b>12.8</b>	<b>13.4</b>	<b>13.5</b>	<b>14.2</b>	<b>15.2</b>	<b>15.3</b>
Excluding low-income countries in fragile situations	11.1	12.9	14.0	14.3	14.4	14.5	15.3	16.2	16.3
<b>Countries in fragile situations</b>	<b>8.9</b>	<b>10.5</b>	<b>11.5</b>	<b>11.4</b>	<b>12.6</b>	<b>13.0</b>	<b>13.9</b>	<b>15.8</b>	<b>16.5</b>
CFA franc zone	11.3	13.0	13.4	14.7	15.1	16.9	18.2	20.3	21.2
CEMAC	6.2	7.8	7.9	9.2	9.5	11.1	12.2	14.6	15.3
WAEMU	15.9	17.8	18.4	19.9	20.3	22.2	23.6	25.2	26.1
COMESA (SSA members)	15.5	16.6	18.1	19.3	19.4	19.8	20.1	20.9	19.6
EAC-5	15.3	17.2	18.8	20.5	20.1	20.9	22.2	23.3	22.2
ECOWAS	12.7	19.9	16.2	15.2	14.6	14.8	15.8	16.2	17.6
SACU	67.8	71.0	66.9	64.5	65.5	64.0	63.8	65.8	64.5
SADC	48.1	50.8	48.2	46.7	47.6	46.6	46.1	47.9	46.0

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	77.3	54.9	62.4	65.4	62.3	55.7	48.0	33.4	29.9	30.4	28.5
Benin	13.7	14.3	17.9	16.0	13.2	15.5	15.8	15.9	16.4	18.2	19.6
Botswana	50.9	40.5	40.6	50.0	48.4	61.9	60.8	52.1	56.9	44.9	43.8
Burkina Faso	10.6	12.6	21.0	26.2	23.7	26.5	26.1	24.9	25.3	28.6	28.7
Burundi	7.8	6.7	8.9	10.1	9.4	8.8	7.2	5.9	5.6	5.3	5.0
Cabo Verde	35.8	33.2	38.3	42.2	45.0	47.0	48.1	42.8	43.1	44.2	44.8
Cameroon	27.8	22.0	24.4	28.1	27.9	27.1	26.8	23.7	21.3	22.8	22.6
Central African Rep.	13.2	10.7	11.8	13.5	12.5	14.4	13.0	12.6	12.8	12.9	12.4
Chad	45.5	35.2	37.8	40.6	38.2	33.4	31.5	26.5	24.1	30.3	30.9
Comoros	14.8	14.5	15.7	16.6	15.0	15.6	16.3	17.1	17.3	17.4	17.4
Congo, Dem. Rep. of	29.5	27.4	43.0	41.6	32.8	38.1	35.0	27.3	23.2	29.0	32.0
Congo, Rep. of	83.5	69.6	75.5	79.5	75.3	70.4	68.0	62.7	56.5	68.5	81.7
Côte d'Ivoire	48.5	50.7	50.5	53.1	48.9	41.5	39.3	38.2	32.6	31.5	31.2
Equatorial Guinea	82.2	63.6	71.4	73.4	75.7	69.9	67.1	59.3	54.1	56.3	56.7
Eritrea	5.8	4.5	4.8	14.4	19.1	17.0	18.0	13.2	15.8	17.6	16.8
Ethiopia <sup>1</sup>	14.6	10.6	15.5	18.2	13.9	12.5	11.6	9.3	7.3	7.4	7.6
Gabon	59.1	52.0	59.2	61.0	64.9	61.5	54.5	43.5	35.7	42.5	41.7
Gambia, The	30.6	25.4	23.8	26.5	30.9	29.4	29.2	24.7	23.0	20.9	20.4
Ghana	23.8	29.7	29.3	36.9	40.1	33.9	39.5	44.0	40.2	43.5	43.6
Guinea	32.6	27.8	32.3	34.4	36.8	31.5	29.3	23.9	30.5	30.8	35.7
Guinea-Bissau	16.0	18.8	20.1	25.7	15.5	18.3	19.8	28.4	30.1	30.3	28.4
Kenya	23.5	20.0	22.5	24.0	22.2	19.9	18.4	16.5	15.8	16.5	17.0
Lesotho	45.9	37.5	37.2	39.5	37.8	33.0	33.2	42.0	41.0	40.6	40.5
Liberia	57.3	40.2	42.1	46.3	50.0	45.3	40.7	32.6	30.2	28.0	26.7
Madagascar	26.9	22.4	24.1	26.8	29.0	30.0	32.8	32.1	33.0	32.2	32.0
Malawi	17.1	17.0	19.6	17.6	23.9	30.7	28.9	25.5	28.0	28.0	27.5
Mali	24.0	22.9	22.9	21.6	26.9	24.9	22.5	22.0	21.5	22.2	21.6
Mauritius	55.6	47.0	50.9	51.7	52.9	47.3	49.8	48.0	45.0	46.5	47.5
Mozambique	29.0	24.5	24.7	26.5	30.6	29.8	27.5	27.9	32.9	39.8	43.5
Namibia	38.5	42.6	41.7	41.4	42.0	43.7	44.1	43.2	44.0	45.4	46.3
Niger	17.6	20.3	22.2	20.9	21.9	22.6	21.0	18.6	17.2	17.7	17.9
Nigeria	28.4	19.6	22.4	24.7	21.4	19.3	14.8	10.1	9.4	12.7	11.6
Rwanda	11.3	11.1	10.8	14.1	13.9	15.4	16.4	18.4	19.0	20.1	20.4
São Tomé & Príncipe	11.2	10.4	12.3	12.6	13.1	17.8	25.4	28.3	26.9	29.0	28.9
Senegal	26.3	24.4	24.9	26.4	27.9	28.3	28.3	29.1	27.6	27.9	27.6
Seychelles	85.8	108.0	93.8	100.2	105.2	95.6	101.8	95.4	99.5	101.7	99.8
Sierra Leone	15.0	15.0	16.2	18.3	32.4	35.9	30.2	16.7	22.0	26.9	29.0
South Africa	29.6	27.9	28.6	30.5	29.7	30.8	31.2	30.6	30.4	29.6	29.5
South Sudan	...	...	...	72.4	9.3	28.0	34.0	21.0	61.0	40.6	45.7
Swaziland	58.4	48.7	45.9	45.2	45.6	47.3	48.7	50.8	48.5	48.2	47.0
Tanzania	18.2	18.9	20.6	22.4	20.9	19.4	18.4	20.1	20.6	20.5	20.8
Togo	37.3	37.8	40.9	44.9	44.7	46.5	39.4	36.0	35.1	36.4	36.7
Uganda	16.3	18.1	17.2	20.4	19.9	20.4	16.6	19.3	18.2	19.4	20.1
Zambia	35.1	32.0	39.7	40.1	41.2	41.4	40.8	38.7	34.2	35.1	35.0
Zimbabwe <sup>2</sup>	27.3	22.3	37.0	44.2	34.1	30.5	27.1	27.5	28.1	26.6	23.9
<b>Sub-Saharan Africa</b>	<b>32.7</b>	<b>27.8</b>	<b>30.4</b>	<b>33.7</b>	<b>31.1</b>	<b>29.7</b>	<b>26.9</b>	<b>23.0</b>	<b>22.4</b>	<b>24.0</b>	<b>23.4</b>
<i>Median</i>	28.1	24.5	24.8	28.1	30.6	30.5	29.3	27.5	28.1	29.0	28.9
Excluding Nigeria and South Africa	38.3	32.8	37.3	41.7	38.6	36.5	33.9	28.5	26.6	27.5	27.7
<b>Oil-exporting countries</b>	<b>39.5</b>	<b>29.5</b>	<b>32.8</b>	<b>37.2</b>	<b>32.7</b>	<b>29.5</b>	<b>24.3</b>	<b>17.0</b>	<b>16.1</b>	<b>19.6</b>	<b>18.2</b>
Excluding Nigeria	63.8	49.9	56.7	61.3	56.4	51.8	46.7	34.7	31.9	33.5	32.8
<b>Oil-importing countries</b>	<b>28.8</b>	<b>26.6</b>	<b>28.8</b>	<b>31.0</b>	<b>29.9</b>	<b>29.9</b>	<b>29.3</b>	<b>27.9</b>	<b>26.8</b>	<b>27.0</b>	<b>27.1</b>
Excluding South Africa	28.1	25.5	28.9	31.5	30.1	29.3	28.1	26.2	24.8	25.5	25.9
<b>Middle-income countries</b>	<b>34.8</b>	<b>29.7</b>	<b>31.7</b>	<b>34.6</b>	<b>32.8</b>	<b>30.9</b>	<b>27.9</b>	<b>23.7</b>	<b>23.2</b>	<b>24.9</b>	<b>23.9</b>
Excluding Nigeria and South Africa	48.7	42.0	45.9	49.9	48.8	44.8	42.1	35.4	32.2	32.8	32.4
<b>Low-income countries</b>	<b>22.1</b>	<b>19.4</b>	<b>23.8</b>	<b>29.2</b>	<b>23.5</b>	<b>24.4</b>	<b>22.8</b>	<b>20.3</b>	<b>19.7</b>	<b>20.9</b>	<b>21.6</b>
Excluding low-income countries in fragile situations	17.1	16.0	18.6	20.9	19.3	18.8	17.3	16.8	15.9	16.6	17.3
<b>Countries in fragile situations</b>	<b>37.1</b>	<b>33.8</b>	<b>39.3</b>	<b>44.5</b>	<b>36.5</b>	<b>36.5</b>	<b>34.7</b>	<b>29.3</b>	<b>28.4</b>	<b>30.2</b>	<b>31.5</b>
CFA franc zone	41.9	37.2	41.4	44.2	43.8	40.6	38.1	33.3	29.5	31.6	32.1
CEMAC	53.0	43.5	49.8	53.7	53.8	49.8	46.4	38.2	33.0	37.5	38.8
WAEMU	30.4	30.9	32.5	33.3	32.6	31.0	29.7	29.1	26.8	27.3	27.2
COMESA (SSA members)	26.4	21.9	27.4	29.6	26.7	26.4	24.6	21.7	19.7	20.7	21.1
EAC-5	19.5	18.5	19.8	21.9	20.6	19.4	17.7	18.0	17.6	18.2	18.6
ECOWAS	28.4	22.5	24.6	27.1	24.6	22.4	18.6	15.2	15.4	18.2	17.1
SACU	31.0	29.0	29.6	31.6	31.0	32.5	33.0	32.3	32.3	31.1	31.0
SADC	35.4	32.3	34.7	37.2	36.5	36.7	35.3	31.6	30.7	30.6	30.4

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	48.3	55.4	42.9	42.2	39.7	39.4	42.2	36.9	27.8	28.1	26.1
Benin	24.9	27.0	29.2	26.1	25.2	28.3	31.0	28.8	28.2	32.0	31.9
Botswana	40.3	52.7	47.7	53.7	60.2	61.8	53.9	53.4	45.7	48.1	48.4
Burkina Faso	25.4	23.2	28.5	33.0	34.7	39.8	35.1	34.1	34.4	37.5	37.9
Burundi	41.5	35.6	43.4	43.5	46.7	41.8	37.3	37.5	29.0	24.9	24.5
Cabo Verde	64.5	63.4	66.8	73.8	68.1	62.8	66.4	59.9	63.0	63.9	64.3
Cameroon	28.4	26.9	27.5	30.9	30.8	29.9	30.2	27.4	23.9	25.0	24.7
Central African Rep.	22.1	23.2	26.5	24.4	23.9	25.0	37.6	34.6	31.5	32.2	29.5
Chad	44.3	46.8	48.6	48.1	48.0	43.1	43.9	42.9	39.6	42.2	43.3
Comoros	39.5	47.9	49.9	50.3	54.3	52.0	49.7	45.5	47.4	47.8	46.9
Congo, Dem. Rep. of	34.9	36.9	51.9	48.0	39.9	38.6	44.0	32.7	28.5	34.6	35.7
Congo, Rep. of	56.0	71.1	57.3	61.9	51.0	52.4	66.0	96.3	76.0	61.6	51.3
Côte d'Ivoire	41.2	39.8	43.2	36.8	44.7	38.6	34.4	36.1	31.7	32.5	31.8
Equatorial Guinea	33.2	47.3	58.3	39.3	44.8	37.4	38.8	47.4	47.7	42.3	41.5
Eritrea	41.6	23.4	23.3	23.2	22.8	22.1	21.8	19.5	19.2	20.4	19.5
Ethiopia <sup>1</sup>	36.3	27.9	33.1	36.5	32.8	28.8	28.2	30.2	26.9	24.7	24.1
Gabon	27.5	34.6	29.5	23.6	36.5	44.0	41.6	39.0	35.4	40.6	38.6
Gambia, The	45.5	41.9	42.7	41.1	44.3	41.1	48.5	50.4	41.9	40.1	39.1
Ghana	40.1	42.9	43.5	49.3	52.5	47.1	49.8	55.6	47.2	50.7	49.6
Guinea	36.0	30.8	36.7	58.2	57.9	43.3	43.4	40.0	42.2	40.9	43.3
Guinea-Bissau	27.8	35.2	35.2	34.5	28.7	28.8	32.2	34.3	31.6	38.0	36.9
Kenya	31.9	30.5	33.9	39.4	35.5	33.2	32.9	27.9	25.5	26.2	26.3
Lesotho	103.6	98.8	93.9	93.0	96.8	87.0	85.9	91.2	90.5	90.3	88.9
Liberia	191.2	135.9	134.7	132.1	119.8	108.4	122.4	120.6	102.0	85.7	79.0
Madagascar	43.4	46.0	37.5	38.0	38.7	38.7	37.2	35.5	36.9	37.7	37.9
Malawi	35.0	31.7	34.9	28.0	38.3	42.6	39.6	36.6	46.3	42.9	38.9
Mali	33.7	34.0	37.9	29.7	31.8	39.9	38.0	38.9	40.3	41.2	37.8
Mauritius	64.2	57.5	63.0	65.6	66.0	61.6	62.3	58.8	55.2	61.6	59.7
Mozambique	38.6	39.7	45.2	58.0	81.7	81.2	72.6	71.6	71.6	73.5	106.3
Namibia	41.8	55.8	52.1	50.6	55.7	59.4	66.3	68.6	62.7	60.4	60.2
Niger	31.2	46.7	49.0	47.8	39.4	39.1	38.8	41.1	37.0	39.9	40.6
Nigeria	17.7	16.6	19.2	21.9	17.5	14.9	15.1	14.9	11.6	13.8	12.4
Rwanda	26.1	28.7	28.6	34.2	34.0	32.0	33.2	35.6	37.1	33.6	34.6
São Tomé & Príncipe	55.6	54.7	61.0	63.1	54.0	58.9	65.9	58.8	51.8	57.6	55.4
Senegal	45.1	41.3	40.3	44.7	48.9	49.1	47.5	45.9	43.4	44.0	43.3
Seychelles	95.4	117.0	108.1	116.6	122.5	102.5	117.4	104.5	107.9	112.1	110.6
Sierra Leone	24.4	30.5	43.9	84.4	65.7	46.2	57.4	41.0	46.4	49.0	49.3
South Africa	30.6	27.5	27.4	29.7	31.2	33.2	32.9	31.7	30.2	29.4	29.6
South Sudan	...	...	...	30.4	34.1	29.9	31.6	28.9	64.8	44.4	61.7
Swaziland	67.4	61.9	58.4	57.8	56.2	54.2	54.3	52.0	57.6	53.9	53.2
Tanzania	26.8	28.4	29.5	34.2	33.0	30.2	28.3	27.0	25.8	26.7	26.8
Togo	54.7	53.4	57.6	66.4	58.6	66.3	57.3	58.0	55.1	55.3	54.7
Uganda	27.0	28.1	30.6	35.3	31.3	29.6	27.4	30.4	27.7	29.1	30.3
Zambia	30.4	26.7	27.6	32.2	36.3	39.3	37.7	41.7	37.0	36.5	35.5
Zimbabwe <sup>2</sup>	36.5	76.1	63.4	79.5	62.8	59.3	53.2	48.6	41.7	37.4	34.8
<b>Sub-Saharan Africa</b>	<b>30.4</b>	<b>30.6</b>	<b>30.7</b>	<b>33.0</b>	<b>32.1</b>	<b>30.8</b>	<b>30.5</b>	<b>29.6</b>	<b>27.2</b>	<b>28.2</b>	<b>27.3</b>
<i>Median</i>	37.5	39.8	43.1	42.2	44.3	41.1	41.6	40.0	40.3	40.6	38.9
Excluding Nigeria and South Africa	38.3	41.0	41.0	42.4	42.5	40.7	40.7	39.1	34.9	35.1	34.9
<b>Oil-exporting countries</b>	<b>24.8</b>	<b>27.1</b>	<b>26.2</b>	<b>28.0</b>	<b>24.7</b>	<b>22.4</b>	<b>22.8</b>	<b>21.6</b>	<b>17.9</b>	<b>19.8</b>	<b>18.0</b>
Excluding Nigeria	40.2	48.7	42.5	39.7	39.8	38.7	41.1	38.9	32.7	31.8	30.2
<b>Oil-importing countries</b>	<b>33.9</b>	<b>33.0</b>	<b>33.8</b>	<b>36.7</b>	<b>37.9</b>	<b>38.1</b>	<b>37.5</b>	<b>36.3</b>	<b>33.7</b>	<b>33.8</b>	<b>34.2</b>
Excluding South Africa	37.6	37.8	40.4	43.8	43.8	41.7	40.5	39.1	35.6	36.3	36.6
<b>Middle-income countries</b>	<b>29.7</b>	<b>29.6</b>	<b>29.1</b>	<b>31.2</b>	<b>30.3</b>	<b>29.0</b>	<b>28.7</b>	<b>28.0</b>	<b>25.4</b>	<b>26.5</b>	<b>25.1</b>
Excluding Nigeria and South Africa	41.0	45.1	42.5	43.0	43.8	42.3	43.0	41.9	36.1	36.3	35.0
<b>Low-income countries</b>	<b>34.2</b>	<b>35.2</b>	<b>38.7</b>	<b>41.4</b>	<b>40.5</b>	<b>38.6</b>	<b>37.7</b>	<b>35.7</b>	<b>33.4</b>	<b>33.7</b>	<b>34.8</b>
Excluding low-income countries in fragile situations	30.1	29.7	32.8	37.4	37.4	35.6	33.4	33.6	30.7	30.5	32.4
<b>Countries in fragile situations</b>	<b>41.2</b>	<b>44.8</b>	<b>47.2</b>	<b>46.0</b>	<b>45.1</b>	<b>42.6</b>	<b>43.4</b>	<b>40.9</b>	<b>38.2</b>	<b>38.5</b>	<b>37.9</b>
CFA franc zone	35.8	38.9	40.7	38.0	40.3	39.9	39.5	40.5	36.8	37.4	36.2
CEMAC	34.4	40.8	41.6	38.3	40.2	39.1	41.0	43.0	37.6	37.1	35.4
WAEMU	37.3	37.1	39.8	37.7	40.3	40.8	38.0	38.4	36.2	37.7	36.9
COMESA (SSA members)	36.8	35.6	38.9	42.4	39.1	37.2	36.7	34.2	31.1	31.5	31.1
EAC-5	29.2	29.3	31.7	36.7	34.0	31.6	30.4	28.7	26.6	27.2	27.5
ECOWAS	23.9	22.8	24.8	27.4	24.4	21.7	21.2	21.6	19.8	22.0	20.3
SACU	32.1	29.9	29.5	31.8	33.6	35.6	35.5	34.5	32.8	32.0	32.2
SADC	34.5	35.7	33.7	36.0	37.3	38.5	38.7	36.4	33.0	32.9	33.1

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	50.4	24.1	41.1	45.2	41.1	33.5	24.1	12.1	14.0	14.6	13.8
Benin	-10.7	-9.9	-10.2	-9.9	-11.1	-10.1	-11.0	-8.4	-7.7	-8.7	-7.3
Botswana	9.5	-12.7	-7.3	-4.6	-13.5	-2.3	3.3	-5.7	7.3	-6.7	-7.5
Burkina Faso	-9.5	-5.8	-1.5	-0.0	-3.9	-5.6	-2.0	-2.2	-2.3	-1.8	-2.2
Burundi	-23.7	-21.9	-30.2	-29.0	-32.2	-29.4	-24.5	-25.2	-18.3	-15.3	-15.6
Cabo Verde	-39.0	-39.6	-40.9	-45.1	-36.6	-33.6	-32.5	-30.6	-33.9	-34.0	-34.0
Cameroon	1.9	-1.8	-0.9	-2.5	-1.0	-0.7	-1.4	-1.3	-0.7	-0.5	-0.6
Central African Rep.	-4.0	-7.8	-8.8	-5.7	-6.2	-7.3	-18.5	-16.4	-13.5	-14.4	-12.5
Chad	24.4	4.8	8.0	10.8	7.7	6.6	2.8	0.5	1.8	6.5	7.3
Comoros	-22.9	-28.2	-28.8	-28.6	-33.3	-31.8	-31.4	-28.5	-27.5	-27.7	-27.0
Congo, Dem. Rep. of	0.2	-3.2	2.1	2.3	0.2	6.6	-1.3	-0.7	-1.4	-1.4	1.6
Congo, Rep. of	51.6	26.8	41.9	46.8	43.1	34.5	23.9	-5.5	2.6	29.9	47.6
Côte d'Ivoire	15.0	17.5	14.5	23.2	11.4	9.6	11.0	9.9	8.5	6.6	6.7
Equatorial Guinea	59.9	32.3	28.5	46.1	44.5	43.9	41.3	26.6	21.2	28.0	28.3
Eritrea	-33.9	-19.9	-19.6	-10.3	-4.6	-5.7	-4.2	-6.4	-3.3	-2.6	-3.2
Ethiopia <sup>1</sup>	-20.6	-15.8	-16.3	-16.6	-16.9	-17.6	-17.9	-20.8	-19.1	-16.8	-16.0
Gabon	41.7	29.8	38.7	46.3	42.1	32.0	27.9	15.5	13.1	16.4	17.0
Gambia, The	-21.3	-22.4	-22.8	-21.2	-22.0	-19.1	-25.4	-29.4	-22.8	-22.0	-21.6
Ghana	-14.9	-8.6	-9.2	-7.7	-10.0	-8.0	-3.6	-8.4	-3.9	-4.0	-2.6
Guinea	3.2	2.6	2.6	-12.5	-4.6	-0.6	-6.5	-9.4	-5.4	-4.4	1.1
Guinea-Bissau	-6.0	-9.8	-8.3	-3.8	-8.1	-5.8	-7.5	0.7	4.4	-0.7	-1.7
Kenya	-12.2	-13.4	-15.6	-20.1	-18.5	-18.6	-18.4	-15.1	-12.9	-13.1	-13.0
Lesotho	-37.9	-43.9	-41.1	-38.2	-44.5	-41.2	-40.3	-37.7	-38.9	-38.9	-38.1
Liberia	-33.1	-30.8	-30.1	-33.3	-26.9	-25.2	-31.6	-44.9	-31.5	-29.5	-27.3
Madagascar	-13.4	-19.5	-12.3	-10.1	-11.2	-8.0	-5.1	-3.4	-4.1	-5.7	-6.1
Malawi	-12.8	-10.3	-10.7	-7.9	-11.0	-7.9	-7.4	-7.6	-11.6	-10.7	-7.6
Mali	-4.4	-6.0	-8.6	-2.6	0.9	-1.9	-3.5	-5.3	-5.3	-5.8	-4.4
Mauritius	-15.2	-17.5	-19.5	-20.9	-21.5	-19.0	-18.0	-16.0	-16.4	-21.4	-19.8
Mozambique	-5.5	-11.3	-11.3	-17.1	-26.7	-31.1	-27.7	-28.1	-19.7	-21.5	-44.4
Namibia	-4.0	-14.0	-9.9	-8.8	-16.4	-15.6	-21.4	-25.2	-18.3	-14.7	-13.5
Niger	-6.9	-14.7	-14.2	-14.4	-6.6	-5.6	-8.6	-12.4	-10.4	-12.2	-12.6
Nigeria	15.3	8.5	8.2	7.9	8.5	8.2	3.7	-1.3	-0.1	1.5	1.6
Rwanda	-10.3	-14.2	-13.6	-17.2	-18.8	-15.1	-15.8	-14.9	-15.6	-12.9	-13.6
São Tomé & Príncipe	-35.6	-39.7	-43.2	-44.9	-38.2	-38.2	-36.6	-33.9	-30.1	-34.4	-33.0
Senegal	-18.4	-15.9	-14.9	-17.5	-20.2	-20.0	-18.3	-15.9	-15.0	-15.4	-15.0
Seychelles	-29.8	-37.6	-39.3	-43.0	-38.5	-30.0	-40.2	-34.8	-36.0	-38.3	-38.2
Sierra Leone	-7.5	-14.3	-20.2	-56.9	-24.1	-0.6	-6.8	-16.8	-16.6	-14.0	-11.4
South Africa	-0.6	1.1	2.2	1.6	-1.1	-2.0	-1.7	-0.9	0.3	0.5	0.2
South Sudan	...	...	...	49.1	-19.6	1.9	9.5	-1.3	16.5	7.0	-2.8
Swaziland	-3.5	-3.6	-3.3	-0.8	1.6	3.8	2.7	8.7	4.0	5.4	5.0
Tanzania	-9.8	-10.0	-9.5	-12.2	-13.0	-12.2	-11.4	-9.1	-7.5	-8.3	-8.3
Togo	-14.2	-13.0	-14.3	-22.4	-14.2	-20.1	-19.3	-24.8	-22.3	-21.4	-20.6
Uganda	-8.9	-8.1	-10.9	-11.7	-9.9	-8.2	-8.3	-9.1	-7.3	-7.8	-8.5
Zambia	4.7	6.3	13.7	9.8	6.3	5.9	6.0	-0.3	-0.8	0.6	1.7
Zimbabwe <sup>2</sup>	-7.3	-46.9	-20.0	-27.3	-21.8	-22.0	-19.3	-17.3	-10.3	-7.7	-8.0
<b>Sub-Saharan Africa</b>	<b>6.1</b>	<b>2.3</b>	<b>4.4</b>	<b>5.6</b>	<b>3.5</b>	<b>3.0</b>	<b>0.8</b>	<b>-3.1</b>	<b>-2.0</b>	<b>-1.1</b>	<b>-1.0</b>
<i>Median</i>	-8.2	-10.8	-10.5	-10.1	-11.1	-7.9	-7.5	-9.1	-7.5	-7.8	-7.6
Excluding Nigeria and South Africa	5.7	-0.9	3.4	6.8	2.7	2.0	-0.2	-5.4	-4.0	-3.2	-3.0
<b>Oil-exporting countries</b>	<b>22.8</b>	<b>12.3</b>	<b>15.1</b>	<b>18.2</b>	<b>15.9</b>	<b>14.0</b>	<b>8.7</b>	<b>1.6</b>	<b>3.1</b>	<b>5.4</b>	<b>5.3</b>
Excluding Nigeria	39.1	20.2	31.3	38.0	31.5	26.7	20.4	9.1	10.7	13.4	13.5
<b>Oil-importing countries</b>	<b>-4.0</b>	<b>-4.7</b>	<b>-3.2</b>	<b>-3.8</b>	<b>-6.5</b>	<b>-6.4</b>	<b>-6.5</b>	<b>-7.1</b>	<b>-5.5</b>	<b>-5.6</b>	<b>-5.7</b>
Excluding South Africa	-7.6	-9.8	-8.6	-9.3	-11.1	-9.7	-9.7	-10.8	-8.7	-9.0	-8.8
<b>Middle-income countries</b>	<b>8.8</b>	<b>5.4</b>	<b>7.1</b>	<b>8.2</b>	<b>6.7</b>	<b>5.9</b>	<b>3.4</b>	<b>-0.9</b>	<b>0.3</b>	<b>1.3</b>	<b>1.5</b>
Excluding Nigeria and South Africa	14.3	6.5	11.7	15.6	12.3	9.8	6.9	-0.4	0.9	1.7	2.2
<b>Low-income countries</b>	<b>-7.7</b>	<b>-11.5</b>	<b>-9.6</b>	<b>-6.7</b>	<b>-11.5</b>	<b>-9.4</b>	<b>-10.0</b>	<b>-11.4</b>	<b>-9.9</b>	<b>-9.3</b>	<b>-9.6</b>
Excluding low-income countries in fragile situations	-11.3	-11.5	-11.5	-12.9	-14.1	-14.1	-13.8	-14.7	-12.7	-12.2	-13.2
<b>Countries in fragile situations</b>	<b>5.1</b>	<b>-2.2</b>	<b>2.0</b>	<b>8.3</b>	<b>-0.3</b>	<b>2.0</b>	<b>0.1</b>	<b>-3.8</b>	<b>-2.3</b>	<b>-1.1</b>	<b>0.8</b>
CFA franc zone	14.1	7.0	9.4	14.7	12.0	9.1	7.2	1.4	1.0	2.6	3.6
CEMAC	29.5	15.2	20.0	27.0	25.1	21.2	16.7	6.2	5.7	11.0	13.2
WAEMU	-2.0	-1.2	-1.9	0.7	-2.5	-3.4	-2.4	-2.7	-2.6	-3.6	-3.2
COMESA (SSA members)	-9.9	-12.6	-10.0	-11.4	-11.8	-10.4	-11.4	-12.0	-11.0	-10.5	-9.9
EAC-5	-10.9	-11.5	-12.9	-15.9	-15.3	-14.5	-14.2	-12.4	-10.5	-10.8	-10.9
ECOWAS	9.2	5.1	4.9	4.8	5.0	5.0	2.0	-2.4	-1.3	-0.3	0.2
SACU	-0.6	-0.1	1.2	0.8	-2.3	-2.7	-2.3	-2.1	-0.1	-0.4	-0.8
SADC	3.8	1.2	5.2	5.8	3.3	2.6	0.9	-1.5	0.3	0.6	0.2

See sources and footnotes on page 72.

**Table SA20. External Current Account<sup>1</sup>**  
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	14.7	-10.0	9.1	12.6	12.0	6.7	-3.0	-10.0	-4.3	-3.8	-3.2
Benin	-6.7	-8.3	-8.2	-7.3	-7.4	-7.4	-8.6	-8.4	-7.2	-9.1	-7.4
Botswana	10.7	-6.3	-2.6	3.1	0.3	8.9	15.4	7.8	14.7	1.8	-1.0
Burkina Faso	-10.4	-4.7	-2.2	-1.5	-7.0	-11.3	-8.1	-8.0	-7.7	-7.2	-7.0
Burundi	-15.0	-6.0	-12.2	-14.5	-18.6	-19.7	-19.2	-22.0	-17.1	-14.1	-14.2
Cabo Verde	-9.5	-14.6	-12.4	-16.3	-12.6	-4.9	-9.1	-4.4	-7.1	-8.5	-8.0
Cameroon	-1.0	-3.5	-2.8	-3.0	-3.6	-3.9	-4.3	-4.1	-3.6	-3.1	-3.0
Central African Rep.	-5.5	-9.1	-10.2	-7.6	-4.6	-3.0	-5.6	-9.0	-8.9	-7.6	-9.9
Chad	0.4	-8.2	-8.5	-5.8	-7.8	-9.1	-8.9	-12.3	-8.8	-4.7	-6.2
Comoros	-6.3	-6.2	-0.2	-4.9	-7.2	-8.1	-8.6	0.6	-9.3	-10.1	-10.6
Congo, Dem. Rep. of	-0.2	-6.1	-10.5	-5.2	-4.6	-5.2	-5.0	-3.9	-4.4	-3.8	-2.9
Congo, Rep. of	-3.1	-14.1	7.8	-3.1	17.7	1.7	-11.6	-42.9	-28.5	-4.7	12.1
Côte d'Ivoire	1.1	6.6	1.9	10.4	-1.2	-1.4	1.4	-1.0	-2.2	-4.0	-3.5
Equatorial Guinea	19.4	-18.1	-29.2	-2.1	-3.9	-0.5	-5.5	-13.4	-17.3	-10.6	-10.0
Eritrea	-3.1	-7.6	-5.6	0.6	2.3	-0.1	0.6	-2.2	-0.1	0.5	0.1
Ethiopia <sup>2</sup>	-8.4	-6.7	-1.4	-2.5	-6.9	-5.9	-6.4	-11.6	-9.9	-10.0	-9.1
Gabon	17.3	4.4	14.9	21.0	17.7	7.1	7.4	-5.4	-9.0	-8.3	-6.3
Gambia, The	-8.5	-12.5	-16.3	-12.3	-7.9	-10.2	-10.8	-15.0	-10.1	-10.9	-10.6
Ghana	-8.1	-5.5	-8.6	-9.0	-11.7	-11.9	-9.6	-7.7	-6.4	-6.0	-4.9
Guinea	-5.9	-8.2	-9.3	-24.8	-26.0	-17.2	-17.6	-20.2	-12.9	-14.2	-12.2
Guinea-Bissau	-1.2	-5.3	-8.6	-4.2	-11.9	-7.2	-2.8	-0.5	2.7	-3.4	-4.6
Kenya	-2.6	-4.4	-5.9	-9.2	-8.4	-8.8	-9.8	-6.8	-5.5	-5.8	-5.7
Lesotho	15.3	3.1	-8.5	-13.0	-8.9	-9.2	-7.8	-8.0	-17.8	-15.8	-13.5
Liberia	-14.0	-23.2	-32.0	-27.4	-21.5	-30.1	-26.9	-35.2	-25.1	-26.6	-28.0
Madagascar	-12.0	-21.1	-9.7	-6.9	-6.9	-5.9	-0.3	-1.9	-2.3	-3.7	-4.2
Malawi	-12.9	-10.2	-8.6	-8.6	-9.2	-8.4	-8.4	-9.4	-15.5	-12.5	-9.1
Mali	-7.3	-10.8	-10.7	-5.1	-2.2	-2.9	-4.7	-7.3	-8.0	-8.0	-6.3
Mauritius	-6.3	-7.4	-10.3	-13.8	-7.3	-6.3	-5.7	-4.9	-4.3	-8.1	-5.6
Mozambique	-8.9	-10.9	-16.1	-25.3	-44.7	-42.9	-38.2	-39.4	-38.9	-34.8	-64.3
Namibia	6.7	-1.5	-3.5	-3.0	-5.7	-4.0	-10.7	-12.7	-11.2	-4.2	-4.6
Niger	-9.2	-24.4	-19.8	-22.3	-14.7	-15.0	-15.4	-18.1	-15.4	-18.1	-18.7
Nigeria	14.0	4.7	3.6	2.6	3.8	3.7	0.2	-3.2	0.6	1.0	1.0
Rwanda	-3.3	-7.0	-7.2	-7.4	-11.2	-8.7	-11.8	-13.4	-14.5	-10.9	-11.8
São Tomé & Príncipe	-27.3	-24.7	-22.9	-27.7	-21.9	-13.8	-21.8	-12.9	-7.9	-8.4	-6.7
Senegal	-9.9	-6.7	-4.4	-8.1	-10.8	-10.4	-8.9	-7.4	-7.1	-7.8	-7.7
Seychelles	-13.8	-14.8	-19.4	-23.0	-21.1	-12.1	-23.0	-18.8	-17.2	-19.1	-18.7
Sierra Leone	-6.9	-13.3	-22.7	-65.0	-31.8	-17.5	-18.2	-16.3	-19.3	-17.8	-17.5
South Africa	-4.3	-2.7	-1.5	-2.2	-5.1	-5.9	-5.3	-4.4	-3.3	-3.4	-3.6
South Sudan	...	...	...	18.2	-15.9	-3.9	-1.6	-7.2	6.2	0.0	-8.7
Swaziland	-3.1	-11.4	-8.6	-6.9	3.3	5.3	3.4	10.8	-5.2	-1.0	-1.9
Tanzania	-6.5	-7.6	-7.7	-10.8	-11.6	-10.6	-10.1	-8.0	-6.3	-7.2	-7.0
Togo	-8.8	-5.6	-6.3	-8.0	-7.5	-13.2	-9.9	-11.1	-9.8	-9.1	-8.4
Uganda	-2.8	-5.7	-8.0	-10.0	-6.7	-6.9	-8.3	-6.6	-5.9	-7.0	-8.1
Zambia	-1.1	6.0	7.5	4.7	5.4	-0.6	2.1	-3.6	-5.5	-3.2	-2.5
Zimbabwe <sup>3</sup>	-7.6	-43.6	-13.3	-22.2	-14.6	-17.6	-14.9	-8.3	-1.6	-0.7	-2.2
<b>Sub-Saharan Africa</b>	<b>2.1</b>	<b>-2.8</b>	<b>-0.9</b>	<b>-0.8</b>	<b>-1.8</b>	<b>-2.4</b>	<b>-3.9</b>	<b>-6.0</b>	<b>-4.0</b>	<b>-3.8</b>	<b>-3.7</b>
<i>Median</i>	-6.1	-7.5	-8.5	-7.3	-7.4	-7.2	-8.4	-8.0	-7.7	-7.6	-7.0
Excluding Nigeria and South Africa	-0.1	-7.3	-3.6	-2.0	-3.7	-4.8	-6.3	-8.8	-6.9	-6.5	-6.5
<b>Oil-exporting countries</b>	<b>12.8</b>	<b>0.3</b>	<b>3.3</b>	<b>4.5</b>	<b>4.7</b>	<b>3.4</b>	<b>-0.9</b>	<b>-5.2</b>	<b>-1.5</b>	<b>-0.8</b>	<b>-0.4</b>
Excluding Nigeria	10.0	-8.7	2.7	8.2	6.7	2.9	-3.4	-10.4	-6.7	-4.4	-3.3
<b>Oil-importing countries</b>	<b>-4.3</b>	<b>-4.9</b>	<b>-3.9</b>	<b>-4.7</b>	<b>-7.0</b>	<b>-7.4</b>	<b>-6.7</b>	<b>-6.7</b>	<b>-5.7</b>	<b>-5.9</b>	<b>-6.2</b>
Excluding South Africa	-4.3	-6.7	-6.3	-7.3	-8.6	-8.5	-7.7	-8.1	-7.0	-7.3	-7.6
<b>Middle-income countries</b>	<b>3.8</b>	<b>-1.1</b>	<b>0.6</b>	<b>0.7</b>	<b>0.2</b>	<b>-0.5</b>	<b>-2.5</b>	<b>-4.8</b>	<b>-2.6</b>	<b>-2.4</b>	<b>-2.0</b>
Excluding Nigeria and South Africa	3.8	-5.4	-0.4	2.0	1.4	-1.0	-3.8	-7.3	-5.4	-4.9	-4.0
<b>Low-income countries</b>	<b>-6.2</b>	<b>-10.2</b>	<b>-8.6</b>	<b>-8.1</b>	<b>-11.2</b>	<b>-10.3</b>	<b>-9.7</b>	<b>-10.5</b>	<b>-8.8</b>	<b>-8.6</b>	<b>-9.5</b>
Excluding low-income countries in fragile situations	-6.9	-8.0	-7.1	-9.5	-12.3	-11.7	-11.4	-12.2	-10.3	-10.4	-11.8
<b>Countries in fragile situations</b>	<b>-3.8</b>	<b>-9.2</b>	<b>-6.4</b>	<b>-3.5</b>	<b>-5.9</b>	<b>-6.5</b>	<b>-6.2</b>	<b>-8.5</b>	<b>-6.6</b>	<b>-5.4</b>	<b>-4.6</b>
CFA franc zone	0.7	-5.7	-4.5	-0.2	-1.3	-3.8	-4.6	-8.6	-7.9	-6.6	-5.3
CEMAC	6.4	-7.4	-4.3	1.3	2.7	-1.0	-4.1	-11.5	-10.2	-5.8	-3.5
WAEMU	-5.3	-4.0	-4.6	-2.0	-5.8	-6.6	-5.1	-6.2	-6.2	-7.3	-6.7
COMESA (SSA members)	-4.6	-7.7	-5.6	-6.8	-6.1	-6.6	-6.7	-7.2	-6.7	-6.5	-6.2
EAC-5	-4.1	-5.9	-7.1	-9.9	-9.4	-9.2	-9.9	-7.8	-6.6	-6.9	-7.0
ECOWAS	8.3	2.0	1.0	0.3	0.7	0.7	-1.5	-4.3	-1.5	-1.5	-1.2
SACU	-3.3	-2.9	-1.7	-2.2	-4.9	-5.2	-4.5	-4.1	-2.8	-3.3	-3.5
SADC	-1.8	-5.4	-1.3	-1.4	-3.3	-4.4	-5.5	-6.3	-4.4	-4.4	-4.9

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	-0.6	2.9	-5.5	-4.9	-8.4	-10.5	-1.8	8.0	-3.5	0.6	0.6
Benin	2.1	1.5	2.8	1.3	2.6	3.3	4.0	1.4	1.3	1.7	1.7
Botswana	4.2	1.9	1.6	9.0	5.8	5.4	2.5	2.1	1.8	1.9	1.8
Burkina Faso	1.6	1.1	0.4	0.4	2.3	0.5	0.8	0.5	0.8	0.9	0.9
Burundi	0.1	0.0	0.0	0.2	0.0	2.6	2.4	1.5	1.2	1.2	1.1
Cabo Verde	9.4	7.0	6.7	5.6	3.8	3.5	6.8	6.0	6.0	6.1	6.3
Cameroon	1.8	2.1	1.8	1.8	3.1	2.9	2.9	2.1	1.9	1.7	1.8
Central African Rep.	3.3	2.1	3.1	1.7	3.2	0.1	0.1	0.3	0.4	2.9	3.1
Chad	3.5	2.7	2.0	1.5	3.4	2.8	-3.4	4.3	2.0	2.6	3.0
Comoros	0.6	2.6	1.5	3.8	1.7	1.4	0.7	0.8	1.3	1.3	1.3
Congo, Dem. Rep. of	5.3	-1.5	13.3	6.5	10.5	5.2	4.2	3.0	2.1	2.5	2.6
Congo, Rep. of	24.2	20.8	17.8	20.6	-2.1	18.0	18.8	31.8	26.0	13.8	10.1
Côte d'Ivoire	1.8	1.6	1.3	1.1	1.2	1.3	1.2	2.1	2.7	2.6	3.2
Equatorial Guinea	7.9	-6.5	-4.2	-2.2	-4.4	-2.5	-0.7	-1.4	-0.3	-1.0	-3.0
Eritrea	1.4	4.9	4.3	1.5	1.3	1.3	1.1	1.1	1.0	0.9	0.9
Ethiopia <sup>1</sup>	1.4	0.7	1.0	2.0	0.6	2.6	2.6	3.0	1.9	5.8	5.8
Gabon	4.2	5.2	3.5	4.1	3.8	5.1	6.0	6.9	8.8	10.2	10.1
Gambia, The	9.6	8.1	9.0	6.7	11.2	9.5	9.2	8.2	7.5	7.0	6.8
Ghana	2.9	11.3	7.9	8.1	7.9	6.7	8.7	7.9	8.0	6.5	5.5
Guinea	5.1	3.0	2.2	5.6	11.4	2.2	0.9	3.9	5.9	5.7	5.4
Guinea-Bissau	1.9	2.1	3.3	2.2	0.7	1.9	2.5	1.6	0.7	3.2	3.1
Kenya	0.5	0.2	0.4	3.3	2.3	1.7	1.7	1.7	1.9	2.1	2.3
Lesotho	-2.3	-3.7	-1.5	-2.1	-2.1	-1.9	-4.5	-4.9	-2.3	-5.0	-5.0
Liberia	5.8	13.4	22.7	22.8	19.3	22.1	13.7	12.6	11.0	11.6	13.6
Madagascar	3.6	8.1	3.9	7.8	7.8	5.2	2.9	4.5	5.0	5.1	5.2
Malawi	1.8	0.9	2.3	0.8	1.4	1.7	0.8	1.8	3.1	3.1	2.5
Mali	1.8	7.3	3.7	4.2	3.1	2.3	1.0	0.9	0.9	0.9	0.9
Mauritius	1.6	2.5	127.6	-9.0	49.5	10.1	4.4	2.9	1.5	1.4	2.1
Mozambique	3.8	8.0	9.8	27.1	37.1	38.6	29.1	26.1	25.4	18.4	50.8
Namibia	6.3	5.7	7.0	7.0	8.6	6.5	4.7	8.1	3.1	3.5	3.4
Niger	2.3	13.4	17.5	16.5	12.1	8.1	8.9	6.9	7.7	9.1	11.0
Nigeria	2.1	2.4	1.4	1.9	1.2	0.8	0.5	0.3	0.8	0.8	0.6
Rwanda	1.2	2.2	0.7	1.6	2.2	3.4	3.9	2.7	3.0	3.3	4.1
São Tomé & Príncipe	16.8	8.1	25.6	13.5	8.6	1.5	5.4	8.3	5.8	3.4	4.6
Senegal	1.6	2.0	2.0	2.0	1.5	1.9	2.0	2.3	2.4	2.5	2.7
Seychelles	11.9	20.2	19.2	19.5	23.8	12.3	16.0	8.1	6.7	11.5	14.6
Sierra Leone	3.9	4.5	9.2	32.3	19.0	7.3	7.7	5.8	13.3	14.8	14.6
South Africa	1.1	2.1	1.0	1.1	0.4	0.4	-0.5	-1.3	-0.4	-0.4	-0.2
South Sudan	...	...	...	-0.4	-0.5	-3.8	-0.1	0.1	-1.6	-0.8	4.9
Swaziland	1.8	1.6	2.9	2.1	2.0	0.7	0.6	1.1	0.7	0.6	0.7
Tanzania	3.5	3.7	4.0	4.5	4.4	4.5	3.8	3.0	2.6	3.1	3.6
Togo	3.1	0.4	1.5	-14.3	-7.6	5.0	-6.4	1.7	2.2	2.4	2.7
Uganda	4.7	4.4	2.5	4.3	4.7	4.4	3.6	2.4	2.1	3.4	5.0
Zambia	5.9	2.8	3.1	4.7	9.5	6.0	9.1	11.6	7.0	6.5	6.3
Zimbabwe <sup>2</sup>	0.7	1.3	1.3	3.4	2.8	2.8	3.3	2.8	1.9	1.3	1.2
<b>Sub-Saharan Africa</b>	<b>2.1</b>	<b>2.7</b>	<b>2.6</b>	<b>2.2</b>	<b>1.9</b>	<b>1.4</b>	<b>1.5</b>	<b>2.1</b>	<b>1.5</b>	<b>1.9</b>	<b>2.2</b>
<i>Median</i>	2.6	2.5	2.9	3.3	3.1	2.8	2.6	2.7	2.1	2.6	3.1
Excluding Nigeria and South Africa	2.9	3.3	4.7	3.0	3.4	2.2	3.2	4.8	2.8	3.4	4.0
<b>Oil-exporting countries</b>	<b>2.5</b>	<b>2.6</b>	<b>0.6</b>	<b>1.1</b>	<b>-0.5</b>	<b>-0.7</b>	<b>0.6</b>	<b>2.1</b>	<b>0.7</b>	<b>1.2</b>	<b>1.0</b>
Excluding Nigeria	3.4	3.1	-1.2	-0.6	-4.1	-4.1	0.7	6.7	0.4	2.0	1.8
<b>Oil-importing countries</b>	<b>1.9</b>	<b>2.8</b>	<b>4.1</b>	<b>3.0</b>	<b>3.9</b>	<b>3.2</b>	<b>2.4</b>	<b>2.1</b>	<b>2.1</b>	<b>2.4</b>	<b>3.0</b>
Excluding South Africa	2.9	3.3	7.2	4.9	6.9	5.1	4.4	4.1	3.5	3.9	4.8
<b>Middle-income countries</b>	<b>1.9</b>	<b>2.6</b>	<b>2.3</b>	<b>1.6</b>	<b>1.0</b>	<b>0.5</b>	<b>0.9</b>	<b>1.6</b>	<b>1.0</b>	<b>1.2</b>	<b>1.2</b>
Excluding Nigeria and South Africa	2.9	3.3	4.8	1.7	1.5	0.0	2.6	5.6	2.3	2.8	2.7
<b>Low-income countries</b>	<b>3.1</b>	<b>3.2</b>	<b>4.5</b>	<b>5.1</b>	<b>6.1</b>	<b>5.3</b>	<b>4.1</b>	<b>3.9</b>	<b>3.3</b>	<b>4.2</b>	<b>5.7</b>
Excluding low-income countries in fragile situations	2.9	3.4	3.6	6.0	6.6	6.9	5.8	4.7	3.7	5.0	7.3
<b>Countries in fragile situations</b>	<b>4.7</b>	<b>4.0</b>	<b>6.0</b>	<b>5.1</b>	<b>4.1</b>	<b>4.0</b>	<b>3.0</b>	<b>4.1</b>	<b>3.8</b>	<b>3.4</b>	<b>3.5</b>
CFA franc zone	4.2	3.3	3.2	3.3	1.5	3.3	2.9	3.8	3.7	3.3	3.3
CEMAC	6.4	3.3	3.4	4.2	0.7	4.2	4.0	5.9	5.4	4.4	3.8
WAEMU	1.9	3.2	3.1	2.2	2.3	2.4	1.8	2.1	2.4	2.6	3.0
COMESA (SSA members)	2.6	1.7	9.8	3.1	6.7	3.8	3.5	3.3	2.4	3.6	3.8
EAC-5	2.3	2.2	2.0	3.7	3.4	3.2	2.9	2.3	2.2	2.6	3.2
ECOWAS	2.2	3.2	2.2	2.7	2.1	1.6	1.3	1.2	1.8	1.8	1.6
SACU	1.3	2.2	1.2	1.5	0.8	0.8	-0.3	-0.8	-0.2	-0.2	-0.0
SADC	1.5	2.5	3.1	1.4	2.0	0.6	1.3	2.5	0.6	1.2	1.9

See sources and footnotes on page 72.



**Table SA22. Real Effective Exchange Rates<sup>1</sup>***(Annual average; index, 2000 = 100)*

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Angola	179.1	249.2	235.0	242.5	268.4	285.4	297.5	300.4	293.1
Benin	119.3	123.1	115.1	114.3	112.3	114.0	112.7	100.5	100.5
Botswana	98.2	100.4	108.8	108.0	116.4	99.6	94.5	94.8	96.3
Burkina Faso	111.6	120.3	110.3	112.2	111.4	113.4	118.0	110.4	104.5
Burundi	71.2	80.3	82.5	81.9	84.3	84.3	87.7	100.1	100.1
Cabo Verde	96.9	101.5	98.9	100.9	98.5	101.8	101.7	98.8	97.8
Cameroon	110.0	115.9	108.6	108.7	105.0	108.1	109.4	106.2	108.3
Central African Rep.	112.4	124.2	118.4	117.2	117.5	121.1	151.6	197.1	261.2
Chad	118.6	133.6	123.6	116.2	125.7	125.8	127.5	125.0	120.6
Comoros	119.2	121.1	115.3	115.6	110.2	114.3	113.1	94.1	88.5
Congo, Dem. Rep. of	27.4	158.8	19.2	20.3	22.8	22.9	23.2	26.8	25.4
Congo, Rep. of	119.9	131.6	122.8	121.5	118.3	126.5	128.5	121.1	125.3
Côte d'Ivoire	117.1	121.9	114.6	116.8	112.1	117.1	118.2	113.1	113.4
Equatorial Guinea	156.6	179.6	177.3	183.7	176.7	184.2	189.1	174.0	176.9
Eritrea	107.0	164.5	183.7	203.1	240.2	278.8	324.3	415.6	495.8
Ethiopia	100.1	115.0	98.4	103.3	122.6	124.1	129.9	156.9	169.1
Gabon	106.0	111.4	107.2	105.7	103.4	105.3	110.0	105.8	107.7
Gambia, The	56.2	56.7	55.0	50.8	49.5	45.8	41.8	41.7	44.5
Ghana	108.9	99.5	106.2	100.9	94.5	95.1	73.7	74.8	86.2
Guinea	72.8	81.8	75.9	73.2	81.6	91.6	99.3	111.8	101.5
Guinea-Bissau	114.0	120.9	115.6	118.0	115.1	116.9	115.9	112.9	115.1
Kenya	120.5	133.1	131.3	125.6	142.6	147.5	152.5	159.6	165.2
Lesotho	65.9	64.1	73.1	73.5	69.2	61.9	57.8	53.9	50.2
Liberia	85.1	91.4	92.9	92.7	101.2	100.0	100.1	122.5	122.5
Madagascar	91.6	107.1	106.8	112.5	111.2	115.2	111.2	108.5	107.4
Malawi	71.5	78.3	73.7	71.3	58.2	49.2	53.5	61.6	53.1
Mali	109.5	117.4	111.3	111.9	112.5	113.0	115.0	110.9	110.1
Mauritius	89.0	91.6	94.5	100.4	101.9	101.8	104.8	103.7	104.7
Mozambique	84.3	84.6	71.8	86.2	92.3	91.9	91.8	85.2	66.1
Namibia	105.0	101.9	114.3	112.5	108.1	98.7	92.8	91.2	87.4
Niger	111.2	118.0	110.0	110.0	104.1	108.0	107.4	102.0	102.0
Nigeria	126.1	131.8	143.0	143.5	159.3	169.9	181.8	180.3	165.4
Rwanda	77.0	90.7	88.4	85.3	87.1	85.8	81.5	88.3	85.4
São Tomé & Príncipe	94.1	117.4	114.2	127.5	133.9	146.6	156.8	157.9	168.2
Senegal	107.2	108.8	102.0	103.1	99.2	101.4	100.6	94.6	95.9
Seychelles	81.7	60.3	62.9	58.3	57.7	67.9	65.8	73.3	73.3
Sierra Leone	72.2	78.7	76.0	76.4	89.1	96.4	99.3	108.1	98.2
South Africa	99.9	94.0	108.6	106.3	100.5	89.9	84.2	83.8	77.7
South Sudan	...	...	...	...	...	...	...	...	...
Swaziland	106.6	105.2	113.5	113.6	113.7	106.9	102.6	101.8	99.2
Tanzania	69.0	72.3	69.1	64.5	75.0	80.4	82.3	78.5	76.2
Togo	112.1	118.7	111.4	112.2	107.8	110.1	111.4	103.5	104.5
Uganda	89.5	92.9	86.5	82.9	94.3	95.9	98.9	91.4	90.8
Zambia	149.4	155.6	164.6	160.3	165.6	171.6	164.7	149.6	145.4
Zimbabwe	...	...	...	...	...	...	...	...	...
<b>Sub-Saharan Africa</b>	<b>107.1</b>	<b>114.3</b>	<b>115.4</b>	<b>114.9</b>	<b>120.1</b>	<b>120.8</b>	<b>121.7</b>	<b>121.8</b>	<b>117.1</b>
<i>Median</i>	106.0	111.4	108.6	108.7	107.8	106.9	107.4	103.7	102.0
Excluding Nigeria and South Africa	102.5	119.1	106.7	106.6	112.4	115.0	114.9	116.0	116.6
<b>Oil-exporting countries</b>	<b>129.0</b>	<b>140.8</b>	<b>147.3</b>	<b>148.1</b>	<b>161.6</b>	<b>171.5</b>	<b>181.7</b>	<b>179.8</b>	<b>168.5</b>
Excluding Nigeria	137.7	167.7	158.6	160.6	166.9	174.7	180.1	176.9	176.0
<b>Oil-importing countries</b>	<b>96.5</b>	<b>101.5</b>	<b>99.9</b>	<b>98.7</b>	<b>100.0</b>	<b>96.7</b>	<b>93.8</b>	<b>94.7</b>	<b>92.0</b>
Excluding South Africa	94.1	107.6	94.7	94.2	99.8	101.3	100.3	102.1	102.9
<b>Middle-income countries</b>	<b>114.5</b>	<b>117.6</b>	<b>126.2</b>	<b>125.4</b>	<b>129.7</b>	<b>129.9</b>	<b>130.2</b>	<b>129.1</b>	<b>123.1</b>
Excluding Nigeria and South Africa	122.4	134.9	133.3	132.7	136.0	139.2	136.3	134.6	137.4
<b>Low-income countries</b>	<b>81.4</b>	<b>101.1</b>	<b>80.1</b>	<b>80.4</b>	<b>87.8</b>	<b>89.7</b>	<b>92.0</b>	<b>95.3</b>	<b>94.0</b>
Excluding low-income countries in fragile situations	87.9	94.5	86.1	86.0	96.6	99.3	101.8	104.1	103.5
<b>Countries in fragile situations</b>	<b>85.2</b>	<b>120.2</b>	<b>84.1</b>	<b>85.0</b>	<b>86.4</b>	<b>88.3</b>	<b>90.1</b>	<b>92.7</b>	<b>91.1</b>
CFA franc zone	115.5	123.3	116.2	116.6	114.1	117.4	119.2	113.6	114.2
CEMAC	118.0	128.6	122.0	121.4	119.5	123.3	126.3	121.4	123.6
WAEMU	113.2	118.7	111.2	112.4	109.3	112.2	113.2	106.9	106.5
COMESA (SSA members)	91.6	117.6	93.4	93.5	102.9	104.4	106.6	113.6	115.2
EAC-5	91.2	98.2	94.7	90.0	102.2	106.4	109.0	108.0	107.9
ECOWAS	119.8	124.2	131.1	131.0	140.7	148.5	153.4	151.6	143.7
SACU	99.7	94.3	108.4	106.3	101.2	90.5	84.8	84.3	78.6
SADC	97.1	105.3	104.7	103.9	104.1	98.7	95.7	95.2	89.7

See sources and footnotes on page 72.

**Table SA23. Nominal Effective Exchange Rates<sup>1</sup>***(Annual average; index, 2000 = 100)*

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Angola	8.8	9.2	7.7	7.3	7.5	7.5	7.4	6.9	5.2
Benin	116.4	118.3	111.8	113.1	107.5	111.4	114.3	104.1	107.7
Botswana	77.8	64.4	67.3	64.2	66.1	54.8	50.8	50.0	49.6
Burkina Faso	119.8	134.5	130.1	135.6	135.3	143.6	158.4	157.3	161.3
Burundi	57.0	52.2	52.6	50.5	46.2	44.4	45.8	50.8	49.5
Cabo Verde	105.1	105.8	103.3	104.4	102.3	106.2	107.8	106.1	108.1
Cameroon	110.6	115.3	110.2	111.5	108.1	112.1	113.9	109.7	113.7
Central African Rep.	108.4	111.3	106.7	107.5	104.4	108.0	109.8	105.2	106.5
Chad	114.3	119.6	116.1	117.5	114.7	117.0	118.6	114.4	117.3
Comoros	115.2	120.8	115.6	119.0	115.7	121.6	123.4	114.8	118.2
Congo, Dem. Rep. of	2.5	1.4	1.3	1.2	1.3	1.3	1.3	1.5	1.4
Congo, Rep. of	117.5	121.5	115.5	116.8	113.4	117.8	119.4	112.2	114.6
Côte d'Ivoire	114.8	118.8	113.0	113.7	110.6	115.3	118.3	113.7	115.0
Equatorial Guinea	122.9	130.1	124.3	126.7	120.5	123.6	123.3	112.1	113.4
Eritrea	48.9	49.5	50.4	49.8	51.8	52.5	53.2	59.5	61.8
Ethiopia	78.7	58.7	48.0	39.3	39.1	37.6	37.6	42.3	43.3
Gabon	109.1	111.2	107.4	107.7	105.0	108.2	109.6	106.2	107.2
Gambia, The	40.7	39.7	37.7	34.6	33.2	29.8	26.2	25.0	25.3
Ghana	45.2	29.4	29.1	26.4	23.4	21.6	14.9	13.0	13.0
Guinea	39.6	28.7	23.7	19.5	19.4	19.9	20.2	21.4	18.3
Guinea-Bissau	117.0	120.0	115.9	116.4	113.9	116.7	118.1	114.3	116.0
Kenya	93.3	89.0	86.9	77.3	84.0	84.7	84.4	84.7	84.3
Lesotho	99.4	82.9	93.0	91.9	83.6	72.7	65.8	60.0	53.3
Liberia	56.4	47.5	45.9	43.6	45.8	42.9	39.6	45.3	42.0
Madagascar	58.9	55.8	52.2	51.9	49.9	49.9	46.2	42.4	39.7
Malawi	40.3	38.5	34.9	32.9	23.6	15.8	14.4	14.2	10.4
Mali	112.9	117.9	113.5	114.9	112.7	116.8	120.3	116.8	119.2
Mauritius	74.2	68.5	70.7	73.0	73.5	72.7	74.1	73.4	74.7
Mozambique	53.6	48.0	37.3	41.9	45.1	44.3	44.5	40.8	27.3
Namibia	86.2	74.7	82.5	80.5	74.9	66.8	61.3	59.5	54.9
Niger	115.4	121.4	115.7	116.8	113.5	118.2	121.4	116.6	118.9
Nigeria	67.4	57.9	56.9	53.5	54.5	55.0	55.7	51.8	42.2
Rwanda	61.1	60.5	59.3	57.7	58.3	56.9	54.6	59.2	55.6
São Tomé & Príncipe	52.7	38.4	33.6	33.9	33.1	34.1	34.6	33.5	34.3
Senegal	112.0	116.7	111.4	112.9	110.4	114.9	117.7	113.1	115.4
Seychelles	80.5	36.6	40.1	37.5	35.6	41.1	39.8	43.5	44.4
Sierra Leone	55.6	47.5	39.9	35.0	36.8	37.1	36.0	36.4	30.2
South Africa	84.0	67.1	76.1	73.3	67.2	58.0	52.1	50.0	44.0
South Sudan	...	...	...	...	...	...	...	...	...
Swaziland	90.9	80.6	86.0	84.5	80.8	75.0	70.9	69.0	64.8
Tanzania	59.2	53.4	49.3	43.1	44.5	45.4	45.0	41.7	39.2
Togo	120.6	126.1	120.4	122.3	118.7	123.1	127.9	120.0	123.5
Uganda	82.3	72.6	67.0	57.2	59.4	59.2	60.3	54.3	52.6
Zambia	65.7	54.8	55.0	52.2	52.1	52.0	47.7	40.6	34.0
Zimbabwe	...	...	...	...	...	...	...	...	...
<b>Sub-Saharan Africa</b>	<b>68.3</b>	<b>59.1</b>	<b>58.6</b>	<b>55.4</b>	<b>54.5</b>	<b>52.6</b>	<b>50.9</b>	<b>48.6</b>	<b>43.3</b>
<i>Median</i>	82.3	68.5	70.7	73.0	67.2	59.2	60.3	59.5	54.9
Excluding Nigeria and South Africa	61.4	56.0	52.0	48.9	48.6	48.1	46.7	45.2	42.7
<b>Oil-exporting countries</b>	<b>61.2</b>	<b>55.5</b>	<b>53.3</b>	<b>50.7</b>	<b>51.3</b>	<b>51.8</b>	<b>52.3</b>	<b>48.9</b>	<b>40.7</b>
Excluding Nigeria	48.0	50.0	45.1	44.1	43.9	44.6	44.6	42.0	37.0
<b>Oil-importing countries</b>	<b>73.0</b>	<b>61.2</b>	<b>62.1</b>	<b>58.5</b>	<b>56.3</b>	<b>52.6</b>	<b>49.3</b>	<b>47.9</b>	<b>44.7</b>
Excluding South Africa	65.5	57.1	53.6	49.7	49.4	48.5	46.6	45.5	43.9
<b>Middle-income countries</b>	<b>71.8</b>	<b>61.9</b>	<b>62.8</b>	<b>59.8</b>	<b>58.6</b>	<b>56.2</b>	<b>53.9</b>	<b>50.8</b>	<b>44.3</b>
Excluding Nigeria and South Africa	66.0	62.0	59.1	56.5	56.0	55.4	52.2	49.2	46.0
<b>Low-income countries</b>	<b>55.9</b>	<b>49.0</b>	<b>44.2</b>	<b>40.6</b>	<b>40.6</b>	<b>40.2</b>	<b>40.3</b>	<b>40.4</b>	<b>38.6</b>
Excluding low-income countries in fragile situations	75.5	66.5	59.2	52.9	53.7	53.6	54.0	53.5	51.5
<b>Countries in fragile situations</b>	<b>52.8</b>	<b>48.4</b>	<b>45.1</b>	<b>44.1</b>	<b>42.9</b>	<b>42.7</b>	<b>42.7</b>	<b>42.8</b>	<b>41.3</b>
CFA franc zone	114.6	119.7	114.5	116.0	112.8	116.9	119.8	114.6	117.1
CEMAC	113.8	118.5	113.6	114.9	111.2	114.6	116.0	110.3	112.9
WAEMU	115.2	120.6	115.3	116.9	114.1	119.0	123.3	118.5	120.8
COMESA (SSA members)	54.5	46.1	42.8	38.5	39.0	38.1	37.6	38.2	36.8
EAC-5	75.7	69.9	66.2	58.4	61.3	61.7	61.6	59.1	57.2
ECOWAS	72.1	62.7	61.2	57.9	58.0	58.4	57.6	53.7	46.4
SACU	83.9	67.5	76.1	73.3	67.6	58.4	52.6	50.5	44.8
SADC	58.4	49.0	50.7	48.4	46.3	42.2	39.3	37.5	32.6

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	28.2	20.2	20.6	19.5	18.8	23.6	27.4	35.8	42.6	36.7	35.7
Benin	20.2	15.0	17.0	15.8	15.7	17.3	19.8	21.3	22.7	26.3	27.1
Botswana	3.6	13.5	14.2	12.4	13.6	12.2	11.6	11.3	16.8	15.2	12.6
Burkina Faso	29.4	25.6	26.2	22.8	23.1	22.6	20.4	23.3	22.8	23.1	23.0
Burundi	120.2	21.2	22.4	24.0	22.6	21.0	18.9	18.2	16.7	26.9	36.6
Cabo Verde	46.0	45.5	51.2	53.2	70.0	81.4	82.6	96.6	97.7	102.7	100.8
Cameroon	19.6	5.5	6.2	7.0	9.0	12.5	16.2	20.4	22.1	27.6	30.6
Central African Rep.	61.0	9.0	9.0	8.0	9.9	15.0	13.8	14.5	12.6	11.7	10.5
Chad	23.4	27.4	24.5	20.6	20.5	21.8	27.0	24.5	26.3	28.1	27.2
Comoros	73.0	51.9	48.9	44.9	40.7	18.5	20.0	24.0	25.4	27.8	27.4
Congo, Dem. Rep. of	88.9	74.8	24.2	20.7	18.3	15.0	13.0	15.2	15.9	20.0	24.0
Congo, Rep. of	99.6	58.8	19.7	21.7	26.2	31.7	32.5	51.4	54.0	55.2	51.8
Côte d'Ivoire	67.6	52.9	47.0	48.1	29.1	27.2	24.5	29.2	27.7	31.7	32.2
Equatorial Guinea	2.0	4.5	7.9	5.5	7.5	6.4	4.8	7.4	12.5	15.1	19.2
Eritrea	60.0	49.1	45.8	35.8	29.1	25.2	22.1	21.5	19.2	19.3	19.7
Ethiopia <sup>1</sup>	37.0	14.4	18.8	24.4	20.6	23.5	25.2	29.5	31.1	33.3	34.4
Gabon	33.1	20.1	17.0	15.4	16.6	24.2	25.3	33.3	35.6	41.8	46.5
Gambia, The	83.7	41.0	39.7	43.0	41.3	43.8	53.9	55.9	51.0	45.7	41.0
Ghana	24.1	19.6	19.4	19.3	21.8	24.9	35.9	42.2	38.3	40.2	37.8
Guinea	91.4	69.6	66.6	71.8	23.3	25.8	27.4	27.9	29.9	29.6	30.1
Guinea-Bissau	161.6	128.7	36.4	24.5	27.3	25.7	22.8	22.0	20.4	21.4	22.0
Kenya	25.2	20.9	21.5	22.4	18.9	19.3	22.8	25.3	27.2	27.7	27.9
Lesotho	38.6	34.1	28.4	26.1	28.7	31.1	34.9	37.5	40.5	38.7	37.7
Liberia	511.9	148.0	10.7	10.7	10.3	11.7	17.9	25.9	32.1	37.0	39.8
Madagascar	46.0	26.0	23.5	21.6	22.8	22.5	22.7	26.0	30.1	32.1	34.2
Malawi	42.2	12.9	12.4	11.4	20.1	26.6	29.8	27.8	33.6	31.9	31.7
Mali	27.9	20.9	21.4	19.0	22.2	22.2	19.5	22.9	22.6	24.2	25.4
Mauritius	11.9	11.0	11.9	12.7	13.2	16.1	15.7	16.3	15.2	14.6	13.5
Mozambique	46.6	36.8	38.4	33.7	33.2	47.0	52.4	66.5	88.0	91.4	85.3
Namibia	4.7	4.9	4.3	6.4	7.8	7.9	7.6	13.1	17.9	16.4	16.8
Niger	31.2	19.6	16.9	15.5	17.1	18.2	20.5	27.4	30.7	33.9	35.2
Nigeria	11.4	3.5	3.2	3.5	3.8	2.6	2.6	3.1	4.0	5.1	4.9
Rwanda	36.3	13.7	13.5	15.2	14.5	20.4	22.9	26.6	35.2	40.0	41.7
São Tomé & Príncipe	207.5	72.4	79.5	78.0	81.0	71.1	66.2	82.2	76.4	81.5	81.7
Senegal	28.7	28.2	27.2	27.8	31.2	33.6	37.3	40.3	37.7	42.6	41.1
Seychelles	62.0	87.6	49.3	48.1	48.3	39.6	37.1	34.9	32.4	31.2	29.6
Sierra Leone	71.4	28.2	30.4	32.4	25.8	21.3	22.5	27.5	34.4	37.9	39.1
South Africa	7.2	7.6	9.5	10.0	14.1	14.4	15.3	13.0	17.9	16.6	16.9
South Sudan	...	...	...	...	...	...	...	...	...	...	...
Swaziland	12.2	9.8	7.9	7.2	7.1	7.7	7.6	9.4	11.0	11.2	10.9
Tanzania	26.7	17.4	19.3	21.1	21.7	22.8	23.6	27.1	29.1	30.3	31.2
Togo	74.5	52.6	18.0	12.9	13.3	14.3	17.1	21.1	19.7	22.9	24.8
Uganda	27.1	12.2	13.4	14.2	14.5	16.0	14.9	19.6	22.1	25.4	27.2
Zambia	41.6	9.0	7.3	8.0	13.2	12.4	17.2	30.8	31.5	35.2	38.4
Zimbabwe <sup>2</sup>	56.1	66.5	62.2	52.1	48.4	46.5	44.1	46.1	47.9	44.5	43.7
<b>Sub-Saharan Africa</b>	<b>20.0</b>	<b>14.1</b>	<b>12.5</b>	<b>12.6</b>	<b>13.5</b>	<b>14.0</b>	<b>14.8</b>	<b>17.0</b>	<b>20.5</b>	<b>21.5</b>	<b>21.4</b>
<i>Median</i>	37.8	21.1	20.2	20.7	20.5	22.0	22.6	26.0	28.4	30.0	30.9
Excluding Nigeria and South Africa	36.2	24.7	21.1	20.5	19.8	21.9	23.9	28.8	30.9	32.1	32.6
<b>Oil-exporting countries</b>	<b>16.9</b>	<b>8.6</b>	<b>7.4</b>	<b>7.6</b>	<b>7.8</b>	<b>8.1</b>	<b>8.6</b>	<b>10.5</b>	<b>13.4</b>	<b>14.8</b>	<b>14.2</b>
Excluding Nigeria	29.0	19.1	17.1	16.1	16.7	20.9	23.8	31.0	36.0	34.8	35.1
<b>Oil-importing countries</b>	<b>22.2</b>	<b>18.0</b>	<b>16.2</b>	<b>16.3</b>	<b>17.9</b>	<b>19.0</b>	<b>20.5</b>	<b>22.3</b>	<b>25.3</b>	<b>25.9</b>	<b>26.6</b>
Excluding South Africa	39.1	27.1	22.8	22.6	21.2	22.3	23.9	28.1	29.3	31.2	31.7
<b>Middle-income countries</b>	<b>14.8</b>	<b>10.7</b>	<b>10.3</b>	<b>10.5</b>	<b>11.7</b>	<b>11.9</b>	<b>12.8</b>	<b>14.3</b>	<b>17.9</b>	<b>18.6</b>	<b>18.2</b>
Excluding Nigeria and South Africa	29.2	21.3	19.3	18.8	18.3	20.9	23.8	29.9	32.2	32.6	32.6
<b>Low-income countries</b>	<b>46.8</b>	<b>29.6</b>	<b>24.0</b>	<b>23.3</b>	<b>22.0</b>	<b>23.4</b>	<b>23.9</b>	<b>27.4</b>	<b>29.3</b>	<b>31.5</b>	<b>32.6</b>
Excluding low-income countries in fragile situations	31.4	18.0	19.9	21.3	20.6	23.6	24.8	29.6	32.0	34.1	34.8
<b>Countries in fragile situations</b>	<b>68.9</b>	<b>49.0</b>	<b>32.2</b>	<b>29.6</b>	<b>25.2</b>	<b>24.7</b>	<b>24.0</b>	<b>26.7</b>	<b>27.2</b>	<b>29.7</b>	<b>31.0</b>
CFA franc zone	37.7	26.6	21.7	20.2	19.1	20.9	21.6	26.3	27.1	30.7	31.9
CEMAC	30.7	17.7	13.2	12.3	14.1	17.3	19.1	24.3	26.9	31.0	33.4
WAEMU	45.0	35.5	30.8	29.3	24.6	24.6	24.1	27.9	27.2	30.4	30.8
COMESA (SSA members)	40.1	25.4	20.2	20.3	19.5	20.1	21.3	25.3	26.9	29.0	30.3
EAC-5	28.5	17.6	18.7	19.9	18.7	19.9	21.5	24.8	27.2	28.8	29.7
ECOWAS	21.6	11.7	9.5	9.5	8.6	7.9	8.0	9.7	11.7	13.4	12.7
SACU	7.3	7.9	9.7	10.0	13.9	14.1	14.9	13.1	18.0	16.7	16.8
SADC	16.1	14.9	13.7	13.7	16.6	18.1	19.7	21.2	25.7	24.8	25.2

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2012	2013	2014	2015	2016	2017	2018
Angola	131.6	121.0	144.7	189.7	186.4	170.5	99.8	83.7	107.4	107.8
Benin	155.1	289.4	368.5	274.5	235.4	225.7	216.8	208.9	198.2	186.5
Botswana	90.5	83.6	86.0	96.7	108.9	104.1	107.5	113.9	89.4	91.5
Burkina Faso	63.4	56.0	39.9	47.2	43.1	35.5	40.7	45.7	43.8	43.2
Burundi	116.1	111.2	168.7	121.9	110.2	138.2	99.8	104.9	111.2	111.9
Cabo Verde	142.8	123.2	143.5	153.5	137.3	128.2	96.8	87.2	93.1	93.1
Cameroon	115.6	91.6	102.4	113.1	111.6	103.4	89.1	71.0	73.4	72.8
Central African Rep.	60.1	64.8	64.3	64.8	77.3	84.2	110.4	137.3	109.0	110.6
Chad	177.6	184.3	235.1	288.8	315.6	300.6	158.0	144.9	171.5	171.5
Comoros	105.0	91.3	95.9	132.3	112.2	97.3	100.3	112.7	120.3	128.6
Congo, Dem. Rep. of	633.9	581.9	685.6	573.2	544.3	593.6	597.1	602.7	608.3	603.9
Congo, Rep. of	125.9	87.1	132.7	126.9	146.1	141.5	80.2	79.4	107.8	113.1
Côte d'Ivoire	91.8	114.3	114.3	107.7	106.1	110.6	124.5	140.4	133.9	135.1
Equatorial Guinea	132.9	115.7	148.3	180.5	178.4	154.6	119.9	157.8	202.3	206.4
Eritrea	50.7	38.1	38.3	38.6	38.8	38.8	38.8	38.8	38.8	38.8
Ethiopia <sup>1</sup>	57.7	70.4	91.8	117.0	97.5	103.3	103.7	104.6	105.1	102.1
Gabon	134.6	121.3	148.4	180.7	178.6	162.2	89.7	80.7	98.5	95.9
Gambia, The	102.8	76.2	65.0	76.8	89.1	78.0	62.6	72.6	72.9	73.2
Ghana	148.4	204.4	249.2	291.5	273.0	253.2	212.6	210.4	201.7	197.0
Guinea	79.7	73.1	82.2	97.7	105.4	110.4	122.6	134.1	125.7	128.2
Guinea-Bissau	62.6	46.4	53.3	46.8	45.4	52.5	102.5	108.9	101.1	99.3
Kenya	82.3	95.7	94.9	75.0	75.4	74.1	90.4	93.5	91.8	93.1
Lesotho	63.8	49.6	49.6	48.6	47.2	46.6	50.5	59.9	57.8	61.6
Liberia	141.9	137.6	194.8	149.3	164.8	147.6	109.5	125.5	154.8	126.3
Madagascar	259.6	303.7	286.0	310.1	341.9	385.0	392.2	417.9	398.8	390.5
Malawi	78.3	88.7	94.2	80.5	77.9	79.6	81.6	82.6	72.9	71.6
Mali	157.7	190.0	207.4	300.6	253.1	268.5	314.5	325.9	325.0	342.7
Mauritius	105.5	111.4	106.9	102.2	103.0	101.5	118.4	124.1	113.0	118.1
Mozambique	107.5	104.3	117.7	110.0	110.0	108.4	106.6	108.5	109.4	107.4
Namibia	103.6	114.5	131.9	141.8	149.2	154.1	139.6	147.0	147.0	147.0
Niger	120.6	164.6	189.9	179.0	173.4	140.3	129.3	141.2	149.3	149.6
Nigeria	136.4	129.6	142.7	161.1	162.6	157.7	115.9	108.9	120.6	119.1
Rwanda	94.4	108.5	127.2	139.4	159.6	154.7	176.6	155.0	176.8	172.7
São Tomé & Príncipe	119.2	74.6	81.9	115.2	87.1	94.5	78.6	102.9	108.8	114.6
Senegal	103.8	124.3	124.0	118.0	108.9	111.0	120.0	119.5	121.7	122.5
Seychelles	99.0	95.0	95.4	96.3	96.4	96.7	94.9	92.4	93.7	93.9
Sierra Leone	103.7	98.2	104.9	101.3	97.7	82.1	63.8	66.6	68.4	63.8
South Africa	118.2	132.5	139.9	143.1	142.0	140.0	144.8	146.9	148.0	146.6
South Sudan	...	...	...	...	...	...	...	...	...	...
Swaziland	102.8	116.1	102.8	112.1	118.9	123.9	122.9	131.5	123.8	126.1
Tanzania	59.8	83.7	89.6	92.4	89.8	86.9	86.7	86.7	83.2	82.0
Togo	95.2	95.3	98.5	99.4	91.5	101.2	84.6	85.0	84.7	85.0
Uganda	83.5	98.4	81.8	87.2	89.3	96.3	102.6	111.7	111.8	111.3
Zambia	184.1	170.9	233.4	213.5	200.6	195.4	189.8	182.7	199.0	196.5
Zimbabwe <sup>2</sup>	86.9	130.8	139.9	143.5	140.1	137.3	143.7	151.9	159.1	167.1
<b>Sub-Saharan Africa</b>	<b>129.9</b>	<b>134.0</b>	<b>148.9</b>	<b>160.6</b>	<b>160.1</b>	<b>156.2</b>	<b>137.0</b>	<b>137.8</b>	<b>142.2</b>	<b>140.0</b>
<i>Median</i>	104.4	109.9	116.0	117.5	110.9	110.8	107.1	112.2	111.5	113.8
Excluding Nigeria and South Africa	134.4	137.5	159.5	170.7	167.6	162.6	148.4	150.6	151.2	149.5
<b>Oil-exporting countries</b>	<b>135.2</b>	<b>125.7</b>	<b>143.2</b>	<b>166.9</b>	<b>167.8</b>	<b>159.8</b>	<b>112.1</b>	<b>103.3</b>	<b>117.2</b>	<b>116.4</b>
Excluding Nigeria	132.6	117.6	144.3	180.0	180.0	165.1	101.4	89.8	110.4	110.4
<b>Oil-importing countries</b>	<b>126.4</b>	<b>139.7</b>	<b>152.9</b>	<b>155.7</b>	<b>153.6</b>	<b>152.9</b>	<b>157.2</b>	<b>161.7</b>	<b>159.1</b>	<b>157.3</b>
Excluding South Africa	134.8	146.0	166.0	166.5	162.1	161.5	164.9	169.7	165.3	163.0
<b>Middle-income countries</b>	<b>124.6</b>	<b>127.8</b>	<b>141.6</b>	<b>155.6</b>	<b>155.7</b>	<b>149.2</b>	<b>124.2</b>	<b>122.1</b>	<b>128.7</b>	<b>127.4</b>
Excluding Nigeria and South Africa	119.7	121.1	142.5	161.7	159.2	145.6	118.1	117.0	122.1	122.3
<b>Low-income countries</b>	<b>157.5</b>	<b>161.3</b>	<b>186.1</b>	<b>184.6</b>	<b>180.4</b>	<b>186.6</b>	<b>186.3</b>	<b>191.8</b>	<b>188.5</b>	<b>184.6</b>
Excluding low-income countries in fragile situations	80.4	99.7	110.4	112.5	105.2	104.2	105.1	106.0	105.8	103.4
<b>Countries in fragile situations</b>	<b>207.6</b>	<b>208.3</b>	<b>238.6</b>	<b>241.7</b>	<b>242.3</b>	<b>255.9</b>	<b>260.0</b>	<b>273.8</b>	<b>270.3</b>	<b>266.7</b>
CFA franc zone	119.6	126.0	145.1	158.4	153.6	146.7	127.5	130.8	136.6	137.5
CEMAC	130.7	112.5	141.8	165.4	170.2	156.9	103.9	98.7	115.4	114.9
WAEMU	107.7	139.4	148.5	150.6	136.2	136.5	147.6	155.4	152.4	153.8
COMESA (SSA members)	170.0	164.4	188.9	177.5	175.5	182.9	189.3	192.2	188.5	185.2
EAC-5	76.7	93.6	93.9	87.6	88.2	88.1	96.4	98.1	97.4	97.2
ECOWAS	131.1	135.1	149.8	167.5	165.6	158.7	125.7	124.7	132.1	130.2
SACU	116.3	129.8	136.9	140.6	140.1	138.2	142.2	144.6	144.4	143.2
SADC	136.8	145.0	158.2	166.4	168.0	168.4	163.1	166.8	166.5	164.4

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	3.1	4.4	5.0	7.1	7.7	7.2	8.8	11.0	7.8	6.7	6.0
Benin	6.5	7.4	7.2	7.0	4.1	2.8	3.5	3.6	3.0	2.2	1.9
Botswana	20.7	15.9	11.5	10.9	10.0	10.6	12.9	13.2	13.1	13.5	13.8
Burkina Faso	4.9	6.0	3.6	3.1	2.5	3.6	4.9	3.1	2.4	1.7	1.2
Burundi	2.6	3.6	4.0	3.7	3.3	3.4	3.4	4.2	1.9	1.2	1.0
Cabo Verde	3.2	4.1	3.4	3.7	4.0	4.5	7.1	5.9	6.2	5.9	5.7
Cameroon	3.6	6.9	5.3	4.7	4.5	4.2	4.9	6.0	3.6	3.9	3.9
Central African Rep.	4.2	4.6	4.1	4.3	5.4	3.7	6.1	4.3	3.9	4.2	4.4
Chad	2.1	1.4	1.3	1.9	2.5	2.3	2.7	1.1	-1.0	-0.2	0.2
Comoros	6.3	6.4	5.7	6.3	6.7	5.9	8.4	8.4	6.7	6.3	6.0
Congo, Dem. Rep. of	0.3	1.1	1.3	1.4	1.6	1.5	1.7	1.2	0.6	0.4	0.3
Congo, Rep. of	3.7	6.3	5.8	10.5	8.9	6.6	8.0	4.6	2.0	2.1	2.6
Côte d'Ivoire	2.6	3.6	4.6	4.3	3.9	4.2	3.2	3.2	2.6	2.6	2.9
Equatorial Guinea	6.8	4.1	3.4	3.7	6.4	6.6	5.3	2.6	-0.0	0.0	0.0
Eritrea	1.0	2.2	2.4	2.8	4.1	4.0	4.7	3.5	3.5	4.2	5.0
Ethiopia <sup>1</sup>	2.3	1.9	2.0	2.6	2.0	1.8	1.5	2.0	2.1	1.9	1.9
Gabon	4.5	5.4	4.8	4.5	3.6	4.6	5.9	5.4	1.8	2.4	2.9
Gambia, The	3.7	5.3	5.1	5.1	6.0	4.8	3.0	2.3	1.7	2.4	3.2
Ghana	2.7	2.7	2.9	2.9	2.9	2.9	2.5	2.6	2.7	2.7	2.9
Guinea	0.5	2.4	1.2	3.2	2.9	2.9	3.3	2.0	2.6	2.9	3.2
Guinea-Bissau	5.3	7.0	5.0	9.3	6.4	6.2	10.2	12.3	11.2	11.8	14.0
Kenya	2.9	3.4	2.9	2.8	3.7	3.9	5.3	5.1	4.8	4.8	4.9
Lesotho	4.8	5.4	4.0	3.6	4.9	5.2	5.5	5.6	4.5	4.4	4.7
Liberia	0.4	2.2	2.3	2.3	2.2	1.9	2.0	2.5	2.9	2.9	3.0
Madagascar	2.5	3.6	2.6	3.6	3.1	2.3	2.7	2.8	3.0	3.2	3.3
Malawi	1.4	0.6	1.5	1.0	1.1	2.0	3.0	3.2	2.8	3.0	3.3
Mali	4.2	4.7	4.2	4.2	3.0	2.9	1.8	1.2	0.1	0.1	0.1
Mauritius	3.8	4.5	4.2	4.4	5.0	5.3	6.9	7.7	7.9	8.1	8.0
Mozambique	4.2	5.0	3.4	2.3	2.6	3.1	3.5	3.7	3.0	2.3	1.7
Namibia	2.0	3.9	3.0	2.9	2.8	2.1	1.8	2.7	2.9	3.2	3.4
Niger	3.2	2.8	3.0	2.2	3.1	3.3	4.6	3.3	3.2	2.8	2.8
Nigeria	10.7	7.2	4.3	4.8	6.9	6.0	5.6	7.2	5.8	5.5	5.2
Rwanda	3.5	6.5	5.2	6.5	5.6	4.8	3.9	3.5	4.0	3.6	3.4
São Tomé & Príncipe	4.6	6.6	3.9	4.6	3.5	3.3	4.1	4.8	3.7	3.7	4.6
Senegal	3.5	4.9	3.8	3.4	3.4	3.7	4.5	4.6	4.5	4.4	4.3
Seychelles	0.8	2.2	2.6	2.6	2.7	3.2	3.9	4.2	3.8	3.6	3.6
Sierra Leone	3.8	3.4	1.6	1.8	2.2	2.0	3.5	3.8	3.5	3.5	3.8
South Africa	3.5	4.6	4.3	4.7	5.0	5.1	5.9	6.2	6.1	5.9	5.6
South Sudan	...	...	...	6.3	3.5	2.5	1.4	0.3	0.2	0.4	0.4
Swaziland	2.5	4.0	2.9	2.3	3.3	3.9	4.0	3.0	3.2	2.5	1.3
Tanzania	4.8	4.6	4.1	3.5	3.6	4.0	4.3	4.0	3.7	3.9	4.1
Togo	3.2	4.6	3.4	4.4	1.8	2.2	2.8	2.9	2.2	2.3	2.3
Uganda	5.6	4.9	3.9	3.7	4.5	4.8	5.1	4.8	4.5	4.2	4.1
Zambia	1.7	3.8	3.0	2.8	2.7	2.6	3.4	3.4	2.7	2.4	1.8
Zimbabwe <sup>2</sup>	0.2	0.9	0.6	0.6	0.6	0.5	0.5	0.7	0.7	0.6	0.6
<b>Sub-Saharan Africa</b>	<b>5.1</b>	<b>5.2</b>	<b>4.1</b>	<b>4.6</b>	<b>5.3</b>	<b>5.0</b>	<b>5.3</b>	<b>5.8</b>	<b>4.8</b>	<b>4.7</b>	<b>4.5</b>
<i>Median</i>	3.5	4.4	3.7	3.7	3.5	3.7	4.0	3.6	3.0	3.0	3.3
Excluding Nigeria and South Africa	3.8	4.2	3.9	4.3	4.3	4.2	4.7	4.7	3.8	3.7	3.6
<b>Oil-exporting countries</b>	<b>7.3</b>	<b>6.4</b>	<b>4.4</b>	<b>5.3</b>	<b>6.7</b>	<b>6.0</b>	<b>6.0</b>	<b>7.3</b>	<b>5.6</b>	<b>5.3</b>	<b>5.0</b>
Excluding Nigeria	3.7	4.8	4.7	6.1	6.4	6.0	6.9	7.7	5.2	4.9	4.6
<b>Oil-importing countries</b>	<b>3.6</b>	<b>4.3</b>	<b>3.9</b>	<b>4.1</b>	<b>4.1</b>	<b>4.1</b>	<b>4.6</b>	<b>4.6</b>	<b>4.3</b>	<b>4.2</b>	<b>4.1</b>
Excluding South Africa	3.7	4.0	3.5	3.4	3.3	3.4	3.8	3.6	3.3	3.3	3.3
<b>Middle-income countries</b>	<b>5.5</b>	<b>5.5</b>	<b>4.3</b>	<b>4.9</b>	<b>5.8</b>	<b>5.5</b>	<b>5.8</b>	<b>6.7</b>	<b>5.6</b>	<b>5.4</b>	<b>5.1</b>
Excluding Nigeria and South Africa	4.2	4.7	4.4	5.1	5.3	5.2	6.0	6.5	4.9	4.8	4.7
<b>Low-income countries</b>	<b>3.2</b>	<b>3.5</b>	<b>3.0</b>	<b>3.2</b>	<b>2.9</b>	<b>2.8</b>	<b>3.0</b>	<b>2.6</b>	<b>2.4</b>	<b>2.2</b>	<b>2.3</b>
Excluding low-income countries in fragile situations	4.3	4.2	3.6	3.4	3.2	3.3	3.5	3.3	3.1	2.8	2.8
<b>Countries in fragile situations</b>	<b>2.2</b>	<b>3.0</b>	<b>3.0</b>	<b>3.9</b>	<b>3.2</b>	<b>2.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.6</b>	<b>1.7</b>	<b>1.9</b>
CFA franc zone	4.0	4.9	4.3	4.6	4.3	4.2	4.5	3.8	2.3	2.4	2.5
CEMAC	4.2	5.2	4.3	5.0	5.2	4.9	5.3	4.4	1.9	2.3	2.5
WAEMU	3.7	4.7	4.4	4.1	3.4	3.6	3.6	3.3	2.7	2.5	2.5
COMESA (SSA members)	2.4	3.0	2.7	2.8	3.0	2.9	3.4	3.3	3.1	3.0	2.9
EAC-5	4.0	4.3	3.7	3.5	4.0	4.1	4.8	4.6	4.3	4.3	4.3
ECOWAS	7.7	6.3	4.1	4.6	6.0	5.4	5.1	6.3	5.0	4.7	4.5
SACU	4.0	5.0	4.5	4.9	5.1	5.2	6.0	6.3	6.3	6.1	5.9
SADC	3.7	4.5	4.2	4.8	5.0	5.0	5.9	6.3	5.5	5.3	5.0

See sources and footnotes on page 72.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Angola	27.6	58.4	57.4	57.2	56.4	57.7	60.5	72.7	68.0
Benin	31.6	43.0	46.9	50.9	51.5	55.6	60.3	67.7	70.0
Botswana	51.4	64.2	56.6	53.2	56.7	55.0	52.1	60.7	57.6
Burkina Faso	26.5	31.7	35.5	37.8	39.6	45.2	52.3	56.8	62.6
Burundi	28.8	31.5	33.6	33.4	31.2	30.3	31.0	30.8	31.1
Cabo Verde	90.0	98.5	103.0	111.2	120.6	134.5	137.0	143.0	...
Cameroon	22.7	26.1	28.7	29.7	28.3	29.9	30.1	31.1	32.4
Central African Rep.	12.6	15.8	17.3	19.1	19.2	25.7	25.4	24.6	24.1
Chad	7.3	9.4	10.0	10.3	11.0	11.7	14.6	17.0	21.2
Comoros	25.1	34.4	37.6	41.5	44.5	42.5	43.1	47.5	53.3
Congo, Dem. Rep. of	6.7	12.3	11.4	12.2	14.0	14.0	14.3	14.9	...
Congo, Rep. of	12.2	17.0	18.4	23.1	28.0	29.6	34.2	44.8	46.5
Côte d'Ivoire	22.3	27.0	29.5	35.0	33.9	35.1	38.1	42.5	45.1
Equatorial Guinea	8.8	14.2	16.1	14.1	18.0	20.2	21.8	26.0	28.1
Eritrea	143.7	126.0	124.7	113.2	104.5	110.4	102.7	...	...
Ethiopia	...	...	...	...	...	...	...	...	...
Gabon	23.6	26.5	23.4	25.5	28.8	32.3	29.9	33.3	34.0
Gambia, The	48.3	61.7	66.8	70.5	70.6	73.6	81.1	...	...
Ghana	29.7	40.1	39.5	38.1	37.3	39.6	46.4	46.9	...
Guinea	...	...	...	...	...	...	...	...	...
Guinea-Bissau	10.8	19.2	24.3	27.6	27.0	28.4	30.2	31.6	32.3
Kenya	57.4	54.1	56.0	57.6	58.1	60.7	63.7	63.7	...
Lesotho	36.9	43.3	43.5	40.1	39.3	46.3	45.4	47.5	40.7
Liberia	...	...	...	...	...	...	...	...	...
Madagascar	23.8	25.6	25.5	26.2	26.3	24.8	25.0	25.3	26.3
Malawi	15.3	23.5	27.3	29.8	31.8	31.6	30.2	32.1	...
Mali	27.6	32.3	34.9	33.2	33.9	39.1	45.0	49.4	51.3
Mauritius <sup>1</sup>	284.6	316.8	369.9	377.9	377.4	365.1	352.7	349.7	327.7
Mozambique	33.2	46.5	52.7	53.7	61.0	63.7	71.7	79.9	78.1
Namibia	66.3	95.3	93.3	93.6	88.1	85.2	81.6	88.9	...
Niger	13.2	20.0	22.7	23.1	24.4	26.0	28.6	29.8	31.0
Nigeria	27.5	39.0	31.2	30.4	29.2	30.1	30.5	29.7	31.1
Rwanda	23.9	22.7	25.5	31.5	31.7	35.3	37.8	38.2	38.0
São Tomé & Príncipe	63.1	80.3	81.1	78.6	84.0	81.8	79.4	80.1	73.0
Senegal	36.6	44.5	47.3	49.9	49.8	55.6	60.6	66.6	71.2
Seychelles	118.8	100.0	109.3	113.0	102.2	118.6	115.9	94.2	95.3
Sierra Leone	16.2	25.9	24.9	24.5	23.0	21.3	22.6	24.3	...
South Africa	116.4	120.9	116.3	115.4	115.1	111.2	112.8	123.5	...
South Sudan	...	...	...	6.7	14.7	13.4	19.3	68.7	73.5
Swaziland	27.3	34.3	34.2	34.9	33.2	35.2	34.1	35.9	38.6
Tanzania	24.2	27.7	30.0	28.8	29.0	28.8	29.4	31.3	...
Togo	37.2	47.0	52.8	60.1	64.5	74.2	72.4	78.1	90.6
Uganda	24.0	23.1	26.6	26.1	26.8	27.6	28.5	29.0	29.5
Zambia	24.9	25.9	25.5	25.8	27.6	29.2	31.8	38.1	32.5
Zimbabwe	...	...	...	...	...	...	...	...	...
<b>Sub-Saharan Africa</b>	<b>43.2</b>	<b>50.1</b>	<b>52.8</b>	<b>52.8</b>	<b>53.5</b>	<b>55.5</b>	<b>56.7</b>	<b>58.9</b>	<b>57.8</b>
<i>Median</i>	26.7	33.3	34.6	34.9	33.9	35.3	38.1	44.8	42.9
Excluding Nigeria and South Africa	41.7	48.6	51.7	51.8	52.5	54.7	55.9	57.9	58.8
<b>Oil-exporting countries</b>	<b>18.5</b>	<b>27.2</b>	<b>26.5</b>	<b>24.6</b>	<b>26.8</b>	<b>28.1</b>	<b>30.1</b>	<b>40.4</b>	<b>41.9</b>
Excluding Nigeria	17.1	25.3	25.7	23.8	26.5	27.8	30.1	41.9	43.4
<b>Oil-importing countries</b>	<b>48.4</b>	<b>55.0</b>	<b>58.4</b>	<b>59.6</b>	<b>59.9</b>	<b>62.2</b>	<b>63.1</b>	<b>63.6</b>	<b>63.6</b>
Excluding South Africa	46.3	52.9	56.6	57.9	58.2	60.6	61.6	61.6	63.6
<b>Middle-income countries</b>	<b>57.4</b>	<b>66.3</b>	<b>69.0</b>	<b>70.2</b>	<b>70.6</b>	<b>72.7</b>	<b>72.9</b>	<b>75.9</b>	<b>68.1</b>
Excluding Nigeria and South Africa	55.8	64.8	68.5	69.9	70.4	72.9	73.1	75.9	70.8
<b>Low-income countries</b>	<b>29.0</b>	<b>34.0</b>	<b>36.5</b>	<b>36.2</b>	<b>37.2</b>	<b>39.2</b>	<b>41.2</b>	<b>40.9</b>	<b>47.5</b>
Excluding low-income countries in fragile situations	25.2	30.7	34.3	36.0	37.7	40.3	44.1	47.5	51.5
<b>Countries in fragile situations</b>	<b>31.3</b>	<b>36.8</b>	<b>38.7</b>	<b>37.9</b>	<b>39.0</b>	<b>40.4</b>	<b>41.7</b>	<b>40.8</b>	<b>47.4</b>

See sources and footnotes on page 72.

**Table SA28. Banking Sector: Loan-to-Deposit Ratio<sup>1</sup>**  
(Percent of deposits)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Angola	42.6	55.8	72.5	79.3	89.1	85.8	75.0	67.2	60.2
Benin	75.0	76.5	73.0	75.2	73.8	73.2	72.9	64.4	62.1
Botswana	55.8	55.4	55.4	67.5	74.0	79.1	82.5	76.4	76.9
Burkina Faso	85.3	78.3	73.1	74.8	79.8	86.1	90.9	87.9	80.8
Burundi	67.7	59.3	63.5	80.1	81.1	73.8	73.5	71.1	67.4
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	87.9	90.3
Central African Rep.	118.0	98.2	103.7	99.6	109.1	108.3	108.2	99.1	100.9
Chad	82.7	85.5	73.4	73.5	77.5	80.2	80.9	83.3	87.7
Comoros	49.5	54.2	57.6	55.1	56.5	64.7	67.9	70.0	67.0
Congo, Dem. Rep. of	49.7	58.6	57.5	68.8	68.0	68.7	71.4	73.7	...
Congo, Rep. of	36.4	38.7	39.5	38.3	49.8	59.6	55.3	72.8	82.0
Côte d'Ivoire	89.5	85.0	77.8	67.2	71.8	76.4	75.3	79.8	82.3
Equatorial Guinea	43.0	56.6	59.0	68.1	38.0	48.1	54.1	74.9	91.5
Eritrea	24.6	25.3	23.8	24.0	24.7	23.3	21.9	...	...
Ethiopia	...	...	...	...	...	...	...	...	...
Gabon	62.5	59.6	62.7	62.9	65.1	77.7	81.4	73.3	80.0
Gambia, The	38.0	42.1	43.7	40.8	39.9	37.5	30.8	...	...
Ghana	73.3	73.4	65.5	57.9	63.2	69.5	70.6	70.3	...
Guinea	...	...	...	...	...	...	...	...	...
Guinea-Bissau	42.9	94.0	66.1	66.0	92.1	83.5	72.5	85.0	83.5
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	50.8
Liberia	...	...	...	...	...	...	...	...	...
Madagascar	...	...	...	...	...	...	...	...	...
Malawi	...	...	...	...	...	...	...	...	...
Mali	79.2	72.2	71.7	76.0	76.7	80.6	80.3	81.1	86.2
Mauritius	65.5	67.7	68.2	80.9	77.2	72.6	74.9	68.0	66.8
Mozambique	53.3	67.7	74.4	74.4	71.1	74.4	73.5	61.7	66.2
Namibia	110.1	73.6	73.9	74.8	78.3	81.1	88.8	92.5	...
Niger	78.1	90.3	78.5	93.9	90.1	99.0	90.2	96.6	102.6
Nigeria	76.3	79.1	64.0	56.2	54.8	57.4	65.3	68.3	77.9
Rwanda	78.4	85.9	83.2	88.7	94.9	84.4	86.2	81.3	85.9
São Tomé & Príncipe	66.7	74.9	108.3	110.5	82.4	75.4	58.5	75.0	71.1
Senegal	81.8	81.8	77.9	84.1	84.8	88.0	85.4	79.3	82.3
Seychelles	30.9	30.7	35.9	33.9	34.7	28.9	31.8	42.6	43.8
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	8.7
Swaziland	96.7	79.6	74.4	85.8	79.8	81.7	86.2	79.3	72.8
Tanzania	52.0	64.6	62.1	67.1	69.9	71.2	75.6	81.4	...
Togo	72.9	63.3	68.1	73.6	77.8	86.2	75.5	78.7	72.6
Uganda	58.8	71.4	77.2	85.5	79.5	80.0	74.6	75.4	75.8
Zambia	50.5	60.1	52.9	56.5	65.2	61.1	65.7	60.1	54.1
Zimbabwe	...	...	...	...	...	...	...	...	...
<b>Sub-Saharan Africa</b>	<b>65.2</b>	<b>67.8</b>	<b>67.4</b>	<b>68.6</b>	<b>69.8</b>	<b>70.8</b>	<b>70.1</b>	<b>73.1</b>	<b>73.4</b>
<i>Median</i>	65.6	69.9	68.8	73.5	74.0	75.4	74.6	75.0	76.9
Excluding Nigeria and South Africa	63.3	66.0	66.0	67.7	68.9	69.8	68.9	72.0	73.3
<b>Oil-exporting countries</b>	<b>59.0</b>	<b>63.4</b>	<b>62.9</b>	<b>57.3</b>	<b>58.3</b>	<b>63.2</b>	<b>63.2</b>	<b>66.9</b>	<b>72.3</b>
Excluding Nigeria	56.1	60.8	62.8	57.4	58.8	64.0	62.9	66.7	71.5
<b>Oil-importing countries</b>	<b>66.6</b>	<b>68.8</b>	<b>68.4</b>	<b>71.5</b>	<b>72.8</b>	<b>72.7</b>	<b>71.9</b>	<b>74.8</b>	<b>73.9</b>
Excluding South Africa	64.7	67.1	66.6	70.1	71.3	71.2	70.3	73.3	73.9
<b>Middle-income countries</b>	<b>66.6</b>	<b>67.0</b>	<b>68.1</b>	<b>70.1</b>	<b>70.4</b>	<b>71.7</b>	<b>72.1</b>	<b>73.8</b>	<b>72.2</b>
Excluding Nigeria and South Africa	62.9	63.4	65.4	68.5	68.6	69.8	69.9	71.6	71.8
<b>Low-income countries</b>	<b>63.6</b>	<b>68.6</b>	<b>66.6</b>	<b>67.0</b>	<b>69.2</b>	<b>69.9</b>	<b>68.0</b>	<b>72.3</b>	<b>74.8</b>
Excluding low-income countries in fragile situations	68.7	76.4	74.5	79.9	79.9	81.2	80.6	78.4	78.9
<b>Countries in fragile situations</b>	<b>61.2</b>	<b>64.2</b>	<b>64.4</b>	<b>62.0</b>	<b>64.0</b>	<b>64.7</b>	<b>61.2</b>	<b>69.9</b>	<b>73.6</b>

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