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**Sub-Saharan Africa
Fiscal Adjustment and
Economic Diversification**

.....

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Abbreviations

BEAC	Bank of Central African States
CAPB	cyclically adjusted primary balance
CBRs	correspondent banking relationships
CEMAC	Economic and Monetary Community of Central Africa
EAC	East African Community
EMDEs	emerging market and developing economies
EMEDEV	all emerging market economies
GDP	gross domestic product
ICRG	International Country Risk Guide
LPM	local projections method
REO	Regional Economic Outlook (IMF)
SARB	South Africa Reserve Bank
SSA	Sub-Saharan Africa
SDGs	Sustainable Development Goals
WAEMU	West African Economic and Monetary Union
WEO	World Economic Outlook (IMF)

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The following conventions are used in this publication:

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

Executive Summary

THE QUEST FOR RECOVERY

The broad-based slowdown in sub-Saharan Africa is easing, but the underlying situation remains difficult. Growth is expected to reach 2.6 percent in 2017, but the pickup reflects mainly one-off factors, notably a recovery in oil production in Nigeria and the easing of drought conditions in eastern and southern Africa, and a somewhat improved external environment. Even with this uptick, growth will barely surpass the rate of population growth. While a third of the countries in the region continue to grow at 5 percent or more, in 12 countries, comprising over 40 percent of the region's population, income per capita is expected to decline. Growth in the region is expected to pick up further in 2018 and reach 3.4 percent, but ongoing policy uncertainty in Nigeria and South Africa hinders a stronger rebound, and growth is not expected to increase further in 2019. Many of the faster growing economies continue to be driven by public spending, with debt levels and debt service costs rising.

The external environment has improved, but the recovery remains modest and vulnerabilities are rising.

- Strengthening global growth, including in key trading partners such as China and the euro area, provides some positive tailwinds to growth in sub-Saharan Africa. In addition, increased appetite for yield has fostered a rebound in sovereign bond issuances by the region's frontier economies; however, low commodity prices continue to weigh on growth prospects for commodity exporters.
- Public debt as a share of GDP has increased since 2013 and is now above 50 percent of GDP in close to half of the region's economies. The number of low-income countries in debt distress or facing high risk of debt distress increased from 7 in 2013 to 12 in 2016, and all of the region's frontier markets or other countries with credit ratings, except Namibia, have been downgraded below investment grade. The debt increase has been driven by a widening in fiscal deficits, slow growth, the slump in commodity prices, and exchange rate depreciations in some countries. While current accounts have improved and exchange market pressures eased somewhat, international reserves are below adequacy levels in many countries.

Reflecting this buildup of vulnerabilities, downside risks dominate. Delays in implementing policy adjustments could reduce fiscal space for progrowth expenditures, crowd out private investment, and adversely impact the external sector. Elevated public debt levels raise concerns about debt sustainability in the region, while the spiraling banks-sovereign nexus could further strain the financial sector. Many countries also face risks stemming from the disruption in correspondent bank relationships.

In this context, implementing the fiscal consolidations planned in many countries, together with structural reforms to tackle constraints on growth, is the key policy priority.

Fiscal consolidation needs are largest and most pressing in the oil-exporting countries. In some cases (such as Angola) a considerable adjustment has already been made, mostly by cutting capital spending. Going forward, oil-exporting countries should focus on raising noncommodity revenues and targeted reductions in recurrent spending. Nevertheless, where consolidation is urgent, notably in oil-exporting countries, cuts in public investment may be unavoidable. Other countries also need to initiate fiscal consolidation, albeit to a smaller extent, focusing also on the composition and efficiency of spending.

Sub-Saharan African countries also need to implement structural reforms and seize opportunities to enhance growth above current projections through structural transformation and export diversification, including by improving access to credit, infrastructure, and the regulatory framework, and building a skilled workforce.

THE IMPACT OF FISCAL CONSOLIDATION ON GROWTH IN SUB-SAHARAN AFRICA

The second chapter examines the effects on output from changes in public expenditure and revenue in sub-Saharan African countries during 1990–2016. Past fiscal consolidations—defined as periods during which fiscal positions improved based on spending cuts or noncommodity revenue mobilization—have typically been associated with negative effects on output.

The estimated effects on output from changes in fiscal policy—fiscal multipliers—are generally smaller in sub-Saharan African economies than those identified in advanced or emerging market economies. On average in sub-Saharan Africa, fiscal consolidations based on reducing public investment have had the largest contractionary effect on output, those based on current spending cuts or on revenue mobilization, have smaller effects on output. However, the impact depends critically on country characteristics, the supporting policy environment, and the efficiency of spending and the strength of institutions.

These findings suggest that countries in the region should focus on revenue mobilization to mitigate the negative impact of fiscal consolidation on growth. However, as revenue mobilization takes time, cuts in expenditures may be unavoidable, particularly in countries facing an urgent need to undertake adjustment. In such cases, it is important to protect both key infrastructure spending, so as to not unduly constrain future growth prospects, and to place priority on social spending on health, education, and social safety nets in order to minimize impacts on lower-income households.

ECONOMIC DIVERSIFICATION IN SUB-SAHARAN AFRICA

The third chapter takes stock of progress with economic diversification in sub-Saharan Africa. The picture is not uniform. At the aggregate level, structural transformation has been slower than in other regions. Still, workers have moved from low-productivity agriculture into higher-productivity manufacturing and services jobs, contributing to overall productivity growth. Moreover, some of the region's other resource-intensive economies and non-resource-intensive economies have achieved export diversification at a similar pace as global peers. In contrast, the region's oil exporters have seen increased specialization, reflecting higher oil prices and new production.

Structural transformation and export diversification are positively associated with growth, in particular at early stages of development. Cross-country regressions suggest that macroeconomic stability, access to credit, good infrastructure, a conducive regulatory environment, a skilled workforce, and equality have been associated with higher economic diversification. Country case studies highlight the heterogeneity of growth experiences. A common element of successful policy interventions is that they build on a country's endowments and expand underlying capabilities. Addressing market failures can help, as can trade integration.

1. The Quest for Recovery

The broad-based slowdown in sub-Saharan Africa is easing, but the underlying situation remains difficult. Growth is expected to pick up from 1.4 percent in 2016 to 2.6 percent in 2017, reflecting one-off factors—particularly, the rebound in Nigeria’s oil and agricultural production, the easing of drought conditions that impacted much of eastern and southern Africa in 2016 and early 2017—and a more supportive external environment. While 15 out of 45 countries continue to grow at 5 percent or faster, growth in the region as a whole will barely surpass the rate of population growth, and in 12 countries, comprising over 40 percent of sub-Saharan Africa’s population, income per capita is expected to decline in 2017.

A further pickup in growth to 3.4 percent is expected in 2018, but momentum is weak, and growth will likely remain well below past trends in 2019 (Figure 1.1). Ongoing policy uncertainty in Nigeria and South Africa continues to restrain growth in the region’s two largest economies. Excluding these two economies, the average growth rate in the region is expected to be 4.4 percent in 2017, rising to 5.1 percent in 2018–19. But even where growth remains strong, in many cases it continues to rely on public sector spending, often at the cost of rising debt and crowding out of the private sector.

Key downside risks to the region’s growth outlook emanate from the larger economies, where elevated political uncertainty could delay needed policy adjustments and dampen investor and consumer confidence. Some progress has, however, been made to address the policy inertia in the Central African Economic and Monetary Community (CEMAC) as most hard-hit oil exporters have embarked on adjustment programs to facilitate economic recovery, while discussions with the remaining two CEMAC members are underway.

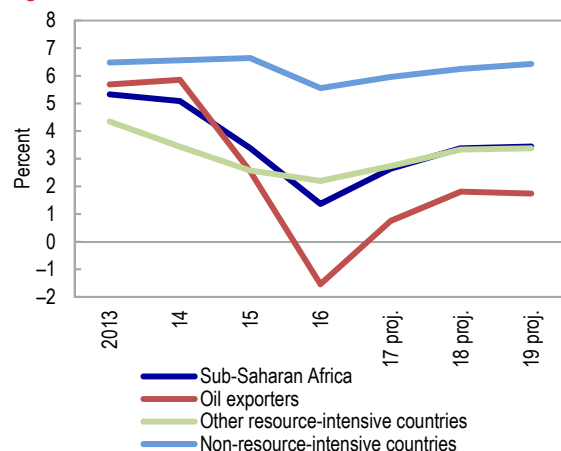
This chapter was prepared by a team led by Jaroslaw Wieczorek and composed of Romain Bouis, Paolo Cavallino, Cleary Haines, and Nkunde Mwase.

The evolution of the global environment since 2016 has become more favorable for sub-Saharan Africa. Commodity prices (notably oil) remain low but above last year’s troughs. Global growth is on track to exceed 3½ percent in 2017–18, with higher-than-expected growth in the euro area and China, both of which have strong trade and investment links with sub-Saharan Africa. Moreover, increased appetite for yield has translated into improved market access for the region’s frontier economies, reflected in Eurobond issuances by Côte d’Ivoire, Nigeria, and Senegal in the first half of 2017.

On the domestic front, many countries are facing rising vulnerabilities:

- Public debt rose above 50 percent of GDP in 22 countries at end-2016 (Figure 1.2). Debt servicing costs are becoming a burden, especially in oil-producing countries, and in Angola, Gabon, and Nigeria are expected to absorb more than 60 percent of government revenues in 2017. Fiscal risks are also starting to materialize in several fast-growing non-resource-intensive countries, partly reflecting security developments and a decline in cocoa prices (Côte d’Ivoire) and fiscal slippages during an election year (Ghana, Kenya).

Figure 1.1. Sub-Saharan Africa: Real GDP Growth, 2013–19



Source: IMF, World Economic Outlook database.

Note: proj. = projection. See page 76 for country groupings table.

- Growing exposure to the sovereign and the accumulation of domestic arrears have magnified pressures in the financial sector, as evidenced in higher nonperforming loans (Angola, Ghana, Nigeria), a sharp decrease in the growth of credit to the private sector (CEMAC, Zambia), and bank undercapitalization (Nigeria).
- While current account deficits have started to narrow and exchange market pressures appear to have abated, in part in response to much needed monetary tightening, international reserves have fallen below adequacy levels in many countries, especially those with fixed exchange rate regimes.

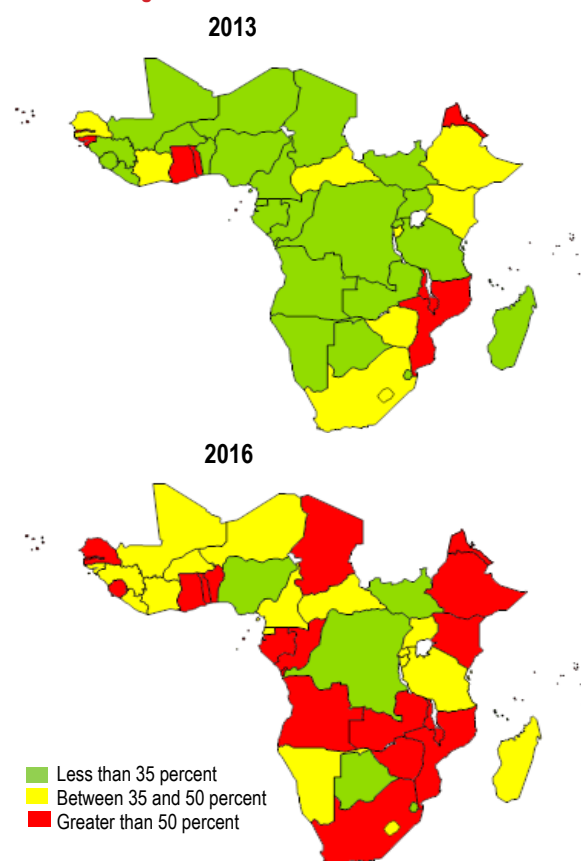
In this context, addressing fiscal vulnerabilities emerges as a key policy priority in many countries, which needs to go hand in hand with renewed efforts to tackle constraints on growth. While medium-term growth projections in most sub-Saharan African countries incorporate an appropriate degree of fiscal adjustment, the challenge is to implement these plans in a timely manner and avert a further buildup of vulnerabilities.

- Consolidation needs are largest and most pressing in the oil-exporting countries, which must adjust to oil revenues now less than half their 2013 level and expected to decrease further, as a percentage of GDP, in the near term. For these countries, raising noncommodity revenues should be the primary area of focus, but cutting unproductive public spending—including inefficient investment—is also needed to put public finances on a solid footing.
- In most other economies, consolidation needs are considerably smaller but require countries to commit to credible medium-term adjustment paths. Here, the focus should be on reducing inefficient recurrent spending (such as unproductive subsidies), enhancing the efficiency of capital spending, and raising noncommodity revenues, in part to create room for high-priority public investment and other spending with desirable growth and social impacts.

- Sub-Saharan African countries can also seize opportunities to enhance growth above current projections through structural transformation and export diversification. Strengthening macroeconomic stability in itself carries a large premium, but beyond that, many countries could also strengthen their growth prospects by improving access to credit, infrastructure and the regulatory environment, and building a skilled workforce.

Against this backdrop, Chapter 2 lays out choices regarding the path and composition of fiscal consolidation in order to contain its impact on output and incomes, and to ensure sufficient fiscal space for priority spending. By looking at past episodes of fiscal consolidation in sub-Saharan Africa, Chapter 2 examines output responses across country characteristics and states of the economy and identifies policies that can mitigate the potential contractionary effects of fiscal consolidation.

Figure 1.2. Sub-Saharan Africa: Total Public Debt as a Percentage of GDP



Source: IMF, World Economic Outlook database.

Finally, Chapter 3 reviews progress on economic diversification in sub-Saharan Africa and its association with economic growth. Cross-country experiences show that policies need to build on a country's endowments and existing strengths and be tailored to tackle specific challenges in order to yield successful diversification. The chapter seeks to identify policies that facilitate structural transformation and export diversification, using cross-country data and country case studies.

A MODEST RECOVERY IS UNDERWAY

A Gradually Improving External Environment

The external environment for sub-Saharan Africa improved with a shift in the composition of global growth and markedly better financing conditions for the region's frontier markets. However, the outlook for commodity prices remains weak.

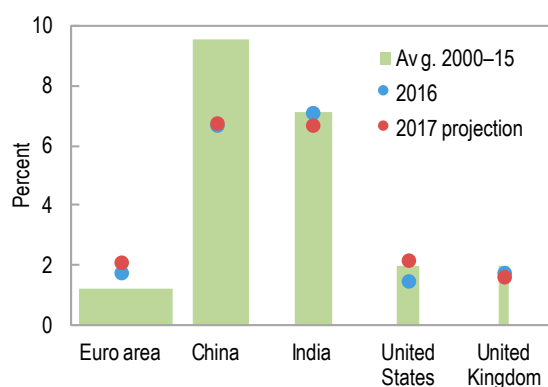
The October 2017 *World Economic Outlook* projects global growth at 3.6 percent in 2017 and 3.7 percent in 2018, slightly above the April 2017 *World Economic Outlook* forecasts. Growth in China is still below the levels seen in the recent past, and the growth projection for the United States has been revised downward a notch, reflecting lowered expected fiscal stimulus. Overall, in the first half of

2017, growth surprised on the upside in the euro area and China and was strong in India, the three export destinations that account for the bulk of sub-Saharan Africa's exports to the rest of the world (Figure 1.3).

Low commodity prices continue to weigh heavily on sub-Saharan Africa's growth outlook. After a slight rebound in 2016, commodity prices have stabilized at relatively low levels compared with their earlier peaks, with oil and iron ore prices less than half their 2013 highs (Figure 1.4). In addition, there were sizable drops in the prices of agricultural raw materials in the first half of 2017, including key sub-Saharan African agricultural commodities (for example, cocoa), though some items (coffee, tea) witnessed price increases.

At the same time, external financing conditions have improved markedly since 2016, with several sub-Saharan African frontier economies (Côte d'Ivoire, Nigeria, Senegal) returning to the market in the first half of 2017 and another (Angola) planning to do so soon. International sovereign bond issuances by the region's frontier markets in 2017 reached \$4.6 billion through June, compared with \$750 million in 2016 as a whole (Figure 1.5). The difference between the spreads of sub-Saharan African frontier markets and comparable emerging markets has decreased (Figure 1.6).

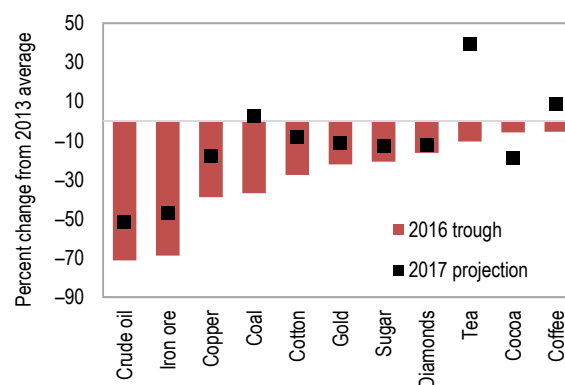
Figure 1.3. Sub-Saharan Africa Trading Partners: Real GDP Growth, 2010–17



Source: IMF, World Economic Outlook database.

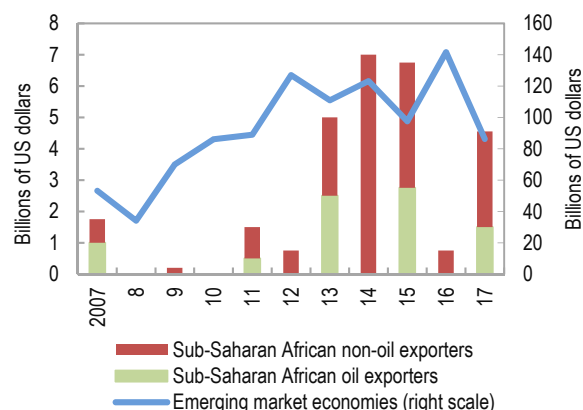
Note: The width of the bars corresponds to the countries' share of exports as a percentage of total sub-Saharan African exports in 2016. Avg. = average.

Figure 1.4. Change in Selected Commodity Prices since 2013



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

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

Figure 1.5. Sub-Saharan African Frontier Market Economies: International Sovereign Bond Issuances

Source: Bloomberg Finance L.P.

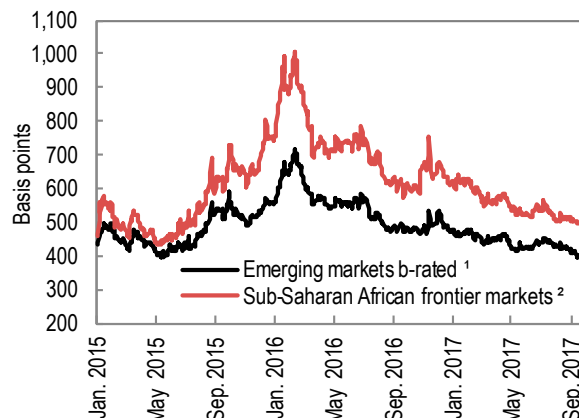
Note: Data through June 2017. See page 76 for country groupings table.

Push rather than pull factors appear to be the predominant drivers of sub-Saharan Africa's improved access to international finance.¹

A Modest Growth Pickup Is Expected in 2017...

Growth in sub-Saharan Africa is expected to reach 2.6 percent in 2017, nearly double that in 2016, but still well below past trends and barely above population growth.

With a good harvest and a recovery in oil production after the easing of tensions in the Niger Delta, Nigeria is expected to contribute more than half of the added growth in 2017. Smaller contributions from the other two largest economies reflect a rebound in oil production in Angola, and an uptick in mining and a good harvest in South Africa (Figure 1.7), but growth rates continue to be very low in each of these economies. Growth also remains subdued in the CEMAC oil-producing countries; only strong non-oil GDP growth in Cameroon is keeping growth in that region in positive territory (Figure 1.8).

Figure 1.6. Sub-Saharan African Frontier Markets and Emerging Market B-Rated Spreads, 2015–17

Source: Bloomberg Finance L.P.

Note: Data as of September 12, 2017.

¹ Includes only sovereign bonds.² Angola, Cameroon, Côte d'Ivoire, Gabon, Ghana, Kenya, Mozambique, Namibia, Nigeria, Senegal, Tanzania, Zambia.

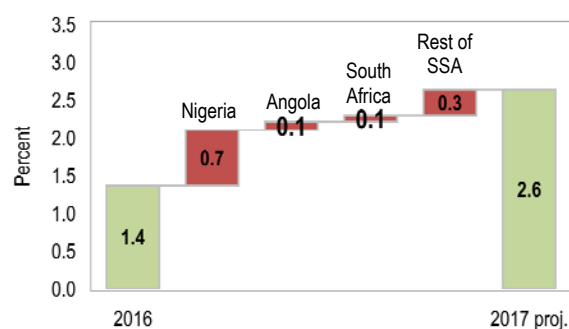
Growth in the rest of sub-Saharan Africa is higher, on average just short of 5 percent and close to the levels seen in the region since the early 2000s. With the easing of drought conditions, notably in southern Africa, growth is set to increase as agricultural output rebounds in Malawi and Zambia, where good rains also boosted electricity production.² Meanwhile, the growth momentum has weakened in hitherto fast-growing countries, such as Côte d'Ivoire, where postconflict catch-up effects are fading, and Uganda, where drought and slowing private sector credit impacted growth, at least temporarily.

Growth is gaining traction in some countries in fragile situations, including those affected by the 2015 Ebola outbreak, although Sierra Leone faces renewed challenges in the wake of a recent natural disaster. In others (Burundi, South Sudan), growth prospects continue to be weak, constrained by internal conflict (Box 1.1).

¹ Applying the coefficients reported in Box 1.2 of the October 2016 *Regional Economic Outlook: Sub-Saharan Africa*, to recent changes in spread determinants indicates that the decline in sub-Saharan African spreads since the end of 2016 has been mostly driven by global factors: lower volatility in global financial markets (proxied by the VIX index); lower perception of uncertainty (evidenced by lower US term premiums); lower funding costs (a smaller LIBOR-Overnight Indexed Spread); and higher or stable commodity prices. In contrast, domestic macroeconomic fundamentals, such as GDP per capita growth rate, the public-debt-to-GDP ratio, and international reserves as a share of GDP, have all deteriorated in the average sub-Saharan African frontier market. Only inflation and current account imbalances improved slightly on average.

² Hydroelectric sources account for 97 percent of total electricity production in Zambia (World Bank).

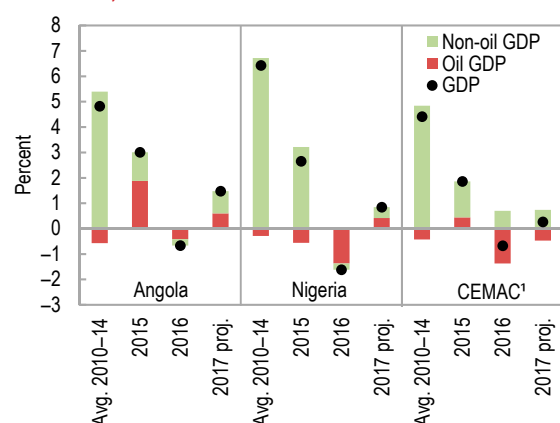
Figure 1.7. Sub-Saharan Africa: Contributions to Change in Real GDP Growth, 2016–17



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

Note: proj. = projection; SSA = sub-Saharan Africa.

Figure 1.8. Sub-Saharan African Oil Exporters: Contributions to Real GDP, 2010–17

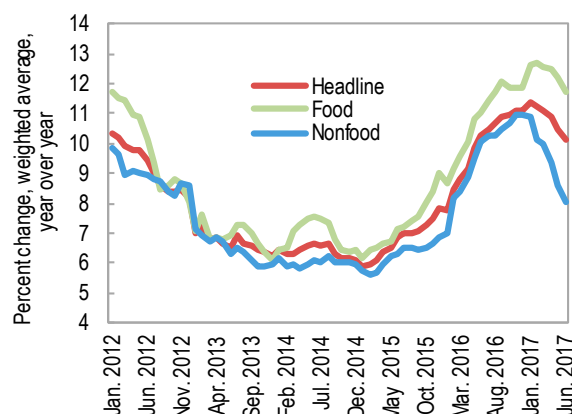


Source: IMF, World Economic Outlook database.

Note: Avg. = average; CEMAC = Central African Economic and Monetary Community; proj. = projection.

¹ CEMAC excludes the Central African Republic, as it is not classified as an oil exporter.

Figure 1.9. Sub-Saharan Africa: Inflation, January 2012–March 2017



Source: Country authorities.

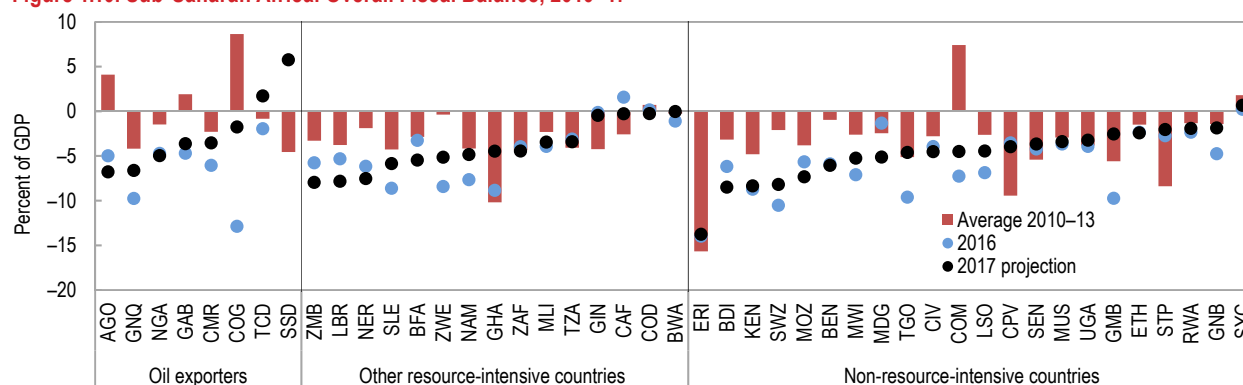
...and Inflation Pressures Are Gradually Receding

Following the commodity price shock, inflation rose sharply during 2015–16, mainly reflecting the pass-through of large currency depreciations in several resource-intensive countries, including Angola and Nigeria. Regionwide, year-over-year inflation began to recede in early 2017 (Figure 1.9) and is expected to drop in 2017 by more than 2 percentage points (from 12.5 percent in 2016). Inflation pressures have eased in Angola and Nigeria with monetary tightening and greater exchange rate stability, as well as in Ghana, Malawi, and Zambia, which also had experienced inflation surges. More recently, several East African countries saw a temporary pickup in inflation in early 2017, following a drought-induced spike in food prices. In Kenya, food price inflation increased from 11.2 percent in December 2016 to a peak of 21.5 percent in May 2017, and headline inflation stayed above the 7.5 percent upper bound of the authorities' target range through June. A similar pattern has occurred in Rwanda, Tanzania, and Uganda. Subsequently, inflation has fallen in these three countries and in Kenya, where government measures aimed to increase maize imports helped bring inflation below 7.5 percent in July. In Madagascar food prices rose sharply after a cyclone devastated its rice crop in March 2017.

Fiscal Deficits Are Stabilizing...

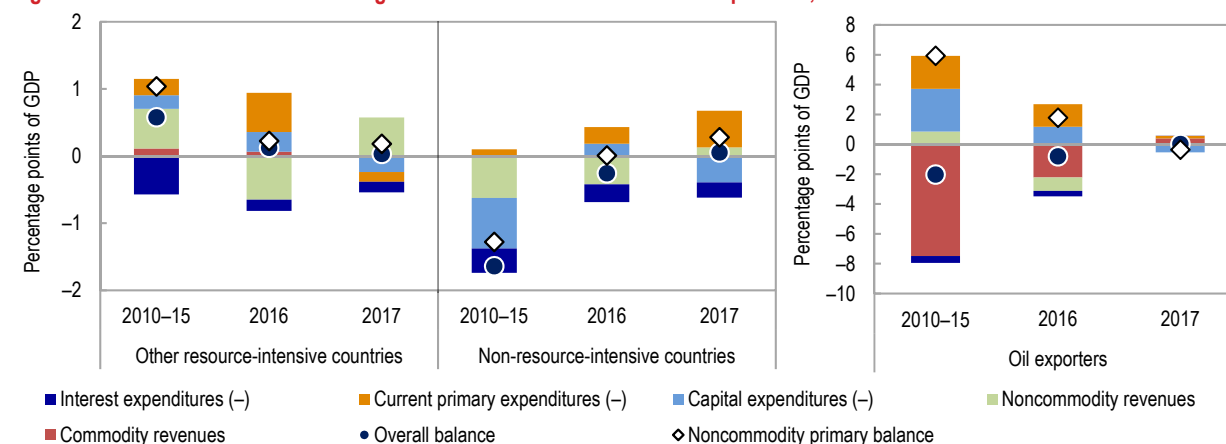
The deterioration of fiscal balances experienced by many sub-Saharan African countries in recent years is expected to abate in 2017, with fiscal deficits expected to stabilize at their 2016 levels. For many countries, however, these levels remain high—two-thirds of the sub-Saharan African countries are running fiscal deficits in 2017 above their average 2010–13 levels, including several countries where fiscal deficits have widened in recent years in the context of already strong economic growth (Figure 1.10).

- Oil exporters are set to maintain their (weighted) average fiscal deficit at 5 percent of GDP in 2017, broadly unchanged from 2016, but their noncommodity primary deficit (of about 7½ percent of GDP in 2017) is expected to be about 0.3 percentage point of GDP higher than in 2016 (Figure 1.11). This marginal deterioration in the noncommodity primary balance

Figure 1.10. Sub-Saharan Africa: Overall Fiscal Balance, 2010–17

Source: IMF, World Economic Outlook database.

Note: See page 76 for country groupings table and page 78 for country abbreviations.

Figure 1.11. Sub-Saharan Africa: Change in Overall Fiscal Balance and Components, 2010–17

Source: IMF, World Economic Outlook database.

Note: An increase (decrease) in revenue contributes positively (negatively) to the change in fiscal position. An increase (decrease) in expenditure contributes negatively (positively) to the change in fiscal position. See page 76 for country groupings table.

is driven by developments in Nigeria and Angola. In Nigeria, a recovery in oil production is compensating for the continuing weakness in non-oil revenues, while financing constraints slow budget execution, restraining expenditures. In Angola, non-oil revenues continue to decline as the impact of the oil price shock and subsequent cuts in capital spending spreads to all sectors of the economy. In contrast, the oil-producing CEMAC countries are expected to see a strengthening in both their overall fiscal balances and their noncommodity primary balances due to expenditure cuts in Cameroon, Equatorial Guinea, and the Republic of Congo, while higher non-oil revenues will create some fiscal space in Chad and Gabon (Box 1.2).

- In other resource-intensive countries, the overall deficit is expected to remain at about 4 percent of GDP. In South Africa, despite consolidation efforts, a modest widening of the fiscal deficit is expected for 2017 due primarily to a weak growth rebound. An increase in capital spending is expected to widen deficits in Burkina Faso and Niger, while the consolidation process will continue in Ghana and Namibia. In Zimbabwe, the deficit will remain elevated despite efforts to contain expenditures.
- In non-resource-intensive economies, the overall fiscal deficit is also expected to remain unchanged, but at about 5 percent of GDP, and with a shift in the composition of spending

from current to capital. Revenue collection is expected to be lower than budgeted in Côte d'Ivoire (due to the drop in cocoa prices) and Kenya, while the scaling up of infrastructure investment will widen the deficit in Madagascar. Consolidation efforts, equally distributed between expenditure cuts and revenue measures, are expected to improve fiscal balances in The Gambia, Guinea-Bissau, and Togo.

...and Monetary Policy Has Responded to Inflationary Pressures

Monetary policy responses have varied widely across the region (Figure 1.12). In oil-exporting countries, after easing in the immediate aftermath of the commodity price collapse, the monetary policy stance was tightened during 2016. This change reflected the growing need to respond to mounting external and inflationary pressures exerted by large fiscal deficits.

- In Angola, raising the policy rate from 12 to 16 percent between March and June 2016 entailed a sharp drop in banks' excess liquidity and a reversal in base money growth from 25 percent in May 2016 to year over year –15.7 percent in May 2017.
- In Nigeria, where the central bank maintained an exchange rate peg until mid-June 2016, the policy rate was increased from 11 to 12 percent in March and to 14 percent in July 2016; however, the effectiveness of this tightening was

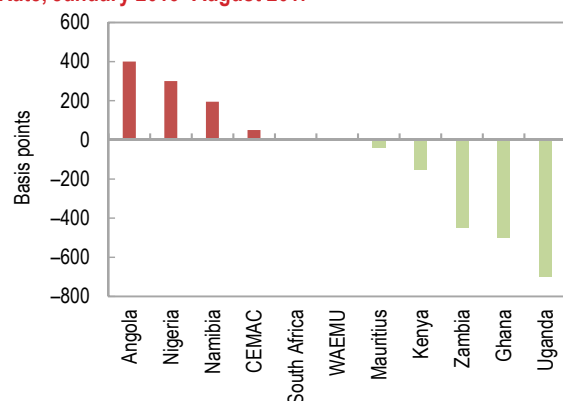
limited in the context of excess naira liquidity, which was only later reined in by increased central bank foreign exchange interventions.

- In the CEMAC, the regional central bank (Banque des États de l'Afrique Centrale—BEAC) raised the policy rate by 50 basis points (to 2.95 percent) in March 2017, after an accommodative period that witnessed a large loss of reserves. The BEAC also announced a gradual elimination of its statutory advances to member countries' governments and the imposition of ceilings on the amounts of government securities that can be accepted as collateral for bank refinancing.

Meanwhile, monetary policy in other countries, mostly with flexible exchange rate regimes, has been broadly accommodative as inflationary pressures have diminished.

- In South Africa, the policy rate was cut at the end of July 2017 for the first time in five years (by 25 basis points) to 6.75 percent in a context of lower inflation, which dropped below 6 percent in the second quarter of 2017, and weak growth. In Namibia, consistent with the peg to the rand, the central bank followed the South Africa Reserve Bank and lowered the policy rate from 7 to 6.75 percent in August 2017.
- In Kenya, Tanzania, and Uganda, the monetary policy stance has been appropriately accommodative, focusing on core inflation, which remained subdued, even though headline inflation rose sharply following a temporary spike in food prices. In Uganda, for example, consistent with its inflation-targeting regime introduced in 2011, the central bank successfully kept core inflation in a narrow band around its 5 percent target; guided by its core inflation forecast and considering the weak growth outlook, it reduced its policy rate by 700 basis points from April 2016 to July 2017 (Box 1.3).
- In Ghana, the central bank cut its benchmark interest rate by 500 basis points from November 2016 to August 2017, following the downward trend in core inflation.

Figure 1.12. Sub-Saharan Africa: Change in Monetary Policy Rate, January 2016–August 2017



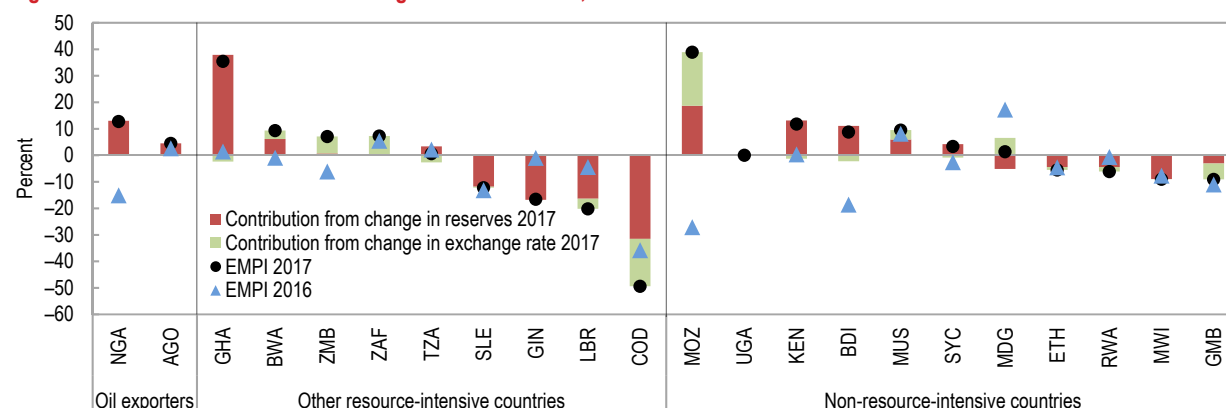
Sources: Haver Analytics; and IMF, *International Financial Statistics*.
 Note: CEMAC = Central African Economic and Monetary Community;
 WAEMU = West African Economic and Monetary Union.

In Many Countries, Exchange Market Pressures Have Eased...

Strong negative exchange market pressures experienced by several countries in recent years started to recede in 2017 (Figure 1.13). This reflected a combination of factors: tighter domestic policies (Mozambique, Uganda); improved trade balances as commodity revenues strengthened (Nigeria, Zambia); and increased foreign financing, including sovereign bond issuances (Nigeria) and other forms

of borrowing abroad (Ghana, Zambia).³ In Nigeria, the easing of pressures facilitated some steps toward liberalizing access to foreign exchange, which has encouraged portfolio inflows and contributed to the narrowing of the parallel market spread from 60 percent in February 2017 to less than 20 percent in August 2017. In contrast, pressures remain high in a number of low-income, resource-intensive countries (Democratic Republic of the Congo, Guinea, Liberia).

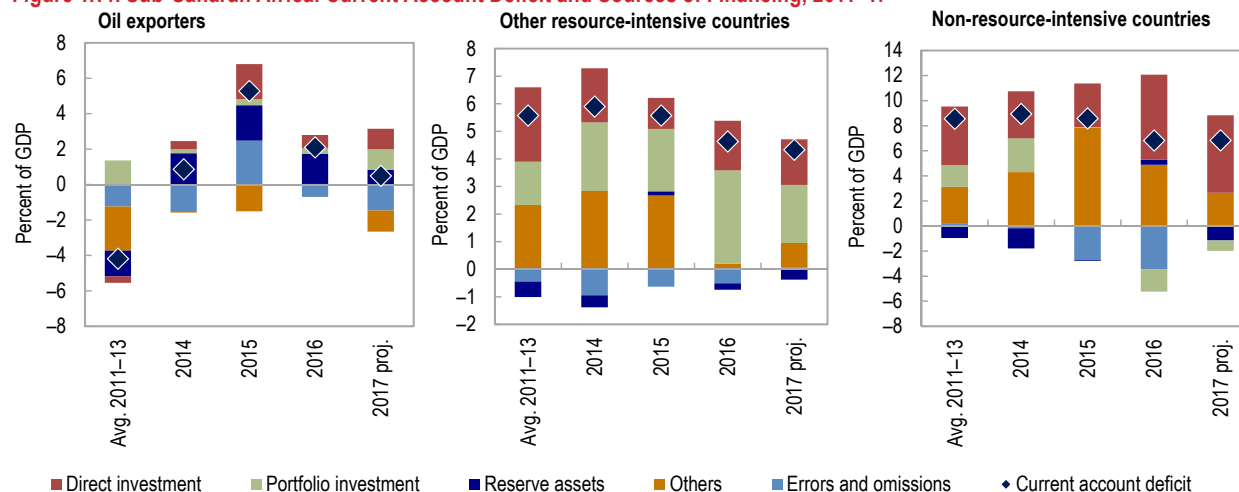
Figure 1.13. Sub-Saharan Africa: Exchange Market Pressure, 2016–17



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

Note: The exchange market pressure index (EMPI) is the percentage change in the US dollar/local currency exchange rate plus the percentage change in reserves (local currency appreciation/depreciation and reserves accumulation/loss contribute to positive/negative exchange market pressures). The 2017 figure refers to the change in the EMPI between December 2016 and the latest available month in 2017. The 2016 figure is computed by taking the average monthly change in the EMPI from December 2015 to December 2016 and multiplying by the number of months in the respective 2017 sample. See page 76 for country groupings table and page 78 for country abbreviations.

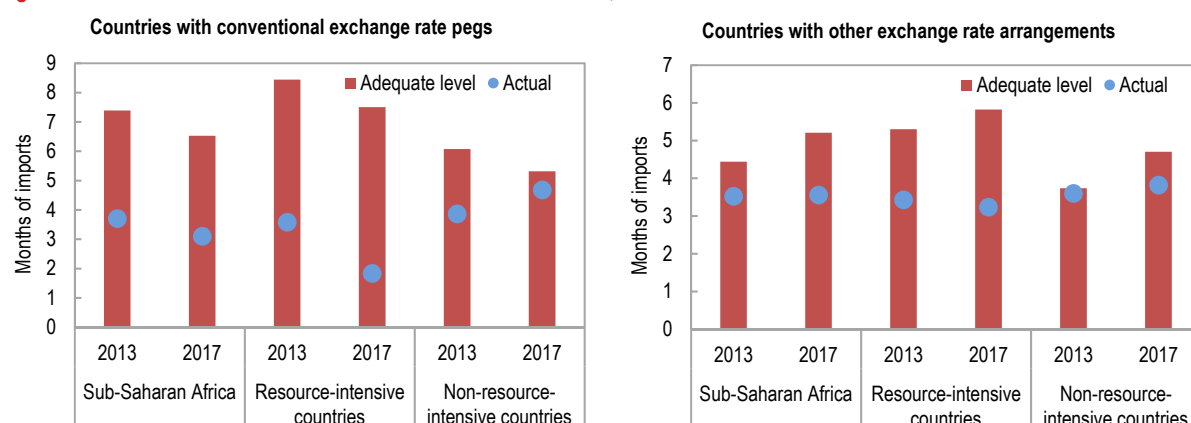
Figure 1.14. Sub-Saharan Africa: Current Account Deficit and Sources of Financing, 2011–17



Source: IMF, World Economic Outlook database.

Note: See page 76 for country groupings table.

³In Ghana, portfolio inflows attracted by the issuance of local currency bonds worth US\$2 billion helped boost reserves from 2.6 months of imports at end-2016 to 3.3 months in June 2017.

Figure 1.15. Sub-Saharan Africa: Level of International Reserves, 2013 and 2017

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

Note: The adequate level of reserves is calculated as the simple average of the country-specific estimate for each member of the group. The adequate level of reserves is higher for countries that are vulnerable to terms-of-trade shocks, have weak fiscal position, and low institutional capacity as measured by the World Bank Country Policy and Institutional Assessment index. For criteria on market access and the mechanics of the adequacy measures, see IMF 2013 and 2016. See page 76 for country groupings table.

...as Current Account Deficits Have Narrowed...

Current account deficits narrowed throughout the region in 2016, and are expected to narrow further in 2017 (Figure 1.14). For oil exporters, current account balances improved due to increased oil production in both Angola and Nigeria as well as a contraction in imports, in some cases (such as the Republic of Congo) related to a scaling back in public investment. Elsewhere, the narrowing of the current account deficit is explained by a drop in imports due to financing constraints (Togo), completion of major investment projects (Ethiopia), and weak domestic demand (South Africa).

Current account deficits in non-resource-intensive economies are expected to remain high—averaging close to 8 percent of GDP in 2017—but are largely financed through foreign direct investment.

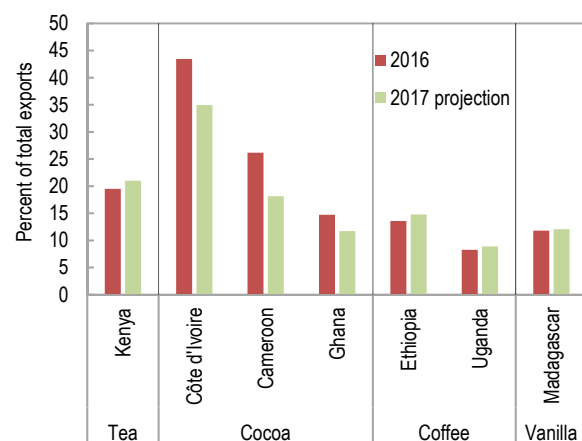
...but External Buffers Remain Low

The improvement in current account balances has yet to translate into an appropriate reconstitution of external buffers. While international reserves in sub-Saharan African countries average 4.8 months of imports, above the traditional three-month import benchmark, half of the region's economies have less than three months of imports' worth of reserves, and in some countries international reserves are at

critically low levels (for example, the Democratic Republic of the Congo and Zimbabwe have about 0.4 month and 0.6 month of imports' worth of reserves, respectively). Moreover, looking at broader indicators of reserve adequacy (see IMF 2013), the IMF's metric for credit-constrained countries suggests a desired 2017 level of reserves equivalent to about 5.6 months of imports, with higher levels for resource-intensive economies and economies with fixed exchange rate regimes (Figure 1.15).⁴ Against this metric, the reserves of the resource-intensive countries with conventional pegs appear particularly low, while countries with other exchange rate arrangements have seen their reserves fall further below adequacy levels.

Vulnerabilities to terms-of-trade and weather-related shocks remain elevated. While much of the volatility in recent years has been driven by oil prices, a number of sub-Saharan African countries have large agricultural exports where price swings—or harvest disruptions—can significantly impact export receipts. Indeed, the sharp decline in cocoa prices in early 2017 is expected to affect several sub-Saharan African economies, including the three leading producers of cocoa (Cameroon, Côte d'Ivoire, Ghana) (Figure 1.16).

⁴The adequacy benchmarks have increased since 2013 for the economies with other exchange rate regimes, on account of the increased domestic vulnerabilities and higher likelihood of external shocks.

Figure 1.16. Sub-Saharan Africa: Exports of Leading Agricultural Goods Producers

Source: Country authorities.

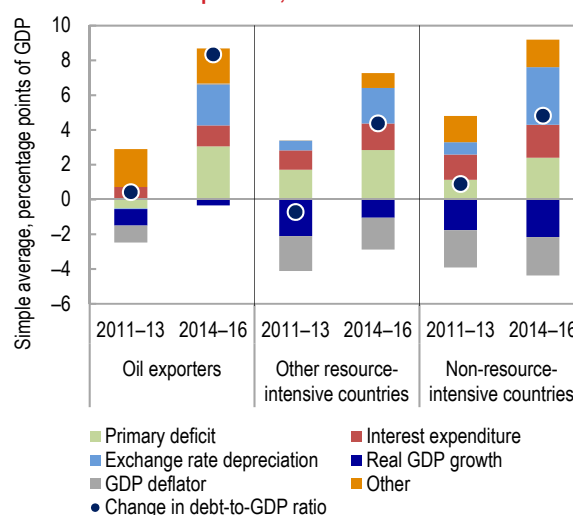
Note: Leading producers are among the top 10 world producers for a particular good.

Mounting Domestic Vulnerabilities

Public debt has increased as a percentage of GDP since 2013 in all but four sub-Saharan African countries and, in many of them, amplified strains on the financial sector. This was driven by slow growth, a slump in commodity prices, widening fiscal deficits, and in some cases sharp exchange rate depreciations.

Public Debt Has Risen...

The median level of public sector debt in sub-Saharan Africa rose from about 34 percent of GDP in 2013 to 48 percent in 2016, and is expected to exceed 50 percent in 2017. Debt accumulation was particularly high (about 8 percent of GDP a year) during 2014–16 in oil-exporting countries, reflecting large primary deficits, growing interest bills and balance sheet effects associated with exchange rate depreciation and low (and at times negative) economic growth (Figure 1.17). The debt-to-GDP ratio has been increasing less rapidly in other countries. Still, also there, the average annual rate of debt accumulation during 2014–16 approached 5 percent of GDP as primary deficits have risen, but consistently higher growth, especially in the case of non-resource-intensive countries, has slowed the increase in the debt-to-GDP ratio. In addition, in several countries, debt has increased due to a variety

Figure 1.17. Sub-Saharan Africa: Average Change in Debt-to-GDP Ratio and Components, 2010–16

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

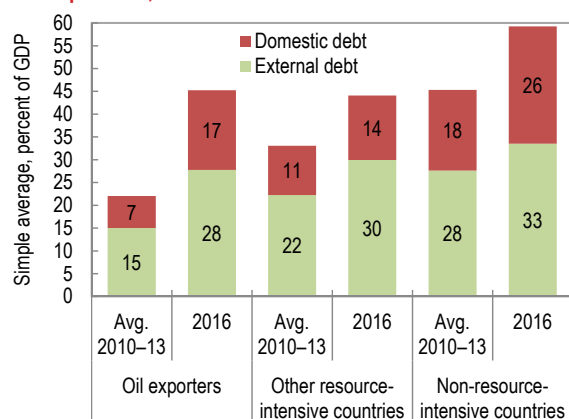
Note: Excludes Burundi, Republic of Congo, Eritrea, and South Sudan because of lack of data availability. See page 76 for country groupings table.

of below-the-line operations, including the buildup of arrears, adjustments for incomplete recording of treasury transactions, and operations on special accounts for public enterprises.

The composition of public debt has changed since 2013. Although external debt remains dominant, its share in total public debt has fallen in recent years as governments in oil exporting and nonresource-intensive countries have increasingly relied on domestic bank and nonbank financing. (Figure 1.18).

Debt service costs have risen sharply, especially in oil-exporting countries. The median debt service-to-revenue ratio among sub-Saharan African countries increased from 5 percent in 2013 to almost 9 percent in 2016 and is expected to reach nearly 10 percent in 2017 (Figure 1.19). In oil-exporting countries the median debt-service-to-revenue ratio more than tripled between 2013 and 2016, and in 2017 is expected to exceed 26 percent, with the highest expected increases in Gabon (from 55 percent in 2016 to 71 percent in 2017) and Nigeria (from 22 percent in 2016 to nearly 62 percent in 2017).

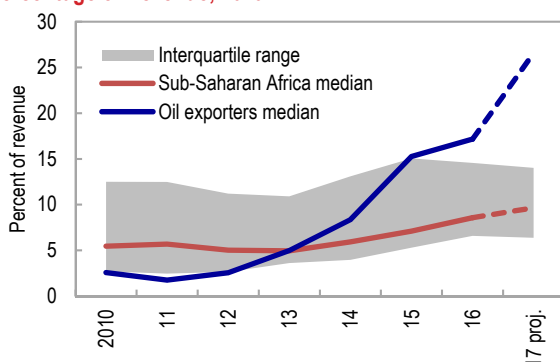
Figure 1.18. Sub-Saharan Africa: Public Sector Debt Decomposition, 2010–16



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

Note: Debt is recorded on a currency basis. See page 76 for country groupings table.

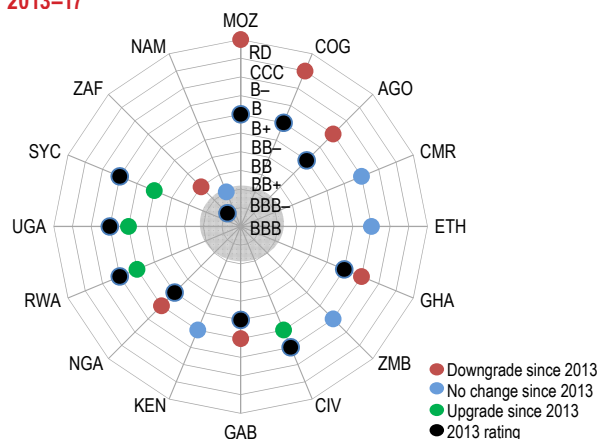
Figure 1.19. Sub-Saharan Africa: Total Debt Service as a Percentage of Revenue, 2010–17



Source: IMF, World Economic Outlook database.

Note: See page 76 for country groupings table.

Figure 1.20. Sub-Saharan Africa: Fitch Credit Risk Ratings, 2013–17



Source: Bloomberg Finance L.P.

Note: Ratings below BBB– are non-investment-grade. The Republic of Congo was in “Restricted Default” during August 3–11, 2016. Namibia’s rating was downgraded by Moody’s from Baa3 to Ba1 (non-investment-grade) on August 11, 2017. See page 78 for country abbreviations.

The debt sustainability outlook has worsened considerably since 2013. The number of low-income countries in debt distress or facing a high risk of debt distress increased from 7 in 2013 to 12 in 2016. Also, consistent with the broader trend of credit downgrades in emerging markets, several sub-Saharan African frontier markets or other countries with sovereign credit ratings have been downgraded; only Namibia was still rated by Fitch as investment grade at the end of August 2017 (Figure 1.20), while Moody’s downgraded Namibia to noninvestment grade on August 11, 2017. Furthermore, several countries are engaging creditors on debt restructuring or rescheduling operations (Chad, Republic of Congo, The Gambia, Mozambique).

...Contributing to the Growth of the Banks-Sovereign Nexus

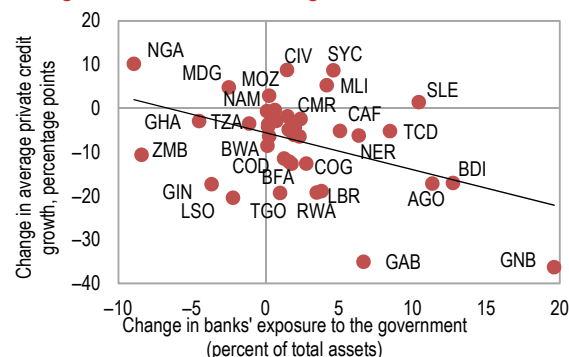
Increased lending by domestic banks to governments has further raised their exposure to the sovereign. In addition, with many sub-Saharan African governments continuing to accumulate arrears, banks’ liquidity and solvency indicators have deteriorated, with potential negative feedback loops as liquidity stress in the banking system raises rollover risks for the sovereign. In some countries, banks’ purchases of government securities have been facilitated by central banks’ refinancing operations of commercial banks (The Gambia, Togo), with banks taking advantage of the spread between interest rates on government debt and refinancing rates, resulting in an indirect monetization of fiscal deficits.

...and the Slowing of Credit to the Private Sector

Credit growth to the private sector decreased from 18.6 percent on average in 2011–13 to 11.2 percent in 2014–16. This negative trend has accelerated in recent months, with private sector credit contracting in real terms in 18 countries in the region between March 2016 and March 2017.

Higher bank exposure to the government appears to be at least in part responsible for this slowdown (for example, in Angola, CEMAC, The Gambia). Indeed, the decline in credit growth to the private sector in 2014–16 relative to 2011–13 was more pronounced in countries where banks’ exposure to the government increased the most between the two

Figure 1.21. Sub-Saharan Africa: Change in Banks' Exposure to the Government and Change in Private Credit Growth, Average, 2011–13, versus Average, 2014–16



Source: IMF, *International Financial Statistics*.

Note: This figure shows the negative relationship between the change in the average banks' exposure to the government (measured by banks' holdings of government securities as a share of total assets) and the change in the average annual growth rate of credit to the private sector, from 2011–13 to 2014–16. See page 78 for country abbreviations.

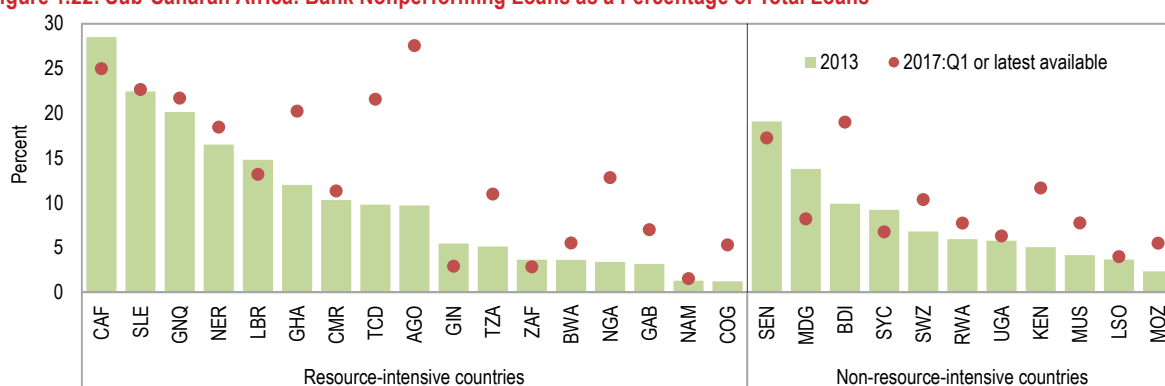
periods (Figure 1.21).^{5 6} However, the recent credit slowdown in some East African Community (EAC) countries and its contraction in real terms does not appear to result from crowding out (in some countries, both the exposure of banks to sovereigns and credit growth to the private sector decreased), but rather from an autonomous weakening of credit

demand, likely related to bank clients' difficulties with servicing outstanding debt. A tightening of credit standards by banks and, in the case of Kenya, the impact of the interest rate caps imposed on loans to the private sector, also dampened credit growth. Moreover, in Kenya and Rwanda, the credit slowdown has been accompanied by a marked decline in broad money growth.

Financial Conditions of Banks Have Weakened...

The economic slowdown in 2016 has affected the financial sector in sub-Saharan Africa. Strains have been exacerbated by foreign exchange market pressures, particularly in countries with dollarized bank balance sheets (Angola, Ghana, Zambia, EAC) and where liquidity conditions have been tightened sharply (CEMAC). Nonperforming loans have edged upward (Chad, Kenya, Nigeria) (Figure 1.22), bank profitability has decreased (Chad, Kenya, Namibia, Nigeria), and bank capital adequacy indicators have weakened in many countries, despite efforts to clean up banks' balance sheets (Angola, Ghana, Nigeria).⁷ Although the profitability of banks appears high in some cases (The Gambia), this mainly reflects large holdings of government securities.⁸

Figure 1.22. Sub-Saharan Africa: Bank Nonperforming Loans as a Percentage of Total Loans



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

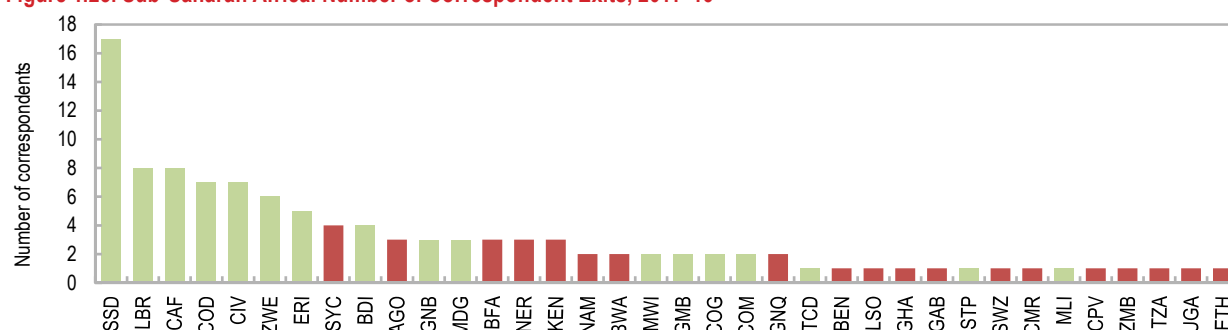
Note: See page 76 for country groupings table and page 78 for country abbreviations.

⁵ The negative relationship between banks' holdings of government securities and credit growth to the private sector is confirmed by cross-country analysis controlling for traditional determinants of credit growth. A 1 percentage point increase in banks' exposure to the government is associated with a 0.6 percentage point decrease in the annual growth of credit to the private sector (Bouis, forthcoming).

⁶ Holdings of government paper also benefit from the absence of capital requirements (given the zero-risk weight assigned to sovereign debt), lower cost of access to central bank refinancing, and in some cases, tax exemption on interest (for example, in WAEMU countries).

⁷ For instance, the Angolan authorities have launched a publicly financed asset-management vehicle to collect on impaired loans for both state-owned and selected private banks.

⁸ Econometric analysis indicates that bank profitability (measured by the return on assets) is positively explained by bank holdings of government securities as a share of total assets (Bouis, forthcoming).

Figure 1.23. Sub-Saharan Africa: Number of Correspondent Exits, 2011–16

Source: Financial Stability Board, Correspondent Banking Coordination Group (CBCG) survey.

Note: Countries with bars in green are in fragile situations. See page 78 for country abbreviations.

...and Many Countries Have Experienced Withdrawals of Correspondent Banking Relationships

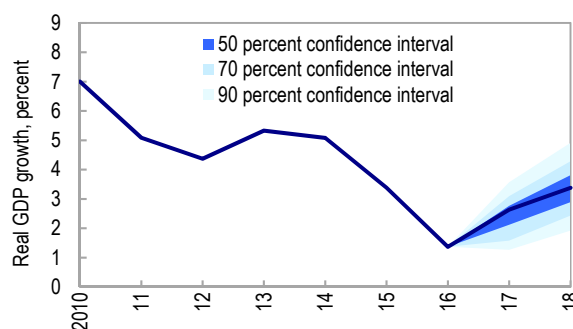
The loss of correspondent banking relationships (CBRs) has continued to spread, reflecting heightened risk-adjusted cost of doing business in host jurisdictions, notably due to greater rigor in enforcing regulations against money laundering and terrorism financing. While CBR exits were initially limited to Angola and smaller jurisdictions (for example, Comoros or Liberia, where all commercial banks have lost at least one CBR in the past three years), more recently, banks in other economies (Democratic Republic of the Congo, Côte d'Ivoire, Kenya) have also seen CBR exits (Figure 1.23). SWIFT data, which capture a meaningful share of correspondent banking activity, indicate that Angola, Mozambique, and Uganda experienced the largest drops in SWIFT transactions, averaging 30 percent in value terms from January 2011 to June 2016 (FSB 2017).

The economic impact of CBR exits is likely to be significant in countries where remittances represent a large share of GDP (Cabo Verde, Comoros, The Gambia, Lesotho, Liberia, Senegal, Togo) and in smaller jurisdictions where further loss of CBRs could disrupt economic activity (Seychelles). Furthermore, the withdrawals of CBRs could result in longer payment chains, an increasing number of intermediaries involved in processing the same payment, an increasing number of restrictions, and higher concentration on the correspondent and respondent side. This could accentuate financial fragilities and undermine long-term growth and financial inclusion by increasing costs of financial services and negatively affecting bank ratings (FSB 2017, IMF 2017).

WHAT LIES AHEAD—OUTLOOK AND RISKS

Modest Recovery Expected to Continue in 2018 but Weak Momentum

Growth is expected to continue to recover in 2018 to 3.4 percent, but will likely remain flat in 2019, and well below the levels achieved earlier in the decade. Similarly to 2017, the growth increase in 2018 will be driven by a few one-off factors, including the expected full-year effect of the recovery in oil production in Nigeria, which started in 2017, and, to a lesser extent, the long-anticipated coming onstream of new oil fields in the Republic of Congo and Ghana (Figure 1.24; Tables 1.1 and 1.2). Beyond these one-off factors, near-term growth prospects appear to have improved for several small and medium-sized countries (Burkina Faso, Lesotho, Malawi, Uganda), but growth will likely be lower than previously anticipated in South Africa due to weak consumer and investor confidence and a normalization of mining and

Figure 1.24. Sub-Saharan Africa: Growth Prospects, 2017 and 2018

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

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

	2004–08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sub-Saharan Africa	6.6	3.9	7.0	5.1	4.4	5.3	5.1	3.4	1.4	2.6	3.4
Oil-exporting countries	8.6	6.7	9.2	4.7	3.9	5.7	5.9	2.5	-1.5	0.8	1.8
Nigeria	7.7	8.4	11.3	4.9	4.3	5.4	6.3	2.7	-1.6	0.8	1.9
Middle-income countries	6.6	3.6	6.9	4.5	4.3	4.8	4.6	2.7	0.4	1.8	2.6
South Africa	4.8	-1.5	3.0	3.3	2.2	2.5	1.7	1.3	0.3	0.7	1.1
Low-income countries	6.3	5.1	7.4	7.1	4.7	7.3	6.7	5.7	4.4	5.3	5.7
<i>Memorandum :</i>											
World economic growth	4.9	-0.1	5.4	4.3	3.5	3.5	3.6	3.4	3.2	3.6	3.7
Sub-Saharan Africa, other resource-intensive countries ¹	4.9	0.5	4.9	5.3	4.3	4.3	3.4	2.6	2.2	2.7	3.3
Sub-Saharan Africa, non-resource-intensive countries ²	6.0	4.9	6.4	5.4	5.7	6.5	6.6	6.6	5.6	6.0	6.3
Sub-Saharan Africa, frontier and emerging market economies ³	6.8	4.2	7.3	5.1	4.5	5.2	5.1	3.6	1.4	2.7	3.4

Source: IMF, World Economic Outlook database.

Note: See page 76 for country groupings table.

¹ Botswana, Burkina Faso, Central African Republic, Democratic Republic of the Congo, Ghana, Guinea, Liberia, Mali, Namibia, Niger, Sierra Leone, South Africa, Tanzania, Zambia, Zimbabwe.² 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, Uganda.³ Angola, Cameroon, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Kenya, Mauritius, Mozambique, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Uganda, Zambia.**Table 1.2. Sub-Saharan Africa: Other Macroeconomic Indicators**

	2004–08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<i>(Percent change)</i>											
Inflation, average	8.8	9.8	8.1	9.4	9.3	6.6	6.3	7.0	11.3	11.0	9.5
<i>(Percent of GDP)</i>											
Fiscal balance	1.6	-4.6	-3.5	-1.2	-1.8	-3.2	-3.7	-4.4	-4.7	-4.7	-4.3
Excluding oil exporters	-0.6	-4.3	-4.4	-3.7	-3.8	-4.0	-4.2	-4.5	-4.5	-4.5	-4.2
Current account balance	2.0	-2.4	-0.8	-0.8	-1.8	-2.4	-3.9	-6.1	-4.2	-3.4	-3.6
Excluding oil exporters	-4.3	-4.5	-3.9	-4.7	-7.0	-7.3	-6.8	-6.7	-5.6	-5.3	-5.6
<i>(Months of imports)</i>											
Reserves coverage	5.1	5.1	4.1	4.6	5.2	4.9	5.2	5.8	5.1	4.8	4.7

Source: IMF, World Economic Outlook database.

Note: See page 76 for country groupings table.

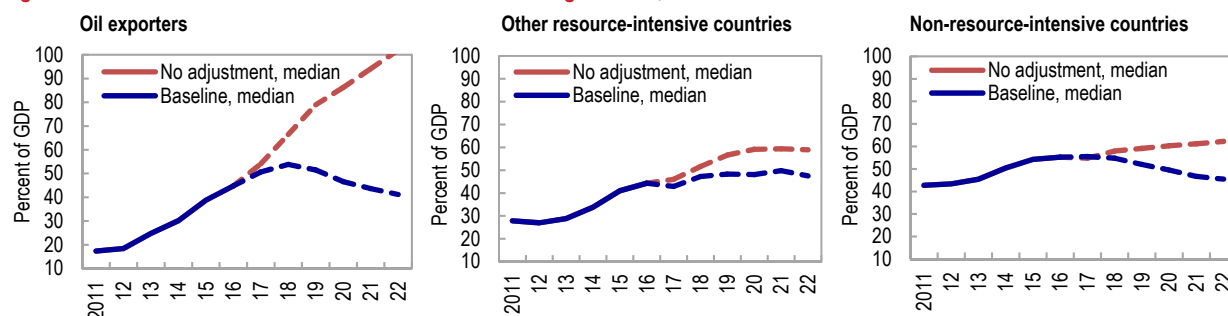
agriculture production after one-off increases in 2017. While the non-resource-intensive countries are expected to continue to grow robustly, growth prospects in many countries will depend critically on planned fiscal consolidations.

Elevated Downside Risks

On the external front, risks appear broadly balanced in the near term. On the upside, growth momentum in the euro area and East Asia could prove more durable than expected. Downside risks include a higher external market premium for sovereign bonds due to changing investor sentiment, a more rapid than expected tightening of global monetary conditions, and a further drop in commodity prices. Sovereign downgrade risks could further weigh on the investment climate and adversely affect growth, particularly in South Africa,

with potential regional spillover effects, while a deterioration in market sentiment could heighten the rollover risk. In the medium term, risks are skewed to the downside and include the possibility of a sharp adjustment in China.

On the domestic front, downside risks appear to dominate. Delays in implementing policy adjustments would reduce fiscal space for pro-growth expenditures and adversely impact the external sector while the continued crowding out of the private sector may stifle the expected pickup in growth. In countries with pressing macroeconomic sustainability concerns, failure to implement needed policy adjustments in a timely manner risks disruptive outcomes. Many countries should also be mindful of the risks associated with the ongoing disruption in correspondent banking relationships.

Figure 1.25. Sub-Saharan Africa: Public Debt as a Percentage of GDP, 2011–22

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

Note: Baseline projections reflect the program or baseline scenarios reported in the latest IMF staff report. No adjustment projections assume that the primary deficit, the real interest expenditure, and the other components of debt accumulation will remain at their 2014–16 averages, while the exchange rate and real GDP growth components are as in baseline projections. Excludes Burundi, Republic of Congo, Eritrea, and South Sudan because of data availability. See page 76 for country groupings table.

Exogenous shocks remain a critical source of vulnerability in many sub-Saharan African countries. Climatic variations in rainfall (including droughts and floods) are a particular concern due to continued high dependence on rain-fed agriculture as well as other weather-sensitive activities such as electricity production (especially in East Africa and Central Africa, where hydropower accounts for over 50 percent of electricity generation). Other important risk factors include a resurgence in socioeconomic tensions (for example in postconflict countries, such as Côte d'Ivoire), and terrorist operations (Lake Chad region, the Sahel, Kenya).

FISCAL CONSOLIDATION IS ENVISAGED IN MANY COUNTRIES

How Much and How Fast?

With many countries facing elevated debt levels and increasing debt service costs, it becomes increasingly important to ensure that fiscal policy strikes an appropriate balance between addressing development needs and avoiding unsustainable debt buildup. Most sub-Saharan African countries reflect this consideration in their medium-term economic strategies. Consequently, subject to the planned fiscal adjustment's being undertaken, in most countries, debt-to-GDP ratios should stabilize or decrease, alleviating debt sustainability concerns. Experience shows, however, that planned fiscal

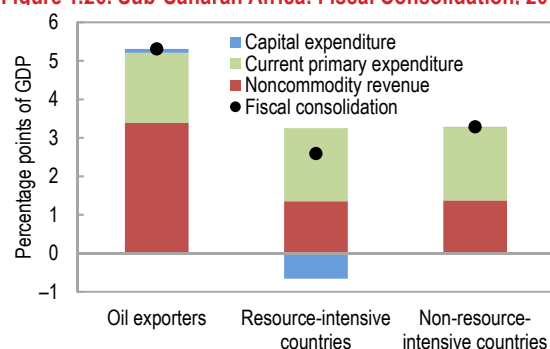
adjustments tend to be postponed—yet the forward-looking analysis offers little scope for further postponement.

A continuation of the elevated pace of debt accumulation seen in 2014–16 would increase public debt to unsustainable levels in each of the country groupings (Figure 1.25). While this aggregate picture masks considerable heterogeneity in country circumstances, most sub-Saharan African countries are planning fiscal consolidations over the medium term in order to maintain their public finances on a sustainable path going forward, thereby safeguarding macro-stability as well as harmonizing the fiscal policy stance with absorptive capacity limits—as summarized in the baseline projections aggregated in Figure 1.25.

The size and pace of the projected adjustment differ depending on country circumstances:⁹

- For oil-exporting countries, the projected consolidation effort amounts on average to 5.3 percentage points of GDP over the next five years (Figure 1.26). In some cases (such as Angola) a considerable adjustment has already been made, but most of the adjustment so far has been achieved through capital spending cuts, reflecting a combination of deliberate policy choices and financing constraints.

⁹For countries with IMF-supported programs, the analysis is based on program scenarios. For other countries, it is based on baseline projections or, if available, on an alternative scenario that reflects the additional adjustment needed to ensure macroeconomic stability. The GDP projections underpinning the analysis in each case are consistent with the projected fiscal consolidation. For the sake of comparability across country groups and to sharpen the focus on efforts that are within the remit of country authorities, the analysis focuses on the noncommodity primary fiscal balance.

Figure 1.26. Sub-Saharan Africa: Fiscal Consolidation. 2017–22

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

Note: Excludes Burundi, Republic of Congo, Eritrea, and South Sudan because of lack of data availability. See page 76 for country groupings table.

Going forward, consolidation efforts in oil-exporting countries are expected to focus on increasing noncommodity revenues—which averaged only about 9 percent of GDP in 2016 and were as low as 3.3 percent of GDP in Nigeria and 4.5 percent of GDP in Equatorial Guinea—and on making targeted reductions in current spending.

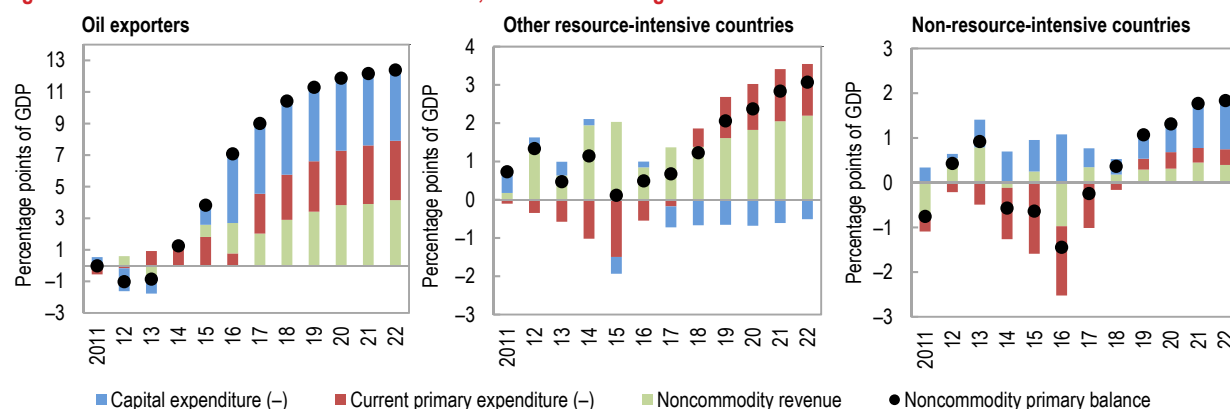
- In other resource-intensive countries, where commodity revenues represent a much smaller share of total revenues, the projected medium-term consolidation amounts on average to 2.6 percent of GDP over five years. The bulk of the adjustment is envisaged to come from cuts in current spending, which has grown rapidly in the context of the expansionary fiscal

policies of recent years (Figure 1.27). In some countries, the consolidation path features an increase in capital spending relative to current levels.

- For non-resource-intensive countries, the projected consolidation is estimated at 3.3 percent of GDP over the next five years. The consolidation effort is expected to focus on raising noncommodity revenues—the countries' main source of earnings—and on reducing current expenditure, while ensuring space for investment spending.

How Can the Impact of Fiscal Adjustment on Growth and Social Outcomes Be Mitigated?

To limit the negative impact on growth, fiscal adjustment should rely on quality measures with low short-term multipliers. Drawing on the analysis in Chapter 2, cuts in capital expenditure, which are associated with the highest negative output impact, should generally be avoided unless the contemplated investment spending is unproductive or cannot be efficiently implemented, or if the level of debt and consolidation needs are so large, for example due to binding financing constraints, that cutting investment spending is unavoidable to ensure debt sustainability. Multipliers associated with raising additional tax revenues and cuts in recurrent spending (for example, subsidies) are lowest, though some expenditure cuts may have important distributional consequences that would need to be addressed via social protection schemes.

Figure 1.27. Sub-Saharan Africa: Fiscal Indicators, Cumulative Change from 2010

Sources: IMF, World Economic Outlook database.

Note: An increase in revenue contributes positively to the change in fiscal position. An increase in expenditure contributes negatively to the change in fiscal position. Excludes Burundi, Republic of Congo, Eritrea, and South Sudan because of lack of data availability. See page 76 for country groupings table.

A timely and well-planned fiscal consolidation is critical in order to avoid the necessity of too sharp an adjustment and to provide time to mitigate adverse impacts on growth and social outcomes. Further, in defining the scope for expenditure cuts, particular attention should be devoted to preserving progrowth spending, such as that on education and health. Adequate allowance should also be made for the operation and maintenance of existing infrastructure, which often gets sidelined by new investment outlays without due consideration for their efficiency and economic soundness.

Monetary policy can help lessen the burden of fiscal tightening. Countries that wholeheartedly adopted interest-based operational frameworks have achieved a lower level and less volatility of inflation, without compromising real output stabilization. In these countries, the policy rate can be used to stimulate growth and mitigate the contractionary impact of prospective fiscal tightening.

Implementation Can Be a Challenge

Instilling fiscal discipline and putting debt on a sustainable path in most cases will require strong structural fiscal reforms, including to ensure adherence to fiscal responsibility laws, and will place pressure on public financial management systems and revenue mobilization.

- On the revenue side, widespread exemptions, limited tax bases, and poor administration may constrain the ability to achieve revenue gains in the near term. In many countries, overoptimistic revenue projections have been a source of frequent and persistent revenue shortfalls that lead to the accumulation of arrears.
- On the spending side, lax commitment controls, revenue earmarking, and limited coverage of fiscal accounts (nonconsolidated government accounts) can lead to frequent and large spending overruns. Recurrence of domestic arrears not only undermines the credibility of budget targets, but also has a negative impact on the private sector, including banks.

Mustering political buy-in for reforms is key, as fiscal consolidation will likely involve taking on vested interests. The probability of success can be enhanced through a combination of transparency and investing in technical capacity to strengthen key institutions.

Measures Are Also Needed to Loosen the Banks-Sovereign Nexus

Bank financing of the government provides fiscal breathing space but may fuel inflation if supported by central bank refinancing, expose the banking sector to liquidity stress, and crowd out credit to the private sector, further weakening the economy and worsening fiscal balances. These risks should be addressed through a combination of policies that includes fiscal consolidation; a gradual tightening of central bank refinancing of commercial banks in countries where this has significantly increased; the removal of various benefits attached to government securities holdings (including, among other things, tax deductibility and exemptions on exposure or reserve requirements); a reduction of state ownership of banks; and the implementation of macroprudential measures such as large exposure limits and capital surcharges on the sovereign.¹⁰ The pace of implementation of these measures should, however, be subject to country-specific circumstances so as not to deprive a sovereign of financing resources when they are most needed and force an unduly abrupt fiscal adjustment.

In the medium term, improving financial market infrastructure (including property titling and the availability of credit bureaus to reduce information asymmetries) can broaden banks' investment opportunities and foster the diversification of loan portfolios.

With fiscal space constrained by rising public debt, addressing growing vulnerabilities in banking systems will be particularly important to ensure that financial institutions can support private sector expansion to mitigate the negative impact of fiscal consolidation on growth and support a sustainable recovery. To this end, fiscal consolidation plans

¹⁰ Traditional microprudential tools are less suitable to mitigate risks from bank lending to the government, as all sub-Saharan African countries (except South Africa) have opted for either Basel I or Basel II regulations, which assign a zero-risk weight to all sovereign debt denominated in domestic currency.

need to be supplemented by arrangements to resolve domestic payment arrears to government suppliers, one of the key factors driving the growth of nonperforming loans. Meanwhile, liquidity pressures in the banking sector should be addressed by putting in place emergency liquidity facilities for banks that roll over domestic securities, as implemented recently by the BEAC. Authorities should also conduct rigorous asset quality reviews of banks linked to stress tests to help identify forward-looking capitalization needs. Weaker banks should be immediately recapitalized or resolved to avoid threatening confidence in the banking system.

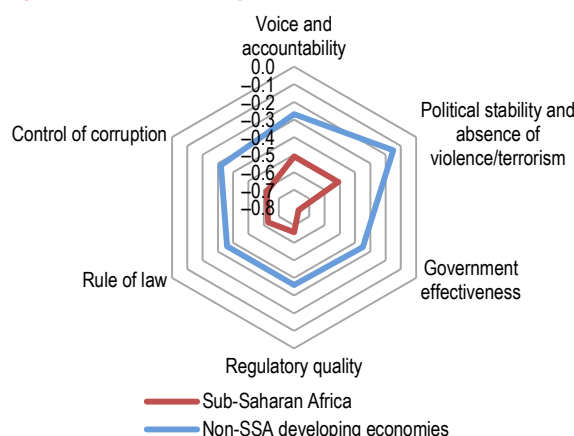
STIMULATING GROWTH IN THE MEDIUM TERM

Efforts to strengthen medium-term sustainability prospects through fiscal consolidation are urgent. But no less important for most sub-Saharan African countries is to act on a broader front to stimulate growth, including by improving conditions for private investment and diversifying away from commodity dependence.

Creating Space for Private Investment

While reducing banks' exposure to the government can create space for private sector investment in sub-Saharan African countries and support growth, complementary measures may be needed to address infrastructure bottlenecks. Most notably, deficits in physical infrastructure in countries in the region could constrain GDP growth by 2 percentage points a year (AfDB 2016). This underscores the need to protect capital spending during fiscal consolidation, ensuring the highest possible degree of efficiency during the process and prioritizing public projects according to their growth and social impact. Sub-Saharan African countries also have much to do to improve governance, including the rule of law and government effectiveness, even compared with other developing economies (Figure 1.28). For instance, public-private partnerships remain limited due in part to the lack of institutional frameworks, weak judicial systems, and capacity constraints (Gurara and others, forthcoming).

Figure 1.28. Selected Regions: Governance Indicators, 2015



Source: World Bank, Worldwide Governance Indicators.

Note: SSA = sub-Saharan Africa.

Addressing the constraints and market failures mentioned above could help unlock private investment. In the near term, this will require improving the macroeconomic environment, reducing fiscal dominance, and enhancing the public-private partnership framework. Innovations, including further expansion of fintech, could also enhance domestic private sector investment and inclusiveness. New international initiatives (*Compact with Africa* by the G20 and China's *One Belt One Road*) also provide opportunities to expand space for infrastructure investment, including with private sector financing.

Fostering Structural Transformation and Economic Diversification

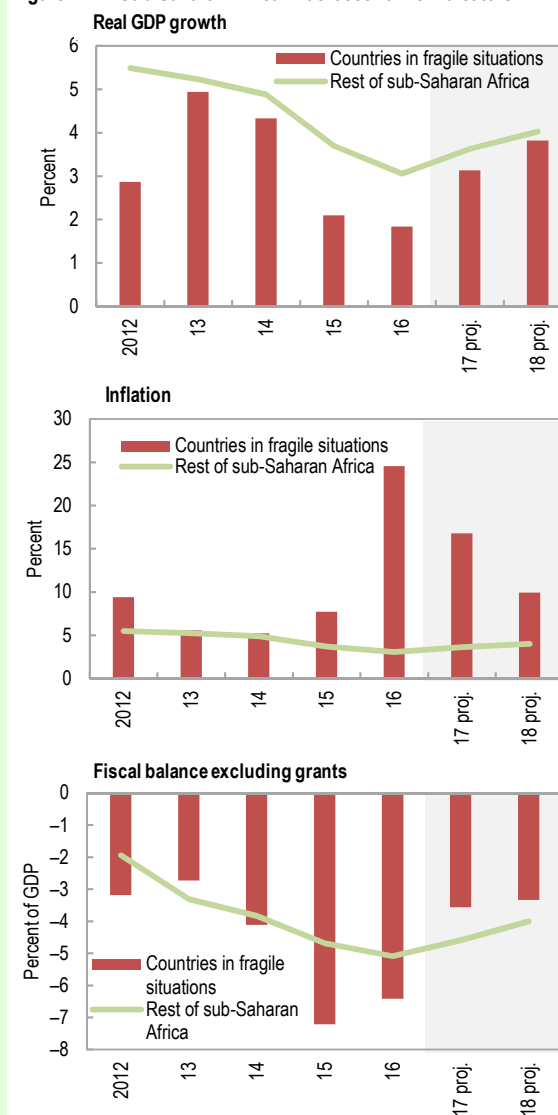
As documented in Chapter 3, structural transformation and export diversification have been slower in sub-Saharan Africa than in other regions. The aggregate picture masks the significant progress achieved in the region's other resource-intensive economies and non-resource-intensive economies, many of which have diversified their economies at a similar pace to their global peers. Structural reforms to foster further economic diversification depend on a country's circumstances and endowments, and should strengthen macroeconomic and political stability, improve education outcomes, bolster governance and transparency in regulation, and deepen financial markets. These policies, together with better infrastructure, can contribute to stronger growth and improved resilience (IMF 2015).

Box 1.1. Countries in Fragile Situations

Countries in fragile situations face deep development challenges. These countries are often characterized by a legacy of severe social and political turmoil, economic instability, and, in some cases, violent conflict. Currently, there are about 20 such countries in sub-Saharan Africa.¹ Since the start of this century, only a few countries (for example, Rwanda, Uganda) have been able to build resilience and escape fragility, which has been achieved through focused policies necessary to foster economic stability and growth, improve governance and security, and strengthening institutions to enable the state to deliver basic services (Gelbard and others 2015). In light of the above, the impact of lower commodity prices in sub-Saharan Africa has been more negative in countries in fragile situations than in other countries, often exacerbated by sociopolitical, governance, and security problems. While the policy response has been uneven across and within countries, several countries have recently improved their economic policy frameworks, which, combined with a modest rebound in commodity prices in 2017–18, is expected to pave the way for economic recovery. But there are significant risks, underscoring the need for determined actions to build resilience.

During the past three years, many of the sub-Saharan African countries in fragile situations were negatively influenced by lower commodity prices and, in some cases, surges in political instability, epidemics, or conflict. For the group as a whole, economic growth and incomes fell, inflation rose, fiscal deficits and debt increased, and foreign reserves declined. Most countries were severely affected by these developments, although some managed to avoid major consequences or even fared relatively well, partly because their economies are relatively less dependent on commodity exports, but also because of appropriate policies and reforms.

Figure 1.1.1. Sub-Saharan Africa: Macroeconomic Indicators



Source: IMF, World Economic Outlook database.

Note: Proj. = projection.

This box was prepared by Enrique Gelbard.

¹ Countries are deemed to be in a fragile situation if the three-year average of their Country Policy and Institutional Assessment rating (compiled by the World Bank) is less than 3.2 or if they are hosting a United Nations/regional peace-keeping or peace-building mission. In sub-Saharan Africa, these countries are Burundi, the Central African Republic, Chad, Comoros, Democratic Republic of Congo, the Republic of Congo, Côte d'Ivoire, Eritrea, The Gambia, Guinea, Guinea-Bissau, Liberia, Madagascar, Malawi, Mali, São Tomé and Príncipe, Sierra Leone, South Sudan, Togo, and Zimbabwe. Other organizations that compile lists of countries said to be fragile include more sub-Saharan African countries in this situation (for example, the Organisation for Economic Co-operation and Development States of Fragility Report 2016, and the Fund for Peace Fragile States Index, 2017).

Box 1.1 *(continued)*

Burundi, Chad, the Democratic Republic of the Congo, the Republic of Congo, Eritrea, The Gambia, Liberia, Sierra Leone, South Sudan, and Zimbabwe experienced a rather marked deterioration in their economic performance. In comparison, Comoros, Guinea, Madagascar, São Tomé and Príncipe, and Togo avoided significant declines in economic growth, although their fiscal and debt positions worsened. Notably, the Central African Republic, Côte d'Ivoire, Guinea-Bissau, and Mali managed to record strong economic growth, while scaling up public investment.

Economic policies have varied across the region. Several countries have put in place policy frameworks to achieve or preserve macroeconomic stability while supporting growth and poverty reduction, which has enabled close engagement with the IMF and the international community (Central African Republic, Chad, Côte d'Ivoire, The Gambia, Guinea-Bissau, Madagascar, Malawi, Mali, Sierra Leone, Togo). In some other countries, policies and reforms have not progressed much due to political, governance, and, in some cases, security challenges (Burundi, Democratic Republic of the Congo, Republic of Congo, Eritrea, South Sudan, Zimbabwe).

The experience of Côte d'Ivoire is noteworthy as a country that built resilience in recent years. Following a decade of political instability, and declines in living standards, the full implementation of a power-sharing agreement paved the way for political normalization in 2011. This has been accompanied by financial support from the international community and focused economic reforms in the areas of revenue administration, public financial management (including expenditure control, debt management, and public banks), the business climate, and the electricity sector. The results have been promising, with increases in public and private investment leading to an average annual rate of economic growth of nearly 9 percent, renewed access to international financial markets, some improvements in health and education indicators, and gains in terms of state legitimacy and governance.

Prospects for 2017 and 2018 point to gradual improvements in economic conditions in most sub-Saharan African countries in fragile situations, but risks abound. Economic growth is expected to pick up in the Central African Republic, Chad, Comoros, the Republic of Congo, The Gambia, Liberia, and Malawi while improvements in fiscal balances are projected to be modest because of spending needs and relatively subdued commodity prices. Prospects for Côte d'Ivoire, Guinea-Bissau, and Madagascar are more promising due to ongoing robust growth, low inflation, and stable fiscal positions and sustainable debt levels. Notwithstanding this positive outlook, there are various risks, including low levels of foreign exchange reserves in many countries, and in some cases, signs of deteriorating soundness in the banking system. In particular, the economic outlook for Burundi, Eritrea, São Tomé and Príncipe, Togo, and Zimbabwe is complicated by high levels of public debt, while climate change risks are also important for Burundi, Eritrea, Madagascar, and Malawi.

Table 1.1.1. Countries in Fragile Situations: Scorecard of Factors to Build Resilience

Country	Political Stability/ Inclusion	Security	Economic Policies/Reforms	Governance/ Public Services
Burundi			Exchange rate, fiscal balance, banking supervision	
Central African Rep.			Revenue mobilization, PFM, public investment	
Chad			Fiscal balance, public debt, revenue mobilization	
Comoros			Revenue mobilization, electricity supply, banking supervision	
Congo, Dem. Rep. of			Revenue mobilization, fiscal balance	
Congo, Rep. of			Fiscal balance, public debt, PFM	
Côte d'Ivoire			Revenue mobilization, PFM, public investment	
Eritrea			Fiscal balance, exchange rate, expenditures	
Gambia, The			Fiscal balance, public debt, PFM	
Guinea			Inflation, fiscal balance, public debt	
Guinea-Bissau			Revenue mobilization, PFM, banking supervision	
Liberia			Revenue mobilization, PFM, public debt	
Madagascar			Revenue mobilization, state enterprises, public investment	
Malawi			Inflation, PFM, fiscal balance	
Mali			Revenue mobilization, expenditures, PFM	
São Tomé and Príncipe			Fiscal balance, public debt, revenue mobilization	
Sierra Leone			Revenue mobilization, PFM, banking supervision	
South Sudan			Fiscal balance, exchange rate, PFM	
Togo			Fiscal balance, public debt, banking supervision	
Zimbabwe			Exchange rate, fiscal balance, public debt	

- Progress is being made; policies/reforms are broadly adequate
■ Need continued attention and, in most cases, additional actions
■ Serious constraint; progress is essential in period ahead

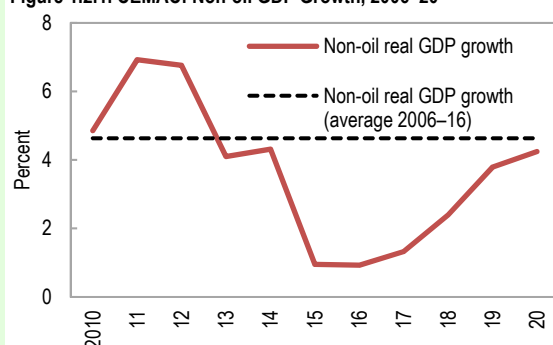
Sources: Fund for Peace, Fragile States Index 2017; Organisation for Economic Co-operation and Development, States of Fragility 2016; World Bank, World Governance Indicators 2016; and IMF staff estimates

Note: PFM (public financial management) refers primarily to budget and treasury management.

Box 1.2. CEMAC's Regional Economic Strategy

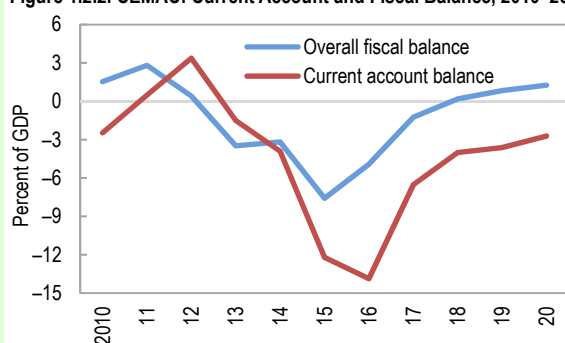
Member countries of the Central African Economic and Monetary Community (CEMAC) have been particularly impacted by the decline in oil prices.¹ With oil accounting for about 74 percent of the countries' exports in 2014, this decline has profoundly impaired these countries' external and fiscal balances, as oil export proceeds and budget oil revenues plummeted between 2014 and 2016. The oil revenue shock and accommodative fiscal policies by member countries contributed to an increase in fiscal deficits and in public debt, from 27 percent of GDP in 2014 to 50 percent of GDP in 2016, despite initial spending cuts by some member countries. The widening fiscal deficits, along with accommodative monetary policy, also contributed to a substantial increase in the current account deficit from 3.9 percent of GDP in 2014 to 13.9 percent of GDP in 2016, and to a sharp decline in the international reserves of the regional central bank (BEAC) from 6 months of imports at the end of 2014 to 2.4 months at the end of 2016 (Figures 1.2.1, 1.2.2, 1.2.3). These economic difficulties have been compounded by security threats from Boko Haram in the Lake Chad region and civil unrest in the Central African Republic.

Figure 1.2.1. CEMAC: Non-oil GDP Growth, 2006–20



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

Figure 1.2.2. CEMAC: Current Account and Fiscal Balance, 2010–20



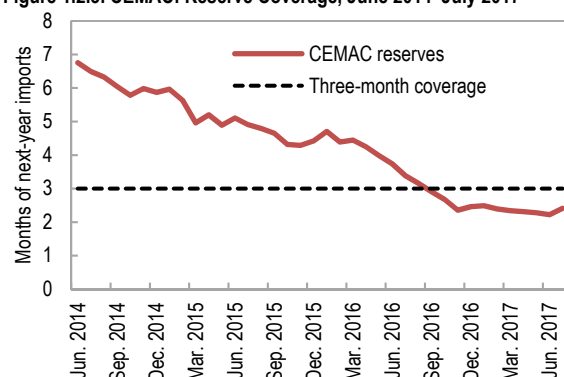
Sources: Central African Economic and Monetary Community (CEMAC) authorities; and IMF staff calculations.

Faced with these acute economic difficulties, the countries have devised a strategy to turn their economies around. At their extraordinary summit of December 23, 2016, CEMAC's heads of state committed to implementing strong national and regional policies and reforms to help avert the depletion of reserves and continue to support the monetary union arrangement. In coordination with the IMF and other development partners, this commitment has since been translated into a regional strategy. At the national level, this strategy calls for (1) sizable fiscal adjustments to ensure the fiscal sustainability of each member country and help avert the depletion of reserve assets and initiate rebuilding them to an adequate level; and (2) structural reforms to strengthen public financial management and enhance the business environment, as well as other country-specific steps needed to restore sustainable growth. These objectives will be supported by regional actions to support the third and fourth prongs of the strategy, which are to tighten monetary policy and liquidity management consistent with external stability and to strengthen the financial sector.

The IMF is supporting the authorities in implementing this strategy through financing, policy advice, and technical assistance. In mid-2017 the IMF approved new programs for Gabon, Cameroon, and Chad, and an increase in funding for the Central African Republic. Discussions are ongoing with the Republic of Congo and Equatorial Guinea. In conjunction with financial assistance provided by other development partners, the

This box was prepared by Edouard Martin.

¹ CEMAC member countries are Cameroon, the Central African Republic, Chad, the Republic of Congo, Equatorial Guinea, and Gabon.

Figure 1.2.3. CEMAC: Reserve Coverage, June 2014–July 2017

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

financing provided under the programs will allow for a more gradual adjustment process than would otherwise be the case. It will also provide more time for countries to implement much-needed structural reforms, which will help them become more resilient to future shocks and crises. The IMF's policy advice and technical assistance have also covered a broad front, including three areas that will be critical to the success of the reforms: (1) policy coordination among countries and with regional institutions in order to ensure that all CEMAC countries contribute to the regional effort; (2) growth-friendly and inclusive fiscal reforms, notably to mitigate the effects of expenditure cuts through improved spending efficiency and to help protect the poor; and (3) combating corruption and increasing transparency in the use of public resources.

Box 1.3. Improving Monetary Policy Frameworks in Sub-Saharan Africa

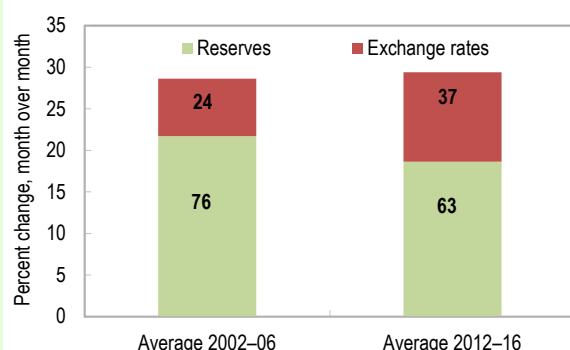
A number of sub-Saharan African countries with some degree of exchange rate flexibility have adopted forward-looking monetary policy frameworks to anchor inflation and promote macroeconomic and financial stability. These countries have begun to rely on policy rates to signal their monetary policy stance and are assigning a greater role to short-term interest rates in implementing monetary policy. The experience of the last decade suggests that among the 22 sub-Saharan African countries with exchange rate flexibility, those with interest-based operational frameworks experienced lower and more stable rates of inflation without reducing their output growth or increasing output volatility.

This box compares the economic performance of these 22 countries during 2012–16 and 2002–06. The choice of the period is motivated by two reasons. First, since 2012, several central banks have started implementing more effective operational frameworks and have invested in analytical capacity by developing their forecasting policy analysis systems supported by IMF technical assistance and customized training (see the April 2015 *Regional Economic Outlook: Sub-Saharan Africa*; and IMF 2015). Second, this isolates the results from the impact of 2007–08 and 2010–11 food price shocks.

Exchange rate flexibility has increased in the 22 countries. When faced with foreign exchange pressures, central banks allowed more exchange rate flexibility in the 2012–16 period compared with a decade earlier, when foreign exchange market interventions were used more often to counteract such pressures (Figure 1.3.1).

This change in central bank behavior is consistent with the transition to forward-looking monetary policy frameworks. Twelve sub-Saharan African countries now publish policy and interbank rates (Table 1.3.1), but only seven of these, countries—where average interbank rates differed from the policy rate by less than 300 basis points in absolute terms during 2012–16—can be considered to have de facto interest-based monetary frameworks. These include the three countries with explicit inflation targets (South Africa, 2001; Ghana, 2007; and Uganda, 2011) as well as Kenya, Mauritius, Rwanda, and Zambia. In the other countries, the link between policy rates and interbank rates does not currently appear sufficiently strong for the monetary policy signals to be transmitted efficiently.

Figure 1.3.1. Selected Sub-Saharan African Countries: Contributions to Exchange Market Pressure Index Average, 2002–06, versus Average, 2012–16



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

Note: Excludes sub-Saharan African countries with explicit fixed exchange rate arrangements since 2012. Exchange market pressure index is derived with equal weights on monthly exchange rate depreciation and monthly change in foreign exchange reserves corrected for IMF disbursements as a percentage of money supply (M1). Contributions are calculated based on positive exchange market pressure index values.

Table 1.3.1. Selected Sub-Saharan African Countries: Interest Rate Spreads, June 2012–June 2017 (Basis points; monthly mean absolute deviations of the interbank rate from the policy rate)

South Africa	24
Uganda	48
Rwanda	169
Ghana	175
Zambia	249
Mauritius	291
Kenya	297
Seychelles	365
Angola	391
Nigeria	496
Tanzania	538
Malawi	593

Sources: Haver Analytics, IMF, *International Financial Statistics*; IMF staff calculations; and Thomson Reuters Data Stream.

Note: Countries are ranked in ascending order with respect to mean absolute deviations. Calculations for Kenya are for June 2002–August 2016, prior to the implementation of interest rate caps. Mozambique introduced policy rate announcements in April 2017 and is not included.

This box was prepared by Emre Alper.

The average rate of inflation and its volatility in these seven sub-Saharan African countries with de facto interest-rate-based operational frameworks declined in the last decade (Figure 1.3.2). Such an improvement is not apparent in the other 15 countries, where the average rate of inflation and its volatility were higher in both periods.

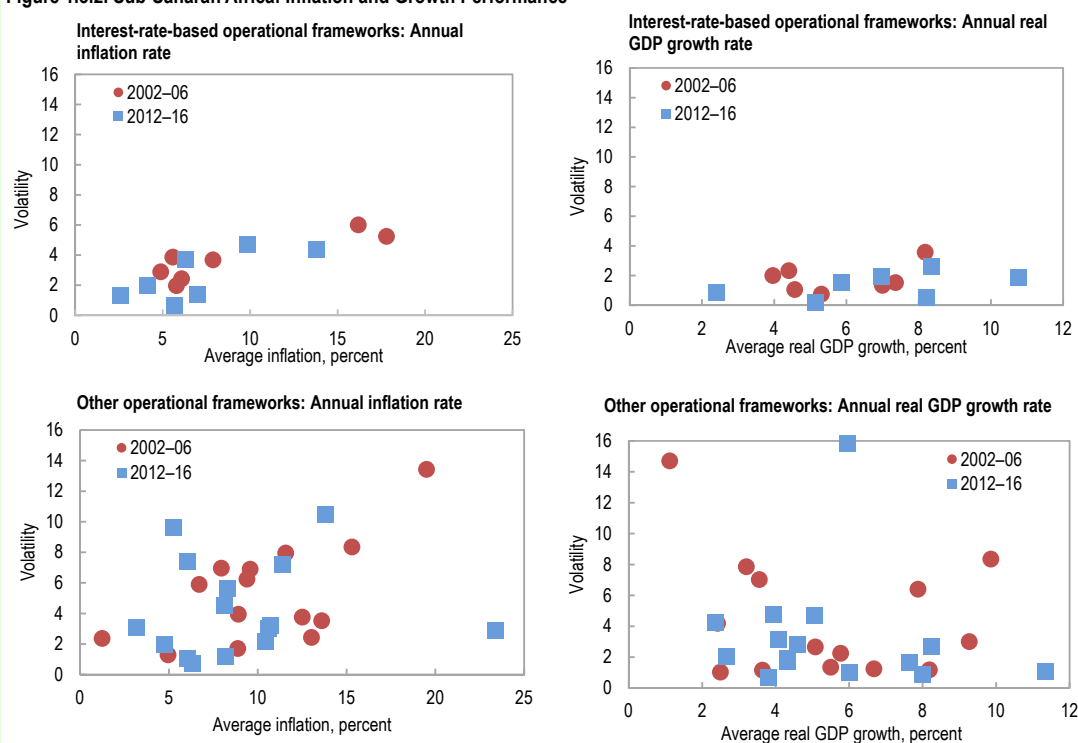
The volatility of real GDP growth appears to be lower in countries with interest-rate-based operational frameworks, possibly also reflecting central banks' concern for output stability. Nevertheless, output volatility appears to have declined in both groups. And there is no evidence that countries with interest-based operational frameworks achieved their inflation objectives at the expense of output stabilization.

Formal statistical analysis, following Ball and Sheridan 2003 and the September 2005 *World Economic Outlook*, appears to support the visual impressions from the plots in Figure 1.3.2, although the small sample size renders some of the results inconclusive.

These observations are subject to caveats. First, the reliance on a small sample of countries and a relatively short time span prohibits robustness checks of the results. Second, reverse causality is a possibility insofar as countries that experience lower output volatility may be more likely to adopt inflation-targeting regimes.

Nevertheless, the assessment suggests that countries that follow through on their policy decisions, notably by conducting consistent liquidity operations in support of their policy rate decisions, appear to reap palpable benefits from doing so. Therefore, countries that aspire to adopt forward-looking monetary policy frameworks, in addition to communicating their policy stance by setting a policy rate, are also well advised to keep interbank rates within a narrow corridor around it. This calls for strengthening interbank money market and foreign exchange market operations, liquidity management, and the analytical and communication capacity of central banks.

Figure 1.3.2. Sub-Saharan Africa: Inflation and Growth Performance



Sources: IMF, *International Financial Statistics*; IMF, *World Economic Outlook* database; and IMF staff calculations.

Note: Excludes countries with explicit fixed exchange rate arrangements since 2012. Average inflation rates less than 40 percent are plotted. Volatility is measured by the five-year standard deviation.

REFERENCES

- African Development Bank (AfDB). 2016. *Integrating Africa—Creating the Next Global Market*. Regional Integration Policy and Strategy (RiPOS) 2014–Series. Abidjan.
- Ball, L., and N. Sheridan. 2003. “Does Inflation Targeting Matter?” IMF Working Paper 03/129, International Monetary Fund, Washington, DC.
- Bouis, R. Forthcoming. “The Banks-Sovereign Nexus in Developing and Emerging Market Economies: Causes and Effects.” IMF Working Paper, International Monetary Fund, Washington, DC.
- Financial Stability Board (FSB). 2017. “FSB Correspondent Banking Data Report.” July 4. Basel.
- Gelbard, E., C. Deléchat, U. Jacoby, M. Pani, M. Hussain, G. Ramirez, R. Xu, E. Fuli, and D. Mulaj. 2015. “Building Resilience in Sub-Saharan Africa’s Fragile States.” IMF African Department Paper 15/05, International Monetary Fund, Washington, DC.
- Gurara, D., V. Klyuev, N. Mwase, A. Presbitero, X. C. Xu, and G. Bannister. Forthcoming. “Infrastructure Investment in Low-Income Developing Countries.” IMF Working Paper, International Monetary Fund, Washington, DC.
- International Monetary Fund (IMF). 2013. “Assessing Reserve Adequacy—Further Considerations.” IMF Policy Paper, Washington, DC.
- . 2015. “Evolving Monetary Policy Frameworks in Low-Income and Other Developing Countries.” IMF Policy Paper, Washington, DC.
- . 2016. “Guidance Note on the Assessment of Reserve Adequacy and Related Considerations.” June. Washington, DC.
- . 2017. “Recent Trends in Correspondent Banking Relationships: Further Considerations.” March. Washington, DC.

2. The Impact of Fiscal Consolidation on Growth in Sub-Saharan Africa

Many sub-Saharan African countries are facing a period of fiscal consolidation in order to ensure macroeconomic stability and sustainable growth. For the resource-intensive countries hit hard by the commodity price collapse, fiscal consolidation is urgent to offset likely permanent revenue losses. For other countries, especially those still growing fast, there may be less urgency for fiscal consolidation, but many have seen buffers eroded, and public debt and borrowing costs are on the rise.

The envisaged fiscal consolidation raises concerns as past episodes—both in the region and more broadly—have been associated with negative effects on growth. Against this backdrop, two related questions arise. How does output typically respond to spending cuts or revenue increases? And what policies can mitigate the impact of fiscal consolidation on output?

To answer these questions, this chapter examines the macroeconomic effects of changes in public expenditure and revenue in sub-Saharan African countries during 1990–2016.¹ The chapter begins by documenting some stylized facts from past fiscal consolidation episodes. Next, the extent to which changes in fiscal policy have knock-on effects on output in the short and medium term is analyzed. The chapter then focuses squarely on fiscal consolidation episodes to examine the impact on output and the role of policies and country characteristics in mitigating potential adverse effects. Based on the findings, the chapter concludes with policy recommendations.

The main findings are as follows:

- Estimated fiscal multipliers in sub-Saharan Africa tend to be smaller than those typically identified in advanced or emerging market economies. As detailed below, by examining the design of fiscal adjustments, institutional and country characteristics, and supporting policy environments, we are able to identify a number of factors contributing to these relatively low multipliers, as well as circumstances in which a larger impact should be expected.
- The impact of changes in fiscal policy on output suggests that it depends critically on whether these changes are expenditure or revenue based. Changing government investment by 1 percentage point of GDP changes output in the same direction by about 0.1 percent in the year of implementation, and by about 0.7 percent after three years. Changing public consumption has a smaller effect on output compared with public investment: after three years, a 1 percentage point of GDP change in government consumption results in a 0.5 percent change in output in the same direction. The impact of changing government revenues is smaller and statistically insignificant.
- Fiscal consolidation episodes also give rise to significant short- and medium-term output effects, depending on the types of fiscal measures used. Increasing the cyclically adjusted primary balance by 1 percentage point of GDP decreases output by 0.3 percent on impact, and by 0.4 percent over a three-year horizon. Fiscal consolidations based on reducing public investment have the largest contractionary effect:

This chapter was prepared by a team led by Charalambos Tsangarides and coordinated by Francisco Arizala, composed of Jesus Gonzalez-Garcia, Monique Newiak, and Mustafa Yenice.

¹ There is extensive literature on the effects of fiscal policy on economic activity. See Gupta and others 2005, IMF 2010b, IMF 2014, DeLong and Summers 2012, Baum, Poplawski-Ribeiro, and Weber 2012, Ilzetzi, Mendoza, and Vegh 2013, Auerbach and Gorodnichenko 2013a, 2013b, Blanchard and Leigh 2013, Batini and others 2014, Dell’Erba, Koloskova, and Poplawski-Ribeiro 2014, Mineshima, Poplawski-Ribeiro, and Weber 2014, and Abiad, Furceri, and Topalova 2016. This chapter contributes to the existing literature by focusing on sub-Saharan Africa, and by distinguishing between the effects of government consumption, government investment, and revenue.

during these episodes, a 1 percentage point improvement in the cyclically adjusted primary balance reduces output by about 0.4 percent on impact and by 0.7 percent after three years. Finally, fiscal consolidations based on cuts in current expenditures have a smaller effect on economic growth (although the effect is statistically insignificant), while fiscal consolidations based on revenue mobilization decrease output less than those based on public investment cuts.

- The precise impact of a change in fiscal policy on output is determined by a range of factors: responses are larger in periods of low growth and smaller where public expenditure management and revenue administration are less efficient. In addition, accompanying policies can play an important mitigating role during fiscal consolidations. In particular, contractionary effects can be lessened in the presence of an accommodative monetary policy stance while keeping inflation in check; greater exchange rate flexibility, where possible; and the existence of solid external buffers and more openness to trade.

Difficult choices need to be made on the speed of fiscal consolidation and the appropriate instruments to use. Our results imply that countries can mitigate the negative impact of fiscal consolidation on growth, but it is imperative for countries to initiate the consolidation in a timely manner in order to avoid forced adjustments:

- Increasing revenue is the least costly, in terms of output, method of achieving fiscal consolidation. However, as revenue mobilization takes time, cuts in expenditures may be unavoidable in countries where fiscal consolidation is needed to regain macroeconomic stability. In some countries—such as in resource-intensive countries where large investment-to-GDP ratios reflect the scaling up of investment in the context of the resource boom—cutting capital investment may be the most effective instrument to achieve the urgently needed fiscal adjustment. The impact of this adjustment on growth will be smaller where public investment efficiency is low.

- Relatively low tax ratios and large potential for revenue mobilization in the region may help explain why revenue-based fiscal consolidations were found to have the smallest impact on growth. Our analysis suggests that on average, countries in the region could increase the tax-to-GDP ratio by 3½–5 percentage points of GDP, and this potential is even larger in oil exporters (Box 2.1).
- Cutting current expenditure appears less harmful for growth than cutting investment, but the composition of these expenditures also matters. Cuts can be achieved by following public expenditure reviews and streamlining—for example, by eliminating highly regressive and poorly targeted fuel subsidies (Box 2.2). However, cuts in current spending can have a substantial negative impact on households, in particular on low-income ones, so it is important to ensure that an appropriate social safety net is in place (Box 2.3). Further, spending on health and education needs to be protected as it has long-term implications for growth and development outcomes. Cutting capital expenditures can significantly impact growth outcomes, and should be based on streamlining and quality-based prioritization of projects.
- Going forward, creating fiscal space through the establishment of credible medium-term fiscal frameworks and fiscal rules can also reduce future needs for abrupt fiscal consolidations.

LEARNING FROM THE PAST

Sub-Saharan Africa has undergone fiscal consolidations in the past, sometimes prompted by commodity price dips. Currently, the region is experiencing an environment where commodity exporters are facing a likely long period of low prices, and others are facing the need for adjustment due to mounting debt vulnerabilities (Chapter 1).

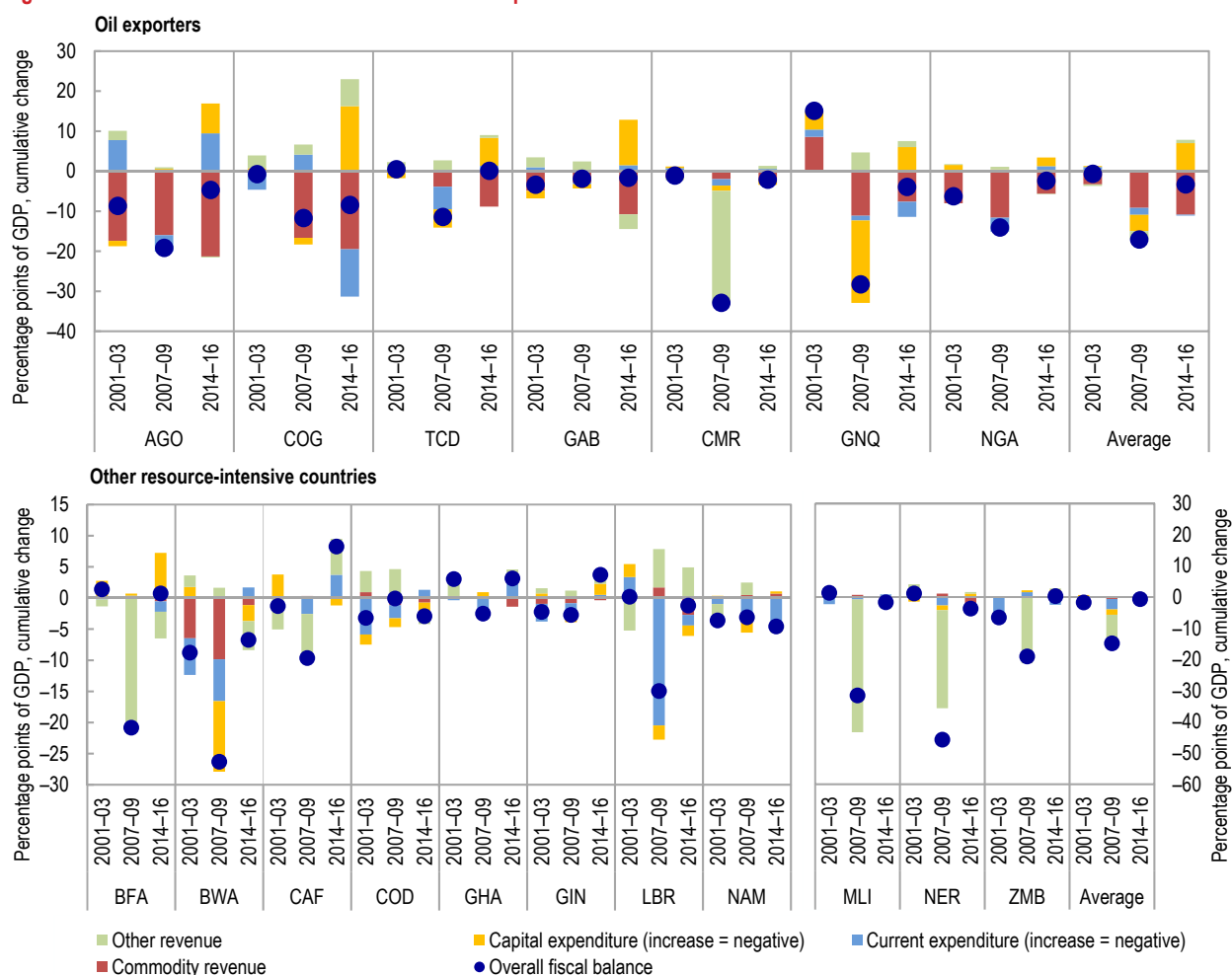
Adjusting to Commodity Revenue Declines

This section starts by identifying three episodes of commodity revenue declines in the region—the beginning of the millennium (2001–03), the global financial crisis (2007–09), and the most recent episode (2014–16)—and then investigates the

magnitude of the declines in commodity revenues and the degree and composition of fiscal adjustment that followed. We find that:

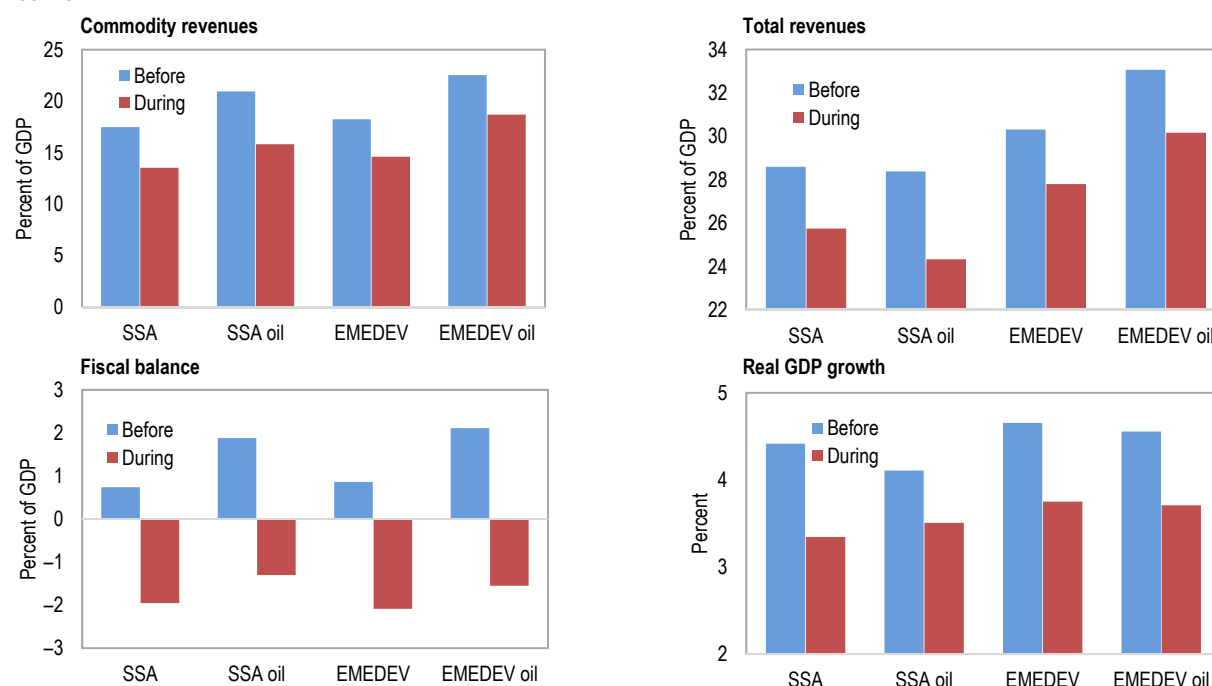
- Most commodity exporters' fiscal balances did not revert to the level preceding the shortfall in commodity revenues: three years after a commodity revenue shortfall, overall fiscal balances usually continued to be weaker (Figure 2.1). While fiscal balances have generally not fully adjusted back in the current episode either, several oil exporters (Angola, Gabon) have already recovered a substantial share of the shortfall.
- Commodity revenue shortfalls were generally not fully offset by increases in other revenues. When noncommodity revenues increased within the three years after the commodity revenue shortfall, the increase in other revenue only covered a fraction of the initial shortfall (for example, in Angola, Botswana, and the Republic of Congo), highlighting the scope for further revenue mobilization.
- Developments in expenditures varied across episodes. While expenditures on average expanded during the global financial crisis and remained flat for oil exporters in the early 2000s, they have been the main source of adjustment in the past three years, especially

Figure 2.1. Sub-Saharan Africa: Fiscal Balance Decomposition



Source: IMF, World Economic Outlook database.

Note: See page 76 for country groupings table and page 78 for country abbreviations.

Figure 2.2. Sub-Saharan Africa and Emerging Market and Developing Economies: Episodes of Commodity-Revenue Decline

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

Note: "Before" refers to the average values two years prior to the commodity-revenue decline episode, and "During" refers to the year of the commodity-revenue decline. EMEDEV = all emerging market and developing economies; SSA = sub-Saharan Africa.

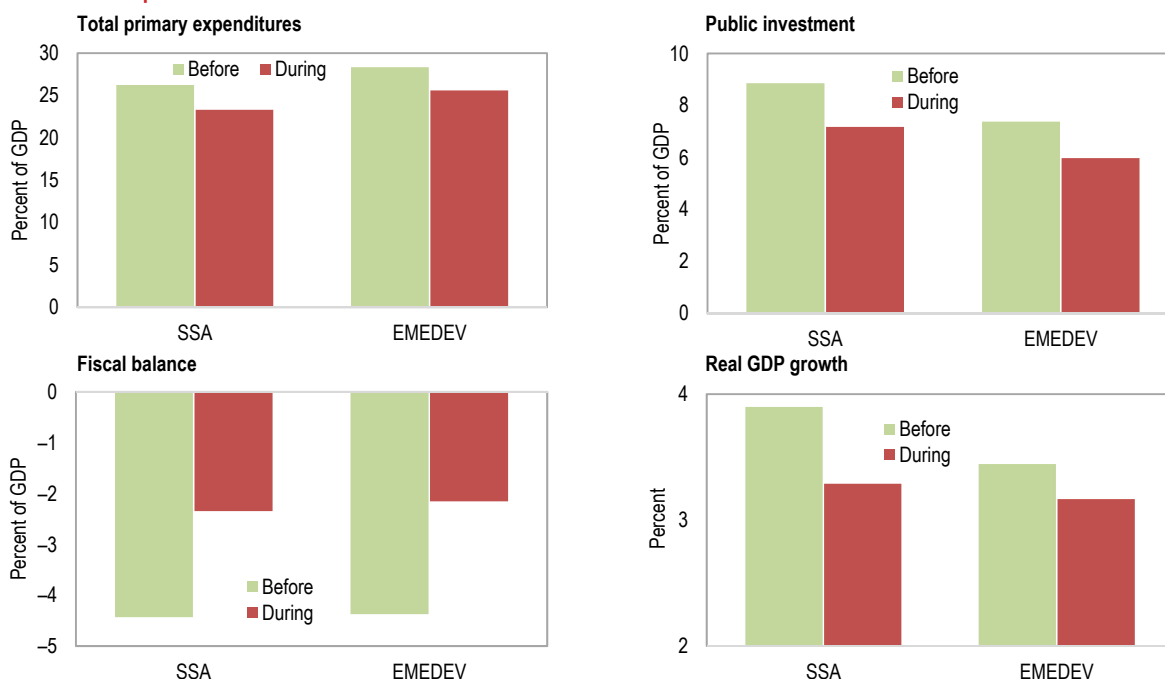
for oil exporters. Also, during the most recent episode, in cases where expenditures were cumulatively cut, this was mainly carried out through cuts in capital expenditures (for example, in Burkina Faso, Chad, Republic of Congo, Gabon, and Zambia), with Angola and the Central African Republic the only notable exceptions. This comparatively stronger adjustment is due in part to the perceived permanent character of the slump in commodity prices, and to the absence of sufficient fiscal and external buffers.² The magnitude of adjustment in investment expenditures depends on the initial size of government investment. In particular, for the most recent episode, countries with high investment-to-GDP ratios also experienced the largest cuts in public investment expenditures.

Looking more broadly at all episodes of commodity revenue declines during the period 1990–2016 in sub-Saharan Africa, we observe that, on average, commodity-related revenues declined by 4 percent of GDP and, after a partial offset from non-commodity-related revenues, total government revenues decreased by about 3 percent of GDP (Figure 2.2).³

Current and capital spending remained mostly unchanged, with overall fiscal balances deteriorating by about 3 percent of GDP, suggesting difficulties in adjusting to the revenue decline. Overall, the combination of the income shock from lower commodity prices, deteriorating overall balances, and possibly weaker global demand was associated with a growth deceleration of about 1 percentage point of GDP, on average. In the emerging market and developing economy sample, both the average

² Larger buffers and the perception that the shock was transitory during the global financial crisis called for implementing countercyclical fiscal policies in the region (Guerguil, Poplawski-Ribeiro, and Shabunina 2014).

³ We construct the commodity-related revenue database using the World Economic Outlook database complemented with data from country authorities, the World Commodity Exporters, and the ICTD Government Revenue Dataset. In addition, we identify episodes of commodity revenue-to-GDP declines of more than 1 percentage point—the average annual decline in commodity revenues among sub-Saharan Africa commodity exporters during 2013–16. This results in 90 episodes in sub-Saharan Africa and 252 episodes in the emerging market and developing economy sample.

Figure 2.3. Sub-Saharan Africa and Emerging Market and Developing Economies: Spending-Based Fiscal Consolidation Episodes

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

Note: "Before" refers to the average values two years prior to the consolidation episode, and "During" refers to the year of the consolidation. EMEDEV = all emerging market and developing economies; SSA = sub-Saharan Africa.

revenue shock and the growth effect are smaller than in the case of sub-Saharan Africa, perhaps reflecting a higher degree of diversification.

The average decline in commodity-related revenues was more dramatic for oil-exporting sub-Saharan African countries (about 5 percentage points of GDP), and was associated with capital spending cuts of about 1 percent of GDP, on average. Also in this group, overall deterioration in the fiscal balance was larger, at about 3.2 percent of GDP, and GDP growth decelerated by about 0.6 of a percentage point.

Episodes of Past Fiscal Consolidations

We now turn to the stylized facts of fiscal consolidations across the region during 1990–2016, and quantify their direct impact on economic activity.⁴

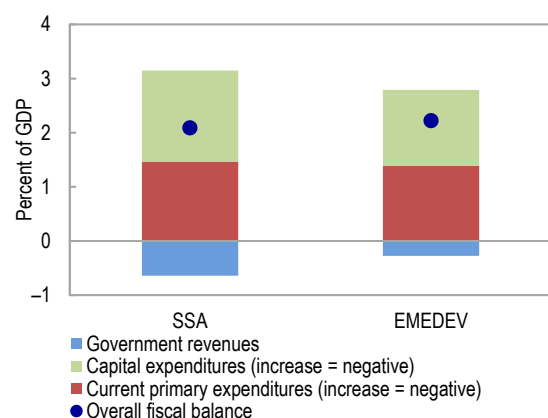
We characterize cases of fiscal consolidation as episodes of significant improvements in the countries' fiscal positions. As a baseline, we identify episodes where the cyclically adjusted primary balance improved by at least 1 percent of GDP (Annex 2.1).

During spending-based fiscal consolidation episodes, primary expenditures were reduced by about 3 percent of GDP, on average, in both the sub-Saharan African countries and the emerging market and developing economies sample (Figure 2.3).⁵

In both samples, the overall fiscal balance during fiscal consolidation episodes improved by about 2 percentage points starting from an average overall fiscal deficit of about 4 percent of GDP. Similarly,

⁴ We focus on action-based fiscal consolidations driven by spending cuts or noncommodity revenue mobilization, rather than on spending cuts associated with commodity price declines or improvements in the fiscal position associated with increases in commodity-related revenue. This is done in order to identify the effect of fiscal policy on economic activity rather than the income effect of commodity-price fluctuations.

⁵ In addition to the required improvement in the cyclically adjusted fiscal position of at least 1 percent of GDP, a fiscal consolidation is classified as expenditure-based if it is associated with primary spending cuts of at least 0.5 percent of GDP. Using this approach, we identify 211 episodes in sub-Saharan Africa and 568 episodes in the emerging market and developing economy sample.

Figure 2.4. Change in the Overall Fiscal Balance and Components: Spending-Based Fiscal Consolidation Episodes

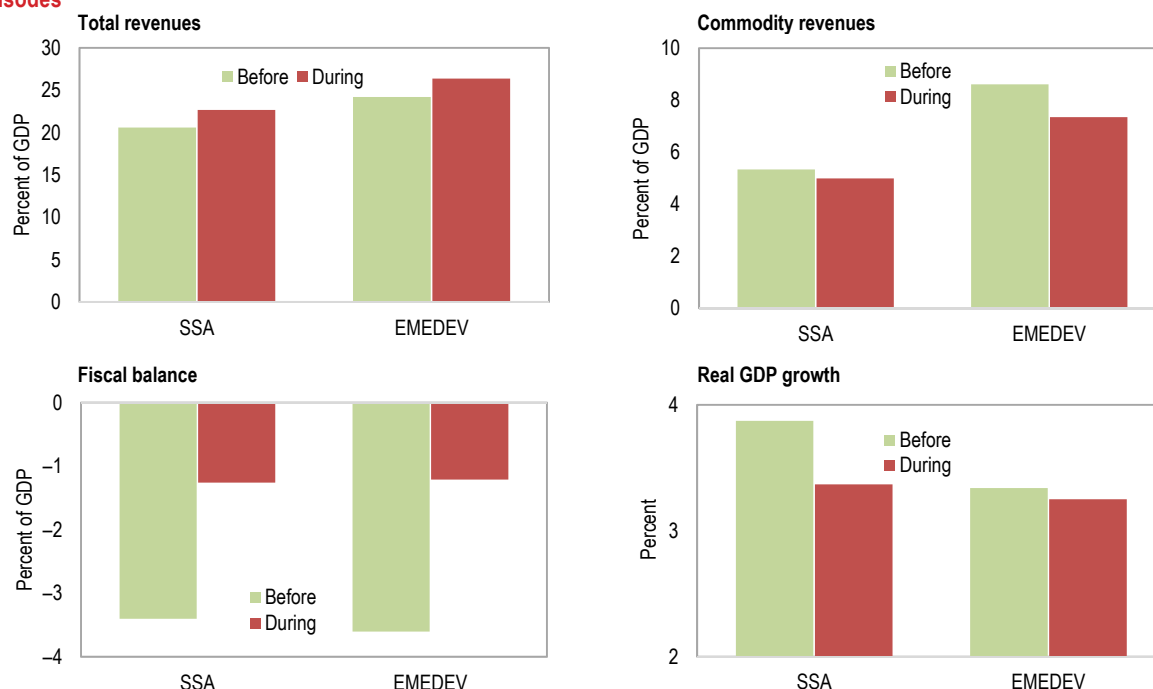
Sources: IMF, World Economic Outlook database; and IMF staff calculations.

Note: EMEDEV = all emerging market and developing economies; SSA = sub-Saharan Africa.

the change in the cyclically adjusted primary balance is about 3 percent in both samples.

In terms of composition, cuts in primary expenditures were roughly evenly distributed between capital spending and current primary spending cuts (about 1.7 and 1.5 percent of GDP, respectively) for the average sub-Saharan African country (Figure 2.4). In addition, government revenues declined moderately in both samples, possibly as a result of the slowdown in economic activity.

Revenue-based fiscal consolidations not associated with commodity revenue increases were of similar magnitude as those based on spending.⁶ They were also characterized by an average improvement in the fiscal position of about 2 percent of GDP and were mostly explained by improvements in government revenues, with limited cuts in primary expenditures (Figure 2.5).

Figure 2.5. Sub-Saharan Africa versus Emerging Market and Developing Economies: Revenue-Based Fiscal Consolidation Episodes

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

Note: "Before" refers to the average values two years prior to the consolidation episode, and "During" refers to the year of the consolidation. EMEDEV = all emerging market and developing economies; SSA = sub-Saharan Africa.

⁶ Revenue-based fiscal consolidations are defined as episodes when the cyclically adjusted primary balance improves by at least 1 percent of GDP together with at least 0.5 percent of GDP improvement in government revenues, and when the consolidation is not associated with an increase in commodity-related revenues. We identify 252 episodes in sub-Saharan Africa and 447 in the emerging market and developing economy sample.

Overall, past spending- and revenue-based consolidation episodes were associated with growth slowdowns. During spending-based consolidations, growth decelerated by about 0.6 and 0.3 percentage point in sub-Saharan Africa and emerging market and developing economy samples, respectively, compared with the rate of growth prior to the consolidation episode.

The growth deceleration has been milder in the case of revenue-based fiscal consolidations compared with spending-based adjustments. These results set the stage for the empirical analysis that follows.

THE EFFECT OF FISCAL POLICY ON OUTPUT

Understanding the impact of fiscal policy on economic activity is critical for consolidation plans. Despite their importance for public policy and a large body of literature, the size of fiscal multipliers—the change in output in response to a change in fiscal policy—remains an open question and often a source of disagreement among economists.

This section investigates the effect of changes in fiscal policy—proxied by unanticipated changes in public investment, public consumption, and fiscal revenue—on output for a sample of 35 sub-Saharan African countries over the period 1990–2016. In particular, it assesses whether the relationship between fiscal policy and output depends on the nature of the fiscal adjustment, the state of the economic cycle, or the efficiency of public investment and economic management. Fiscal multipliers are estimated considering all fiscal shocks (positive or negative) and across all fiscal stances.

This allows the quantification of the impact of fiscal policy across a broad set of countries in the region, including those still growing fast and where the need for fiscal consolidation might be more moderate.⁷

The approach used has two key elements. First, it uses forecast errors to identify the causal effects of unanticipated changes in public investment, consumption, and revenues on output growth (Auerbach and Gorodnichenko 2013a, 2013b; Abiad, Furceri, and Topalova 2016).⁸ Second, using the local projections method (LPM) (Jordà 2005), it traces the short- and medium-term responses of output to the unanticipated changes in different fiscal variables for up to five periods ahead.⁹

The Size of the Fiscal Multiplier

Multipliers vary depending on the policy variable. Public investment shocks have large and significant effects on economic activity (Figure 2.6).¹⁰ An unanticipated 1 percent of GDP change in public investment changes output by about 0.1 percent in the same direction in the year of the shock and by 0.7 percent after three years. Estimated multipliers for consumption expenditures have a smaller effect on output than investment multipliers (about 0.5 percent after three years). Finally, changing government revenue does not have a statistically significant effect on output.

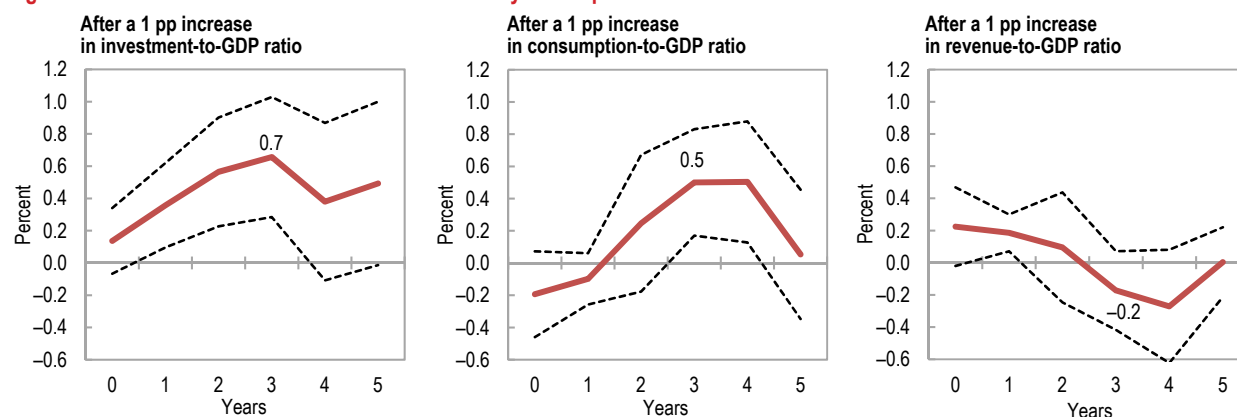
Consistent with other studies on developing economies, the magnitude of the estimated multipliers is less than one, with the investment expenditure multiplier being the largest in magnitude, followed by the multiplier of public consumption, and with the multiplier for revenues

⁷ Given the current context of many countries in the region, the next section estimates the effects of fiscal policy during episodes of fiscal consolidation. Conceptually, the distinction between the two sections is also important since a reduction in investment or an increase in revenues does not necessarily translate into a fiscal consolidation (given that, for instance, a cut in investment can be offset by an increase in consumption of the same amount, leaving the overall fiscal position unchanged).

⁸ Forecast errors for each of the three series (public investment, consumption, revenue) are computed as the difference between the actual observed value and the *World Economic Outlook* forecast as of the third quarter of the same year (see Annex 2.1 for more details).

⁹ The econometric specification includes three unanticipated fiscal policy shocks—public investment, public consumption, and government revenues—and also includes relevant macroeconomic controls such as lags of real GDP growth; lags of fiscal variables; contemporary and lagged observations of commodity price changes and real external demand (proxied by changes in commodity terms of trade and the real growth of trading partners, respectively); and lags of the monetary policy stance (proxied by real money growth and inflation). For details see Annex 2.1.

¹⁰ Figures show the effect of an unanticipated exogenous 1 percentage point increase in the ratios of public investment, public consumption, or revenue to GDP, for the year of the shock ($t = 0$) and the cumulative effect up to five years after the shock.

Figure 2.6. Sub-Saharan Africa: Effect of Fiscal Policy on Output

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

Note: The figures present the response in output after a percentage point increase in the ratios of investment, consumption, and government revenues to GDP. Dashed lines indicate 90 percent confidence bands. pp = percentage point.

not being statistically different from zero.¹¹ Overall, the estimated multipliers are within the range of those found in the literature for similar groups of countries (Table 2.1). For example, the estimated multiplier for investment expenditure is within the range reported by Ilzetski, Mendoza, and Vegh (2013) and Gonzalez-Garcia, Lemus, and Mrkaic (2013).¹²

Given the need for fiscal consolidation, what do these results imply about the composition of fiscal adjustment? First, reductions in government investment are more harmful for growth than cutting government consumption. This is because lower levels of productive investment imply lower capital accumulation, which has negative effects on potential output for subsequent periods (Dell’Erba, Koloskova, and Poplawski-Ribeiro 2014). However, crucial social spending on health, education, and social safety nets should be protected since reductions in current spending can have a larger negative effect on lower-income households, and could

adversely impact longer-term development prospects. Second, given the likely small impact on output, increasing revenue mobilization is less costly than cutting expenditures. Indeed, better domestic revenue mobilization offers substantial potential to consolidate with a lower cost in terms of output growth. As discussed in Box 2.1, the average sub-Saharan African country could increase its tax-to-GDP ratio by 3½ to 5 percentage points—and the potential is larger in oil exporters, which could raise the tax-to-GDP ratio by as much as 8¼ percentage points, on average.

Fiscal Multipliers and Country Characteristics

The impact of fiscal policy shocks has been found to depend crucially on the state of the economic cycle and country characteristics, such as periods of low and high growth, and the efficiency of public investment and economic management. This section investigates these issues in the context of sub-Saharan Africa.¹³

¹¹ Using tax revenue instead of overall revenues yields similar results. When considering tax revenues, the estimated effect after three years of a percentage point change in the ratios of public investment or public consumption to GDP is to change output by 0.6, and 0.4, respectively, in the same direction. These estimates, however, are based on a reduced sample due to the limited availability of tax revenue forecasts in the World Economic Outlook database. Since conclusions are similar to the baseline results in Figure 2.6, the remainder of the analysis uses total fiscal revenue to allow for a more comprehensive sample.

¹² For consumption expenditure, our estimate is broadly in line with the literature, ranging between 0.1 and 0.3 after two years into the shock. For fiscal revenue, other studies generally report a slightly positive but insignificant multiplier.

¹³ The literature on fiscal multipliers has also discussed the degree of exchange rate flexibility, the level of debt, and the degree of openness of the economy (Ilzetski, Mendoza, and Vegh 2013; Batini and others 2014; Mineshima, Poplawski-Ribeiro, and Weber 2014). We expand on this discussion in the next section. In addition, multipliers are likely to be different in the case of oil-exporting countries, given that fiscal policy mainly affects the non-oil economy. Due to small sample data limitations, it is difficult to focus only on oil exporters.

Table 2.1. Selected Groups: Estimated Fiscal Multipliers in the Literature

Source	Group	Variable	1 Year	2 Years	3 Years
Abiad, Furceri, and Topalova 2016	Advanced Economies	Investment	0.8	1.0	1.5
Blanchard and Leigh 2013	Europe	Structural fiscal balance	1.1	...	...
Gonzalez-Garcia, Lemus, and Mrkaic 2013	Developing economies	Investment	0.4	0.6	...
		Consumption	0.4	0.3	...
		Taxes	-0.1	0.5	...
Ilzetki, Mendoza, and Vegh 2013	High-income countries	Consumption	0.4	0.5	0.6
		Investment	0.9	1.2	1.3
	Developing economies	Consumption	0.2	-0.1	-0.4
Kraay 2012	Aid-dependent economies	Investment	1.5	1.6	1.6
		Spending	0.5	...	...
		Spending	0.9	1.0	1.1
Ilzetki 2011	High-income countries	Taxes	-0.1	-0.1	-0.2
		Spending	0.4	0.3	0.2
	Developing economies	Taxes	-0.4	-0.6	-0.8
IMF 2008	Advanced economies	Spending	...	...	0.5
		Revenue	...	...	-0.4
	Emerging economies	Spending	...	...	-0.2
		Revenue	...	...	-0.2

Source: Authors' calculations.

Note: The figures show the effects of increases in spending and public revenue, thus expected signs are positive and negative, respectively. Boldface type denotes significance at least at the 0.10 level.

Business Cycles

In general, fiscal multipliers tend to be larger in downturns than in expansions. In an environment of low growth and economic slack, an increase in public spending can potentially have a larger impact on economic activity than it would in a context of high rates of growth. This is because, at full capacity or in a period of high growth, an increase in public demand is more likely to crowd out private demand and leave output unchanged. On the other hand, during periods of low growth or economic slack, there is more room for the fiscal impulse to translate into an expansion of aggregate demand and output.

Indeed, a downturn has a different effect on multipliers than an upturn in sub-Saharan African countries. During periods of low growth, public spending multipliers tend to be larger than during periods of high growth, while the revenue multiplier shows a smaller magnitude during periods of low growth (Figure 2.7).¹⁴

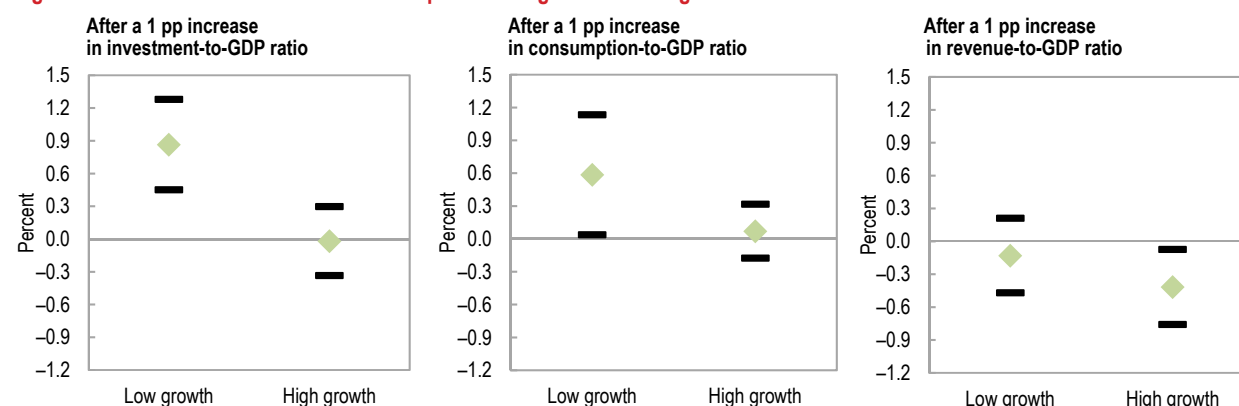
Efficiency of Public Investment and Economic Management

Inefficiencies in public expenditure management and revenue administration tend to decrease multipliers because they limit the impact of fiscal policy

on output. Such inefficiencies may capture weaknesses in governance, public investment management in general, and project selection, implementation, and monitoring—all of which result in a dollar's worth of investment expenditures yielding less than a dollar of effective public capital. Since in a low-efficiency environment only a fraction of public investment spending translates into productive capital stock and infrastructure, increased public investment leads to more limited output gains (see Chapter 2 of the October 2014 *World Economic Outlook*).

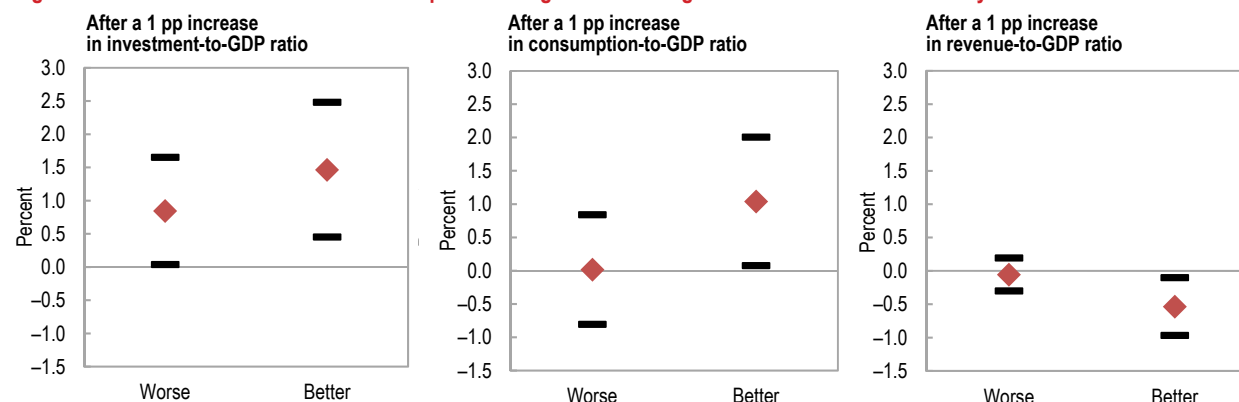
We proxy inefficiencies and quality of economic management using a composite indicator that combines three aspects of the quality of government from the *International Country Risk Guide* (ICRG), namely the quality of bureaucracy, control of corruption, and the tradition of law and order. Indeed, sub-Saharan African countries with lower governance quality tend to show smaller multipliers of both public spending and revenue (Figure 2.8). The results suggest that public spending tends to be relatively less productive when the quality of governance is low, a circumstance that may favor rent seeking over efficient spending (Keefer and Knack 2007).

¹⁴ For low and high growth, and worse or better institutional quality, the measures refer to the standardized distance between the indicator and the sample mean. The efficiency of public investment refers to a time-varying score between 0 and 1. In all cases, the variables enter the estimated equation using a smooth transition function, as in Auerbach and Gorodnichenko 2013a.

Figure 2.7. Sub-Saharan Africa: Fiscal Multipliers during Periods of High and Low Growth

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

Note: The figures present the response in output after a percentage point increase in the ratios of investment, consumption, and government revenues to GDP. Bars indicate 90 percent confidence bands. pp = percentage point.

Figure 2.8. Sub-Saharan Africa: Fiscal Multipliers during Periods of High and Low Governance Quality

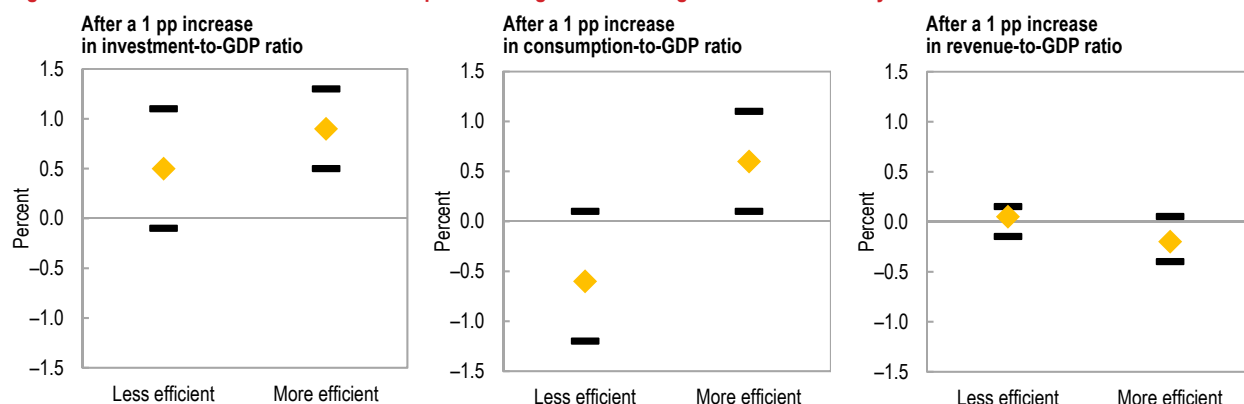
Sources: PRS Group, International Country Risk Guide database; and IMF staff calculations.

Note: The figures present the response in output after a percentage point increase in the ratios of investment, consumption, and government revenues to GDP. Bars indicate 90 percent confidence bands. pp = percentage point.

In addition, we proxy inefficiencies in public spending and quality of economic management using a hybrid indicator that combines physical and survey-based indicators into a synthetic index of the coverage and quality of infrastructure networks (IMF 2015). We find that multipliers of both public investment and consumption expenditure are significantly larger in countries where public investment is most efficient, and lower in countries with low efficiency of public investment (Figure 2.9). The multiplier of fiscal revenue is estimated to be larger when the efficiency of public investment is larger, but the results are not statistically significant.

FISCAL CONSOLIDATIONS, ECONOMIC ACTIVITY, AND MITIGATION POLICIES

This section focuses squarely on the effects of fiscal consolidation on economic activity and the policies that can lessen their potentially contractionary effects. These include policies related to the composition of consolidations as well as accompanying policies such as those affecting monetary conditions, the degree of exchange rate flexibility, the level of indebtedness, the size of external buffers, and the degree of trade integration.

Figure 2.9. Sub-Saharan Africa: Fiscal Multipliers during Periods of High and Low Efficiency of Public Investment

Sources: IMF, Fiscal Affairs Department, Public Investment Efficiency Indicator database; and IMF staff calculations.

Note: The figures present the response in output after a percentage point increase in the ratios of investment, consumption, and government revenues to GDP. Bars indicate 90 percent confidence bands. pp = percentage point.

Identifying Episodes of Fiscal Consolidations

As described in IMF 2010a, it is important to consider “action-based” fiscal consolidations—that is, improvements in the fiscal position resulting from a reduction in public expenditures or increases in revenue mobilization—that are not explained by a surge in commodity revenues or a reflection of increases in government revenues associated with improvements in the business cycle. We follow the literature by identifying the size of the fiscal consolidation based on the cyclically adjusted primary balance, excluding episodes that are associated with improvements in commodity revenues. In addition, we distinguish fiscal consolidations between: (1) those driven by government spending cuts and not associated with improvements in commodity revenues; and (2) revenue-based consolidations not associated with improvements in commodity revenues.¹⁵

The analysis estimates the direct effect of fiscal consolidations on economic activity using the LPM and following Dell’Erba, Koloskova, and Poplawski-Ribeiro (2014), and Devries and others (2011).

We identify the average effect of the policy intervention relative to a baseline on output growth and estimate the expected impact of the policy intervention after controlling for domestic and external economic conditions.¹⁶

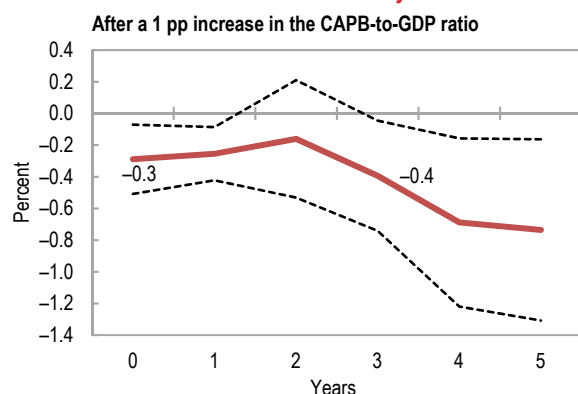
How Much Does Fiscal Consolidation Hurt?

Focusing first on episodes of fiscal consolidation associated with spending cuts and not related to an improvement in commodity revenues, we find that fiscal consolidations have contractionary effects on economic activity. A 1 percentage point adjustment in the ratio of the cyclically adjusted primary balance to GDP reduces output by about 0.3 percent on impact and by 0.4 percent after three years (Figure 2.10).¹⁷

¹⁵ In all cases, the improvement of the cyclically adjusted primary balance needs to be higher than 1 percent of GDP (see IMF 2010a; Dell’Erba, Koloskova, and Poplawski-Ribeiro 2014). In addition, consolidations are classified as expenditure based if spending falls by at least 0.5 percent of GDP and as revenue based if government revenues increase by at least 0.5 percent of GDP. Also, in all cases, commodity-related revenues cannot increase by more than 1 percent of GDP. See Annex 2.1.

¹⁶ Given the limited intraregional integration in sub-Saharan Africa, the spillovers from fiscal consolidations are expected to be low; see, for instance, Chapter 1 of the April 2016 *Regional Economic Outlook: Sub-Saharan Africa*. For a discussion on regional spillovers in the context of fiscal consolidations in the euro area see Dabla-Norris, Dallari, and Poghosyan, forthcoming.

¹⁷ These results are robust to alternative definitions of fiscal consolidation episodes, including when spending-based consolidations are required to have a larger component of spending cuts than revenue increases. Analyzing “large” fiscal consolidations (defined as an improvement in the cyclically adjusted primary balance larger than 1.5 percent of GDP, as in IMF 2010a), we also find similar results, although the contractionary effects on output seem to be slightly larger. Finally, identifying fiscal consolidations that are “sustained” over time (defined as fiscal consolidations where the three-year cumulative change in the cyclically adjusted primary balance was larger than 2.5 percent of GDP), we observe stronger contractionary effects on economic activity.

Figure 2.10. Sub-Saharan Africa: Impact of Spending-Based Fiscal Consolidation on Economic Activity

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

Note: The figure presents the response in output after a 1 percentage point to GDP improvement in the cyclically adjusted primary balance (CAPB), following a spending-based consolidation. Dashed lines indicate 90 percent confidence bands. pp = percentage point.

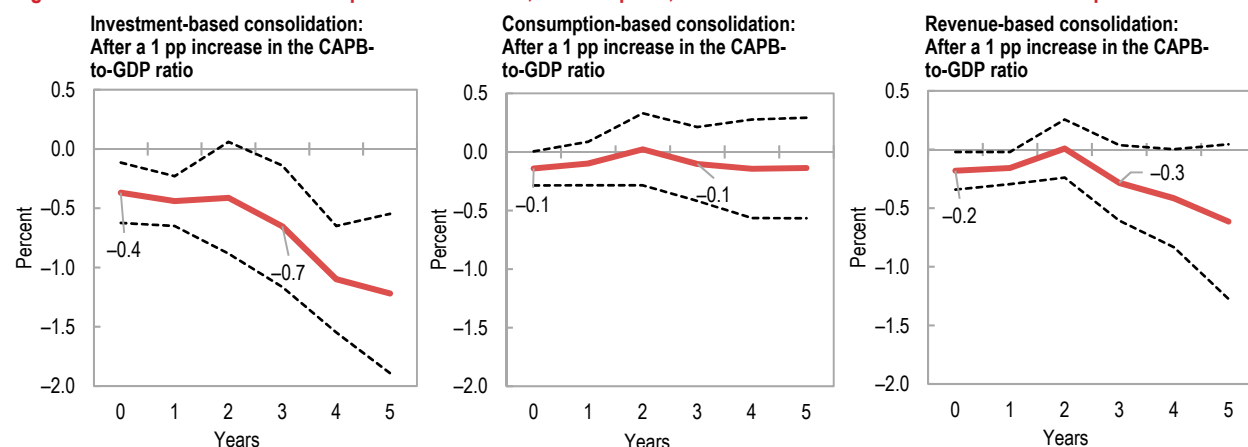
Differentiating fiscal consolidations depending on whether they are mostly driven by a reduction in public investment, a reduction in current expenditures, or an increase in revenues, the analysis finds that the impact on output depends on the composition of fiscal consolidation. Consolidations driven by reductions in public investment are the least growth friendly: a 1 percentage point of GDP adjustment in the fiscal position during these episodes reduces output by about 0.4 percent on impact, and by close to 0.7 percent after three years (Figure 2.11). As discussed earlier, this result may be explained by the fact that lower investment affects potential output and through this channel

has a longer-lasting impact on output (Dell’Erba, Koloskova, and Poplawski-Ribeiro 2014).

Considering fiscal consolidations driven by cuts in current expenditures, we find small and insignificant effects on output. This suggests that cutting potentially wasteful components of spending and streamlining expenditures (such as eliminating fuel subsidies, which tend to be regressive (Box 2.2) may achieve fiscal consolidation and at the same time have only mild or negligible effects on economic activity. Importantly, assessments of the distributional effect of the composition of fiscal consolidation (see for instance, Ball and others 2013 and Woo and others 2013) underscore the need to protect crucial social spending on health, education, and social safety nets (Box 2.3).

Finally, fiscal consolidations driven by increases in revenue mobilization (and not associated with higher commodity-related revenues) have negative effects on growth, but these are of a smaller magnitude than investment-based fiscal consolidations. A 1 percent of GDP improvement in the fiscal position during these episodes reduces output by about 0.2 percent on impact and by 0.3 percent after three years (although not statistically different from zero) compared with 0.4 and 0.7, respectively, when fiscal consolidations are investment based.

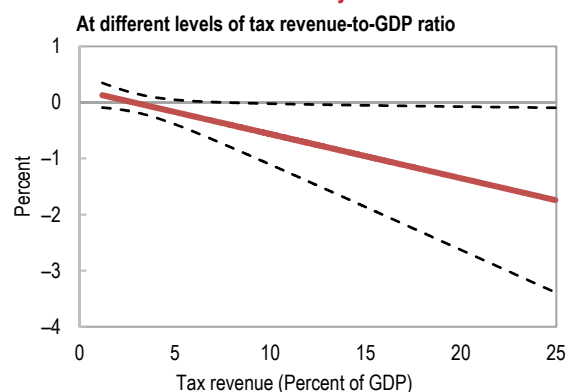
In the case of sub-Saharan Africa, the relatively low tax ratios and the untapped potential for revenue mobilization may be a possible explanation for

Figure 2.11. Sub-Saharan Africa: Impact of Investment, Consumption, and Revenue-Based Consolidations on Output

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

Note: The figures present the response in output after a 1 percent of GDP improvement in the cyclically adjusted primary balance (CAPB), following an investment, consumption, or revenue-based consolidation. Dashed lines indicate 90 percent confidence bands. pp = percentage point.

Figure 2.12: Sub-Saharan Africa: Impact of Tax-Based Consolidation on Economic Activity



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

Note: The figure presents the marginal effect on output for different levels of the tax-revenue-to-GDP ratio following a tax-based fiscal consolidation. Dashed lines indicate 90 percent confidence bands.

revenue-based measures being less contractionary than investment-based consolidations (see Gaspar, Jaramillo, and Wingender 2016 for a similar argument).¹⁸ Indeed, the estimated impact of tax-based consolidations for different levels of tax-to-GDP ratios is smaller in countries with low levels of tax revenue mobilization (Figure 2.12).

The Role of Policies and Macroeconomic Factors

Can policies or macroeconomic fundamentals play a mitigating role when fiscal consolidation is needed? These policies may include the monetary stance, the urgency for the fiscal consolidation, and other elements associated with the external sector such as the degree of exchange rate flexibility, the size of external buffers, and the degree of trade openness.¹⁹

Monetary Policy Stance

A more accommodating monetary policy stance, proxied by the rate of growth of broad money and credit to the private sector—or more broadly, less tight liquidity conditions—helps lessen the contractionary effects of fiscal consolidation on growth (Figure 2.13). We also find preliminary evidence that in countries experiencing higher inflation

levels, fiscal consolidation may be less harmful for growth, although these results are not always statistically significant. A plausible channel is that fiscal consolidation reduces aggregate demand, contributing to a reduction in inflation, which in itself is favorable for growth. In addition, if consolidation contributes to reducing inflation, it also contributes to strengthening the credibility of the economic policy package that also supports growth.

Different Debt Environments

The contractionary effects of fiscal consolidation are smaller in the case of countries with higher debt (Figure 2.14). As in the case of high inflation, fiscal consolidation can favor the reduction of high debt levels, as well as have positive credibility and confidence effects and contribute to reducing the burden of debt service in the future, which in turn allows for freeing resources for productive and growth-friendly investments.

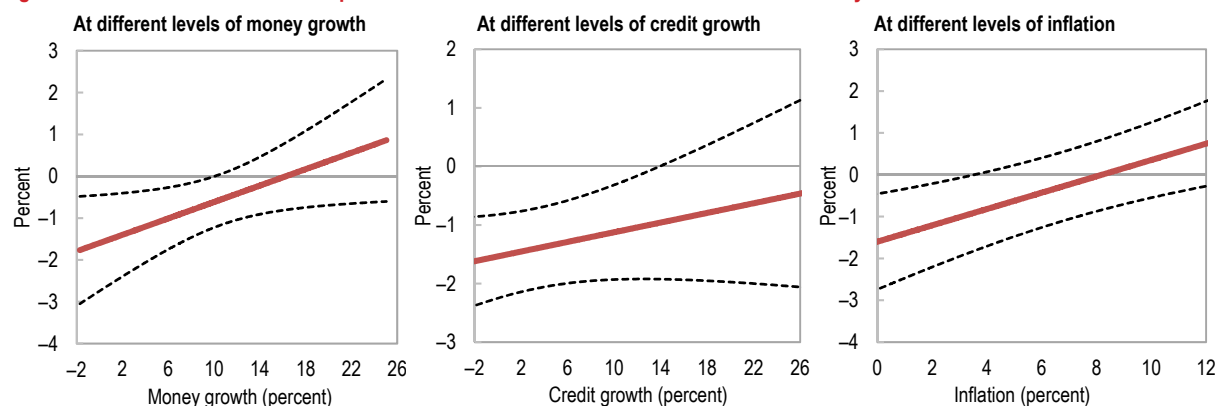
External Sector

Consistent with the literature on fiscal multipliers (for example, Ilzetzki, Mendoza, and Vegh 2013), we find preliminary evidence that more exchange rate flexibility can lessen the negative impact of fiscal consolidation on economic activity, although the results are not statistically significant (Figure 2.15). The main channel of transmission is that in a more flexible exchange rate regime, monetary policy is less constrained by fiscal policy, and in the context of a fiscal consolidation it does not need to contract the monetary policy stance, as would be the case under a more rigid exchange rate arrangement.

The analysis also finds evidence that countries with more robust external buffers—measured as the level of international reserves as a percentage of GDP—seem to face a smaller impact of fiscal consolidation on growth. A possible explanation is that, all else being equal, these countries may have greater leeway to implement the fiscal adjustment than a country with exhausted external buffers. Finally,

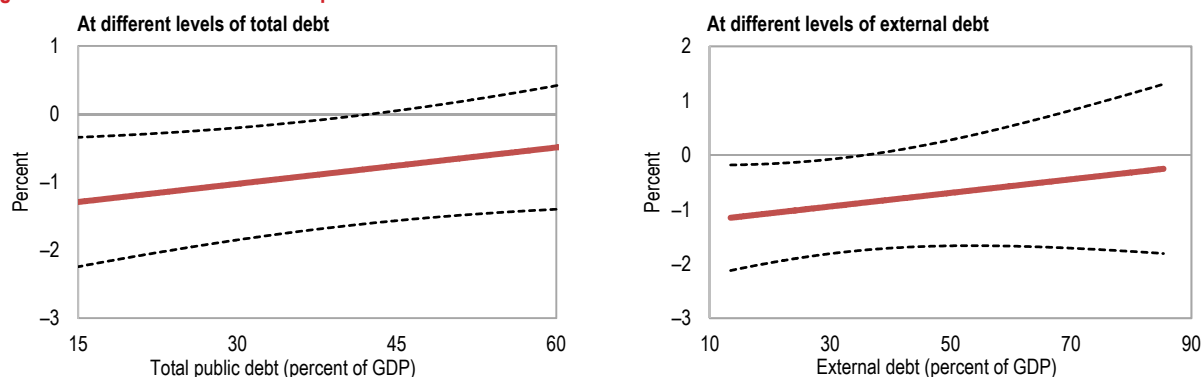
¹⁸ For a sample of 15 advanced economies, which tend to have larger tax ratios, IMF 2010a finds that tax-based consolidations are more contractionary than spending-based adjustments. Similarly, for a sample of advanced economies, and using a nonlinear estimation, Dell’Erba, Koloskova, and Poplawski-Ribeiro (2014) find that over the medium term expenditure-based fiscal consolidations are less contractionary than revenue-based consolidations during normal periods of economic growth and not statistically different from each other in the case of prolonged recessions.

¹⁹ To address this point, we augment the baseline specification with an interaction term between the fiscal policy variable and the other accompanying policies and calculate the marginal effect of fiscal consolidation on economic activity for different levels of the policy variables (see Annex 2.1).

Figure 2.13. Sub-Saharan Africa: Impact of Fiscal Consolidations under Different Monetary Conditions

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

Note: The figures present the marginal effect on output for different levels of money growth, credit growth, and inflation following a spending-based fiscal consolidation. Dashed lines indicate 90 percent confidence bands.

Figure 2.14. Sub-Saharan Africa: Impact of Fiscal Consolidations in Different Debt Environments

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

Note: The figures present the marginal effect on output for different levels of total and external debt following a spending-based fiscal consolidation. Dashed lines indicate 90 percent confidence bands.

consistent with the fiscal multiplier literature, we find preliminary evidence that growth in more open economies suffers less during fiscal consolidations than in more closed economies. A possible channel is that external demand plays a larger role in overall economic activity in more open economies and is less dependent on the role of public demand.

POLICY CONSIDERATIONS AND CONCLUSIONS

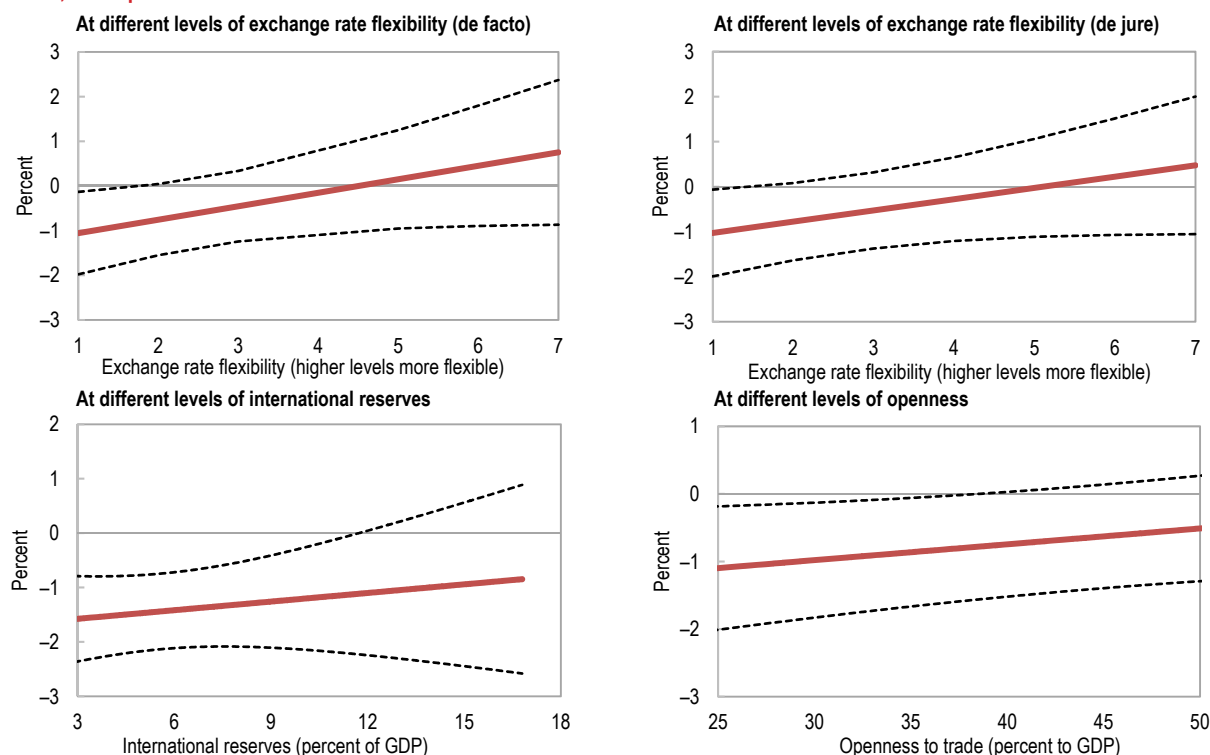
The analysis in this chapter suggests that fiscal consolidations in sub-Saharan African countries typically have a contractionary effect on output. The composition of fiscal consolidation also matters: cutting capital expenditures is much costlier in

terms of output than cutting current expenditures or raising revenue. During episodes of investment-based fiscal consolidation, a 1 percentage point of GDP improvement in the fiscal position lowers output by 0.4 percent in the first year of consolidation, and by about 0.7 percent three years later. In contrast, during fiscal consolidations based on current expenditures and revenue, a 1 percentage point of GDP improvement in the fiscal position lowers output on impact by 0.1 and 0.2 percent, respectively.

This suggests that countries in the region facing an urgent need to consolidate will have to implement policies that are likely to weigh negatively on economic activity.²⁰ At the same time, they face

²⁰ Some related literature discusses a trade-off between consolidation and growth, in effect slowing the accumulation of debt to control its possible negative effect on growth, on the one hand, and the risk that consolidation may slow down growth, on the other. For example, DeLong and Summers 2012 suggest that fiscal consolidation and austerity may be self-defeating if they cause short-term reductions in growth to become permanent through negative hysteresis effects on trend output.

Figure 2.15. Sub-Saharan Africa: Impact of Fiscal Consolidations and Role of Exchange Rate Flexibility, International Reserves Buffers, and Openness to Trade



Sources: IMF, World Economic Outlook database; Penn World Table 9.0; and IMF staff calculations.

Note: The figures present the marginal effect on output for different levels of exchange rate flexibility, international reserves, and openness following a spending-based fiscal consolidation. Dashed lines indicate 90 percent confidence bands. In the case of the exchange rate flexibility measures, higher values mean more flexibility according to the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) database.

difficult choices about the timing and speed of consolidation and what instruments to use. What can be done to mitigate the negative impact of consolidation on growth? Can fiscal positions be improved while finding a way to exert a more limited effect of consolidation on output? Our analysis suggests the following in response:

- Since increasing revenue is less costly in terms of output, consolidation through revenue mobilization is preferable to cutting expenditures, especially public investment. Furthermore, increasing revenue through domestic revenue mobilization can yield substantial returns by allowing the region's social and infrastructure gaps to be addressed (see the October 2014 *Regional Economic Outlook: Sub-Saharan Africa*). Since tax collection in the region is generally low, increasing revenue mobilization can be growth enhancing (Gaspar, Jaramillo, and Wingender 2016). Indeed, there is scope to further boost public revenues through the expansion of tax bases and the modernization of outdated tax structures, and by increasing tax rates. Estimates for the region suggest a large untapped revenue potential: on average, sub-Saharan African countries could increase their tax-to-GDP ratio between 3.5 and 5 percentage points (Box 2.1). Nonetheless, increases in revenue mobilization may be difficult to implement quickly, creating a need to adjust spending in the short term.
- Cutting current expenditure is preferable to cutting investment, but composition matters. Options include streamlining expenditures by containing the wage bill in oversized public sectors, and eliminating highly regressive and poorly targeted fuel subsidies in favor of targeted social spending (Boxes 2.2 and 2.3). Current spending cuts are likely to have social costs and hence need to be designed in conjunction with social protection schemes and the preservation of crucial social spending on health

and education. Cutting capital expenditures, which arguably tends to encounter the least resistance, should be the last option and limited to items that have a limited impact on domestic activity (for example, those with a large import component) and long-term economic growth, or in cases where the scaling up of investment has taken place and consolidation is urgent. In addition, capital expenditures could be streamlined following a quality-based prioritization of projects, as fiscal multipliers are smaller where spending efficiency is low.

- Complementary policies can play an important mitigating role in fiscal consolidation. A more accommodative monetary policy, while keeping inflation in check, can lessen the contractionary effects of fiscal consolidation by offsetting some of the negative demand effects. In addition, greater exchange rate flexibility, wherever possible, and greater openness to trade may play a mitigating role. Building external buffers in the form of international reserves and creating fiscal space through the establishment of credible medium-term fiscal frameworks and fiscal rules can go a long way in preventing the need for abrupt fiscal consolidations in the future.

The discussion above suggests that there are ways to mitigate the effects of consolidation, but the overall strategy and challenges may differ between countries in the region:

- Commodity exporters are still adjusting to the new environment of low commodity prices and the resulting reduced export proceeds and budgetary revenues, in particular in oil exporters. With limited remaining buffers, fiscal consolidation is urgent. A fiscal adjustment will be needed especially for those countries facing large financing gaps, limited access to markets, or rapidly rising debt. To minimize the impact on economic activity, priority should be given to measures that have low multipliers. These may include postponing new spending initiatives, cutting low-quality projects and expenditures linked to imports, implementing public expenditure reviews, and containing the wage bill (IMF 2010a). As real public wages tend to be high in some resource-rich countries, containing or reducing them could also be helpful for competitiveness and growth, especially if the private sector wage-setting process uses the public sector as a reference (IMF 2016a). Similarly, in resource-rich countries where the investment-to-GDP ratio substantially increased during the boom years, a reduction in capital expenditures may be warranted. On the revenue side, improving noncommodity revenues (which are generally low) reduces reliance on commodity-related revenue and overall has a lower fiscal multiplier than expenditures. In parallel, countries need to strengthen medium-term fiscal frameworks, based on conservative commodity-price assumptions (IMF 2016a), and sustain economic diversification efforts (Chapter 3).
- Non-resource-intensive countries are dealing with elevated fiscal deficits as governments address social and infrastructure gaps. Despite robust growth, vulnerabilities are emerging with public debt on the rise. These countries would benefit from some degree of fiscal consolidation to avoid building further vulnerabilities, but they can consolidate at a slower pace and focus on a smoother adjustment process. In the context of a more measured consolidation effort, it is important to ensure that increases in expenditures, which have led to rapidly rising debt levels, are curbed, consistent with medium-term fiscal and external sustainability. As in the case of commodity exporters, greater focus on domestic revenue mobilization is required given the large untapped potential for greater revenue collection.
- In all countries in the region, the adjustment should be accompanied by efforts to improve the business environment, enhance the quality of institutions and governance, support domestic competition, and put in place fiscal reforms to promote growth (IMF 2016b).

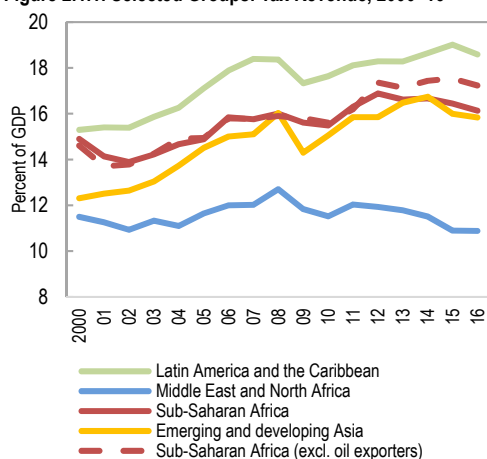
Box 2.1. Sub-Saharan Africa's Revenue Potential

Research presented in this box finds that the average sub-Saharan African country could increase its tax-to-GDP ratio by 3½ to 5 percentage points. The potential varies from 3¼ percentage points in resource-intensive countries to 3¾ in non-resource-intensive ones and 8¼ percentage points in oil exporters. The potential revenue that could be collected from taxes on goods and services—which already constitutes a significant share of taxes in many countries—is large.

Over the past 15 years, tax revenues have been on an increasing trend in sub-Saharan Africa, rising from an average of less than 15 percent of GDP in 2000 to a peak of 17½ percent of GDP in 2012 (Figure 2.1.1).

However, tax revenue trends have varied during these years. Since the drop in commodity prices, oil exporters, in particular, have seen tax revenues decline sharply (Angola, Chad, Nigeria), while revenue losses in other commodity exporters have been more moderate (Central African Republic, Sierra Leone, Zambia) and often related to taxes on international trade (Figure 2.1.2, panel 1). Conversely, many non-resource-intensive countries have seen their tax-to-revenue ratios increase, mainly through a rise in the tax ratio on goods and services, which constitutes a significant share of tax revenues in the region's oil importers (Figure 2.1.2, panel 2).

Figure 2.1.1. Selected Groups: Tax Revenue, 2000–16



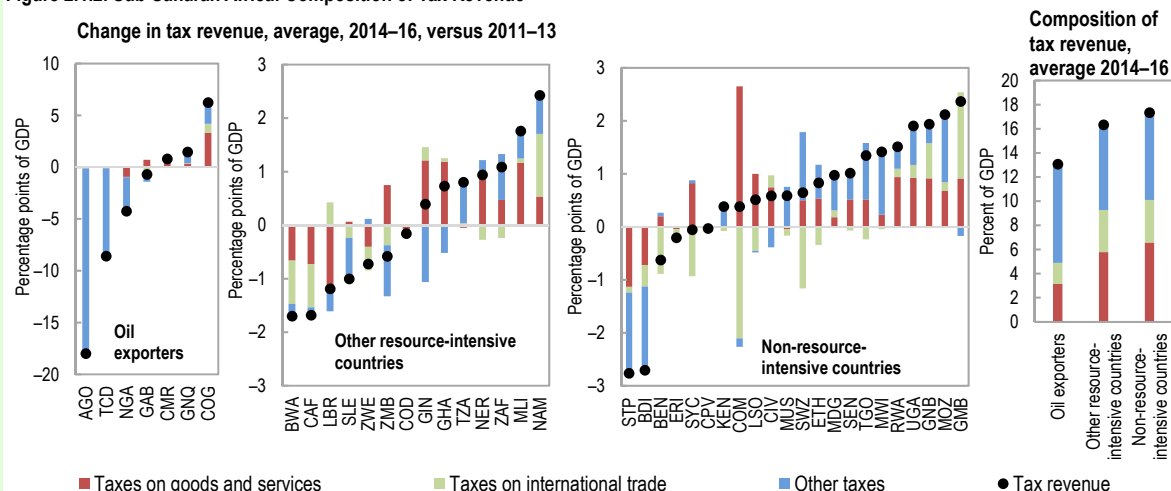
Source: IMF, World Economic Outlook database.

Quantifying the Potential

These trends reopen the question of the region's tax revenue potential. To determine this potential, this box builds on the work in the October 2015 *Regional Economic Outlook: Sub-Saharan Africa*. Those and related studies use cross-country observations to estimate a global "tax frontier"—the upper level of the tax-revenue-to-GDP ratio to which a country can raise its taxes given its economic and institutional development. The distance to that tax frontier for each country reflects in part tax policy preferences—countries closer to the tax frontier would tend to accept higher tax burdens to finance the delivery of public services—but it also depends on tax administration.

With preferences and underlying fundamentals to estimate such a frontier being dynamic and potentially impacting certain types of taxes differently, the following estimation

Figure 2.1.2. Sub-Saharan Africa: Composition of Tax Revenue



Source: IMF, World Economic Outlook database.

Note: See page 76 for country groupings table and page 78 for country abbreviations.

Box 2.1 (continued)**Table 2.1.1. Tax Frontier Estimation**

	Tax	Goods and Services
	Global	Global
Log real GDP per capita (lag)	2.797 ***	2.019 ***
Trade openness	0.101 ***	0.002 ***
Value added of agriculture	0.000	0.000
Gini coefficient (WDI)	-0.006 ***	-0.008 ***
General government dummy	0.113 **	0.126
Public expenditure on education	0.018 ***	0.007
Oil exporter dummy	0.160 **	-0.630 ***
Log real GDP per capita squared (lag)	-0.144 ***	-0.102 ***
Constant	4.769 ***	-0.464
sigma_u	0.54 ***	0.66 ***
sigma_v	0.10 ***	0.16 ***
Number of observations	1,451	1,211
Number of countries	123	107

Source: IMF staff estimates.

Note: WDI = World Development Indicators.

*, **, and *** indicate statistical significance at the 10, 5, and 1 percent levels.

extends previous analyses to cover the years into the commodity price shock, a larger set of sub-Saharan African countries, and specific tax measures.

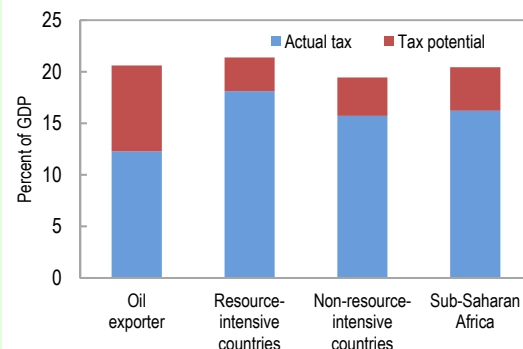
Regressions of the tax-to-GDP ratio on a range of country-specific factors in a panel of 124 countries from 2000 to 2015 yield the following results:¹

- More trade openness, lower levels of income inequality, oil exporter status, and higher education spending are strongly associated with higher tax-to-GDP ratios. Higher lagged income per capita is also related to a higher tax ratio but the effect diminishes at higher levels of development (Table 2.1.1, column 1).²
- These estimates allow for determining an implied tax ratio based on each country's fundamentals that, when compared with the actual tax ratio, yields the country's tax potential. For the average sub-Saharan African country, this ratio could be as large as 3½ to 5 percent of GDP, but there are large variations across regional groups (Figure 2.1.3).³ In particular, the average oil exporter shows a potential of 8¼ percent of GDP, compared with 3¼ percent for the average resource-intensive country and 3¾ percent for the average non-resource-intensive country.
- Given that taxes on goods and services provide a substantial share of revenues in many countries, it is interesting to look into the potential for this particular type of tax. The results based on Table 2.1.1 (column 2) reveal that the potential additional revenue from these taxes may be substantial—at 2½ percent of GDP for the region on average, 2¾ percent points for oil exporters, 3¼ percent for other resource-intensive countries, and about 2 percent for non-resource-intensive countries. These results imply possible further gains from value-added and excise taxes.

¹ Regressors include the log of GDP per capita and its square (to measure a possible nonlinear effect of development on tax collection capacity); trade openness, measured by the sum of exports and imports in percent of GDP (to proxy potential to tax foreign transactions); the size of the agricultural sector in percent of GDP (to proxy informality); the Gini coefficient (to proxy the preference for redistribution); a dummy to capture general versus central government revenue (measured tax base); public spending on education in percent of GDP (to proxy preference for public service provision); and an oil-exporter dummy.

² The estimation follows Mundlak's (1978) random effects model, which allows for identifying inefficiency from unobserved heterogeneity across countries (correlation of the random effect with the explanatory variables). The estimation produces a time-invariant tax effort for each country's ratio of actual to estimated tax revenue in percent of GDP over the estimation period.

³ The range reflects different samples used to determine the tax potential, with 3½ percent of GDP being the lower bound for an estimation using a sub-Saharan African sample, and 4¼ percent using estimates from a global or emerging market and developing economy sample.

Figure 2.1.3. Sub-Saharan Africa, Full Sample: Tax Ratio and Potential, Average

Source: IMF staff estimates.

Note: See page 76 for country groupings table.

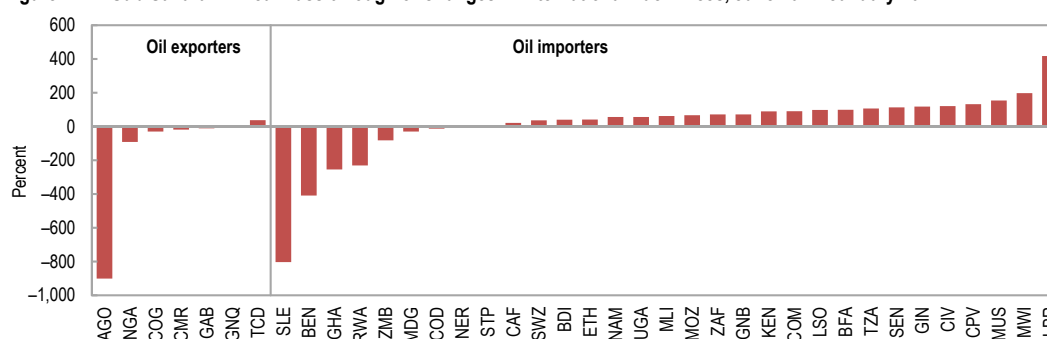
Box 2.2. Eliminating Fuel and Energy Subsidies

Eliminating regressive fuel and energy subsidies in favor of targeted social spending can help both achieve fiscal consolidation and improve economic efficiency. Policy reforms in some (mostly oil-exporting) countries, along with lower international fuel prices, have reduced the size of fuel subsidies in sub-Saharan Africa, but there is a need to strengthen reforms in this area.

Universal fuel and energy subsidies have been prevalent in sub-Saharan Africa, but they have substantial drawbacks. One of the rationales behind energy subsidies is that they can provide a highly visible benefit for important segments of the population. However, they are poorly targeted and have a negative impact on economic efficiency by fostering fuel overconsumption, curtailing investment and maintenance in the oil refining and electricity sectors, and crowding out more productive government spending (IMF 2013).

The sharp fall in international fuel prices since mid-2014 has been passed through only partially in sub-Saharan African oil importers, while oil exporters have actually increased domestic fuel prices (for example, Angola) (Figure 2.2.1). Fuel prices in the region are mostly set by governments, either on a discretionary basis or by automatic adjustment formulas. In fact, only about one-third of sub-Saharan African countries allow automatic adjustment of retail prices, while the rest set prices administratively. This pricing structure has historically translated into relatively low pass-through to changes in global oil prices.

Figure 2.2.1. Sub-Saharan Africa: Pass-through of Changes in International Fuel Prices, June 2014–January 2017



Sources: Country authorities; and IMF staff calculations.

Note: See page 76 for country groupings table and page 78 for country abbreviations.

A survey of fuel prices in the region suggests that between June 2014 and early 2017, the median pass-through coefficient (defined as the nominal change in domestic retail prices divided by the nominal change in international prices, both in domestic currency) was negative in oil exporters (–19 percent), as they increased fuel prices, and positive in oil importers (62 percent), as they (partially) transmitted the decline in global oil prices. Interestingly, oil exporters have increased prices of most fuel products since early 2015 (a median pass-through coefficient of 39 percent), following limited adjustments between June 2014 and early 2015.

For the region as a whole, the pass-through of the fall in gasoline and diesel prices has been smaller than for kerosene since mid-2014 (a median of 40 percent for the first two against 81 percent for the latter).

Fuel subsidies have fallen significantly since mid-2014. An analysis based on detailed price structures yields the following results:

- All countries with relevant information show sustained improvements in the ratios of actual to pretax fuel prices since mid-2014 (Figure 2.2.2). In contrast to the situation of a few countries at that time, average retail fuel prices in early 2017 covered all supply costs (that is, the cost, insurance, and freight import price plus transportation and distribution costs and profit margins).

This box was prepared by Mauricio Villafuerte with assistance from Tunc Gursoy.

Box 2.2 (continued)

- A more stringent “posttax” analysis—which adds the sub-Saharan African average of gross tax per liter (\$0.27) to the cost-recovery price—implies that, on an annualized basis, net fuel subsidies (that is, across all fuel products) fell by an average of 1 percent of GDP between mid-2014 and early 2017 (to almost 0 percent of GDP).

Fuel and electricity subsidies in sub-Saharan African countries have disproportionately benefited the better-off, but their removal would also hurt the poor. Since the top income quintile consumes significantly more than the bottom one, the former received on average more than six times total subsidies than the latter. However, a removal of energy subsidies can be distributionally neutral because the share of energy in household consumption is relatively similar across income quintiles. In the case of kerosene, which has a particularly high weight in low-income households’ consumption basket, increasing its price can be distributionally regressive (Table 2.2.1).

A successful reform to domestic fuel and energy pricing requires a comprehensive strategy. The current environment of low international fuel prices facilitates the introduction of permanent changes. Still, country experiences suggest the following key elements of a reform (IMF 2013; Clements and others 2013): (1) a communication campaign; (2) phased and gradual price increases; (3) targeted social spending or essential investment to mitigate the impact of the reform on affected households and firms; (4) introduction of an automatic pricing formula; and (5) accompanying measures to improve the efficiency of state-owned enterprises and service delivery.

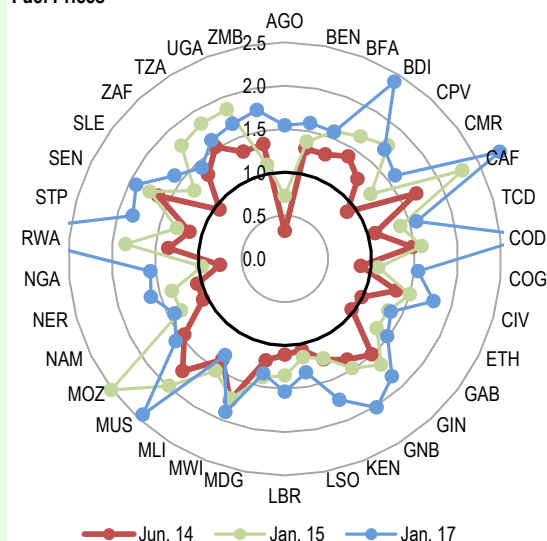
Table 2.2.1. Sub-Saharan Africa: Impact of Fuel Price Increases per Consumption Quintile (Percent of total household consumption)

	Consumption Quintiles					All
	Bottom	2	3	4	Top	
Africa						
Total	4.7	4.8	4.8	5.0	5.3	5.0
Direct Impact	1.7	1.6	1.6	1.6	1.9	1.7
Gasoline	0.1	0.1	0.2	0.3	0.5	0.3
Kerosene	1.3	1.1	0.9	0.7	0.5	0.9
LPG	0.1	0.2	0.2	0.3	0.3	0.2
Electricity	0.2	0.3	0.3	0.4	0.6	0.4
Indirect	3.0	3.1	3.2	3.4	3.4	3.2

Source: Coady, Flamini, and Sears 2015, *The Unequal Benefits of Fuel Subsidies Revisited*.

Note: LPG = liquefied petroleum gas.

Figure 2.2.2. Sub-Saharan Africa: Ratio of Actual to Pretax Fuel Prices



Sources: Country authorities; and IMF staff calculations.

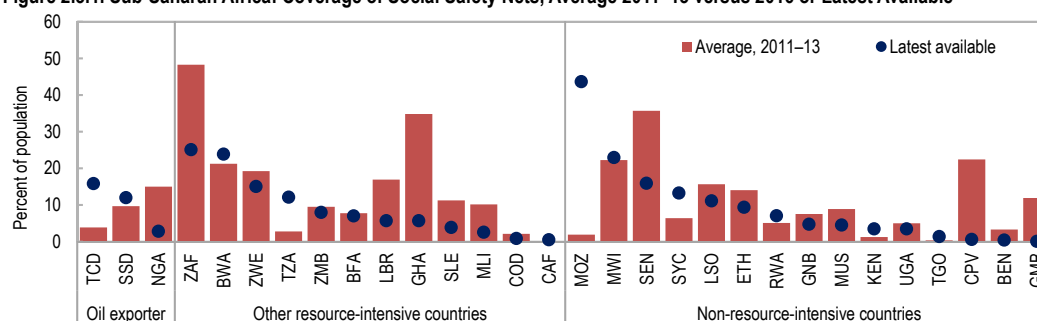
Note: See page 78 for country abbreviations.

Box 2.3. Leveraging Existing Social Safety Nets

While the growth impact of reduced government consumption may be relatively small, there may be important distributional consequences depending on the precise nature of the cuts. Governments can, however, build on existing programs to mitigate the impact on the most vulnerable, while establishing shock-response programs that can be triggered in an efficient and timely manner when shocks occur in the future.

Over the past two decades, virtually all sub-Saharan African countries have introduced social safety net programs. These are 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 the human capital and productive capacity of the poor (Beegle, Coudouel, and Monsalve 2017). While there are considerable differences in current coverage (Figure 2.3.1), many countries have seen an expansion in coverage in recent years as economies have slowed and countries have cut spending levels—including on key social components, such as health (Figure 2.3.2)—to preserve fiscal and debt sustainability.

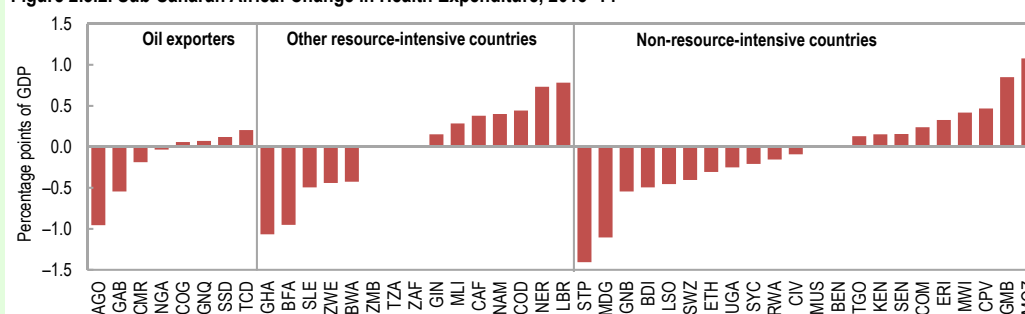
Figure 2.3.1. Sub-Saharan Africa: Coverage of Social Safety Nets, Average 2011–13 versus 2016 or Latest Available



Source: World Bank, Atlas of Social Protection Indicators of Resilience and Equity (ASPIRE) database.

Note: See page 76 for country groupings table and page 78 for country abbreviations.

Figure 2.3.2. Sub-Saharan Africa: Change in Health Expenditure, 2013–14



Source: World Bank, *World Development Indicators*.

Note: See page 76 for country groupings table and page 78 for country abbreviations.

Governments have multiple options to expand social protection in the short term while enhancing the scalability of programs for the future (Table 2.3.1). At the same time, streamlining more regressive expenditures, such as fuel subsidies, and enhancing revenue mobilization and public investment efficiency can create fiscal space, making expansion of social safety nets consistent with overall fiscal consolidation (IMF 2017). Building on synergies between programs and enhancing the scalability of existing programs would, at the same time, increase the efficiency of service delivery going forward. Programs should answer to three main criteria: (1) *preparedness* for timely and effective shock response, such as through readily available data (for example, the registry of vulnerable households

This box was prepared by Aline Coudouel, Emma Monsalve, and Monique Newiak.

Box 2.3 (*continued*)

and the inventory of possible payment networks); (2) *responsiveness*, with a trigger that activates the “response” phase to crises (for example, drought, food prices); and (3) *recovery* to terminate or adjust assistance when the shock subsides.

Some countries have put in place safety net programs that allow governments to react to shocks by temporarily scaling up programs. These include the Productive Safety Net Program in Ethiopia, which temporarily supported an additional 3.1 million beneficiaries for three months in 2011, and the Kenya Hunger Safety Net Program, which preregistered 374,000 households in the country’s northern counties to facilitate transfers in case of shocks. Many other countries in the region are starting to invest in such mechanisms, which will allow a swift and efficient response in case of shocks.

Table 2.3.1. Options for Scaling Up Social Safety Nets

Vertical expansion	Increasing the benefit value or duration of an existing program, including through adjustment of transfers or introduction of extraordinary payments/transfers.
Horizontal expansion	Adding new beneficiaries to an existing program, including through extension of geographical coverage of existing programs, extraordinary enrollment campaign, modifications of entitlement rules, or relaxation of requirements to facilitate participation.
Piggybacking	Using a social protection intervention’s administrative framework, but running the shock-response program separately, including through the introduction of a new policy.
Shadow alignment	Developing a parallel humanitarian system that aligns with a current or possible future social protection program.
Refocusing	In case of budgetary constraints, adjusting the social protection system to refocus assistance on groups most vulnerable to the shock.

Source: OPM 2015.

Annex 2.1. Methodological Details

Estimating Fiscal Multipliers Using Forecast Errors and the Local Projections Method

To examine the effect of fiscal policy on output, our empirical approach follows IMF 2013 and Auerbach and Gorodnichenko 2013a, 2013b to identify unexpected changes in fiscal policy (or shocks) using forecast errors—calculated as the difference between the actual realization of fiscal variables and the forecasts made in the October *World Economic Outlook* of each year. This identification strategy overcomes the two issues often associated with the empirical estimation of the effect of fiscal policy on output—namely the fiscal foresight and the potential feedback from the state of the economy to the fiscal policy (for a discussion see Leeper, Walker, and Yang 2013 and Abiad, Furceri, and Topalova 2016).

In order to estimate output impulse responses following the unanticipated changes in fiscal policy, we use the local projections method (LPM) proposed by Jordà 2005 and advocated by Stock and Watson 2007 and Auerbach and Gorodnichenko 2013a, 2013b. The LPM has been widely used in the literature investigating fiscal multipliers. It is viewed as a flexible alternative to the typically used vector autoregression (VAR) estimation and it allows the estimation of nonlinearities in impulse responses (for example, under different states of the economy). Also, it does not require order assumptions and quarterly data—which is important in the context of sub-Saharan African countries where quarterly data are not consistently available.

To estimate the impact of fiscal policy shocks on economic activity we estimate the following model:

$$\begin{aligned} \frac{Y_{i,t+h} - Y_{i,t-1}}{Y_{i,t-1}} = & \alpha_i^h + \gamma_t^h + \beta^{Ih} SI_{i,t} + \beta^{Ch} SC_{i,t} + \beta^{Rh} SR_{i,t} + \dots \\ & \sum_{j=1}^p \theta_{1,j}^h \Delta y_{i,t-j} + \sum_{j=1}^p \theta_{2,j}^h (I, C, R)_{i,t-j} + \sum_{j=0}^p \theta_{3,j}^h z_{i,t-j} + \sum_{j=1}^p \theta_{4,j}^h x_{i,t-j} + \dots \\ & + \sum_{j=0}^{h-1} \theta_{5,j}^h (SI, SC, SR)_{i,t+h-j} + \sum_{j=0}^{h-1} \theta_{6,j}^h z_{i,t+h-j} + \varepsilon_{i,t}^h, \quad (2.1.1) \end{aligned}$$

in which i and t denote countries and years, respectively, and h is the number of periods ahead for which the multiplier is calculated. The left side shows the cumulative growth rate of real GDP at horizon h . Specifically, for $h = 0$, the equation estimates the contemporaneous effect of the fiscal shocks on real GDP, while the effect for each horizon $h = 1, \dots, 5$ is estimated in separate equations. The β 's estimate the cumulative response of GDP over time given a shock in public investment, consumption, and revenues, and the corresponding standard errors are used to define confidence intervals.

The specification includes country and year fixed effects, the shocks in public investment, public consumption, and fiscal revenue at time t (SI , SC , and SR), which enter the model divided by the level of GDP in $t - 1$ to allow the direct calculation of the multiplier. Other control variables include lags of the rate of growth of real GDP; lags of the fiscal variables, which are predetermined at t ; contemporary and lagged observations of external variables (denoted by z) proxied by the changes in commodity terms of trade and the real GDP growth of the trading partners; lags of other domestic macroeconomic variables (denoted by x), such as real money growth and inflation, to proxy monetary policy; and future realizations of the unexpected shocks in the fiscal variables and the exogenous variables (as suggested in Teulings and Zubanov 2014).

The fiscal multiplier, which represents the cumulative change of real GDP over h periods following a one-unit shock in the fiscal variable, is obtained directly from the estimation. For example, the investment multiplier β^{Ih} is:

$$\beta^{Ih} = \frac{Y_{i,t+h} - Y_{i,t-1}}{Y_{i,t-1}} / \frac{SI_{i,t}}{Y_{i,t-1}}. \quad (2.1.2)$$

Short- and Medium-Term Impact of Fiscal Consolidations and Role of Policies

For the section focusing on the effect of fiscal consolidation on economic activity, we use the LPM following the recent literature (Dell'Erba, Koloskova, and Poplawski-Ribeiro 2014; Jordà and Taylor 2016; Devries and others 2011).

We are interested in the effect of policy intervention c_j on the outcome variable Y (at time period $t + h$) relative to a baseline c_0 . This is given by $E[(Y_{t,h}(c_j) - Y_t) - (Y_{t,h}(c_0) - Y_t)]$, and the policy intervention can be calculated by the local projection:

$$Y_{t+h} - Y_t = \alpha^h + \beta^h C_t + \theta^h \omega_t + \varepsilon_{t+h}, \quad (2.1.3)$$

in which the fiscal policy variable is $C_{i,t}$ and ω_t is the conditioning set. The expected impact of the policy intervention (which is equivalent to an impulse response from a VAR) is

$$E[(Y_{t,h}(c_j) - Y_t) - (Y_{t,h}(c_0) - Y_t)] = \beta^h (c_j - c_0) \text{ for } h = 1 \dots, H.$$

To identify the effect of the policy intervention we estimate the following specification:

$$\begin{aligned} \frac{Y_{i,t+h} - Y_{i,t-1}}{Y_{i,t-1}} &= \alpha_i^h + \gamma_t^h + \beta C_{i,t} + \dots \\ &\sum_{j=1}^p \theta_{1,j}^h \Delta y_{i,t-j} + \sum_{j=0}^p \theta_{2,j}^h z_{i,t-j} + \sum_{j=1}^p \theta_{3,j}^h x_{i,t-j} + \dots \\ &+ \sum_{j=0}^{h-1} \theta_{4,j}^h C_{i,t+h-j} + \sum_{j=0}^{h-1} \theta_{5,j}^h z_{i,t+h-j} + \varepsilon_{i,t}^h, \quad (2.1.4) \end{aligned}$$

in which Y_t refers to real GDP, and $C_{i,t}$ corresponds to the fiscal policy variable. The conditioning set includes lags of real GDP growth and additional controls z_t , such as the growth of the trading partners, as a proxy for external demand; a country-specific measure of commodity terms of trade; and lags of real money growth and inflation, as a proxy for the monetary policy stance, x_t . In addition, we include future realizations of the fiscal policy variable and the exogenous variables.

To investigate the role of policies or macroeconomic fundamentals in fiscal consolidations, we augment (2.1.3) by introducing an interaction term between the fiscal policy variable and the other policy variables (S_t) of interest as follows:

$$Y_{t+h} - Y_t = \alpha^h + \beta^h C_t + \mu^h C_t \times S_t + \rho^h S_t + \theta^h \omega_t + \varepsilon_{t+h} \quad (2.1.5)$$

The total effect of the fiscal consolidation on economic activity is now given by the term $\beta^h + \mu^h \times S_t$, which depends on the different levels of the state variable S_t .

Computing the Cyclically Adjusted Balance

We define the cyclically adjusted primary balance following the aggregated approach discussed in Fedelino, Horton, and Ivanova 2009 as $CAPB = R^{Adj} - E^p$, in which R^{Adj} corresponds to the cyclically adjusted revenues and E^p refers to total primary spending. We adjust revenues by the business cycle $R^{Adj} = \frac{R}{(1+\gamma)}$, in which R corresponds to government revenues, γ refers to the estimated output gap, and R^{Adj} refers to the cyclically adjusted revenues. The output gap is estimated using a Hodrick-Prescott filter with a smoothing parameter of 6.25 and extended historical data and five years of *World Economic Outlook* projections to reduce the end-of-sample bias.

Annex 2.2. Variable List and Sources

Description	Details	Source
Real GDP growth	Percent change	WEO
Real GDP per capita growth	Percent change	WEO
Public consumption	Percent of GDP	WEO
Public investment	Percent of GDP	WEO
Total government expenditure	Percent of GDP	WEO
Primary government expenditure	Percent of GDP	WEO
Capital government expenditure	Percent of GDP	WEO
Total government revenue	Percent of GDP	WEO
Tax revenue	Percent of GDP	WEO
Commodity revenues	Percent of GDP	WEO
Noncommodity revenues	Percent of GDP	WEO
Overall fiscal balance	Percent of GDP	WEO
Total public debt	Percent of GDP	FAD
External debt	Percent of GDP	WEO
General/central government	Dummy variable	WEO
Public investment efficiency (PIEX)	0–1 scale	FAD
Broad money	Percent change	WEO
Inflation	Consumer price index, percent change	WEO
Claims on private credit	Percent change	IFS
International reserves	Percent of GDP	WEO
Trade openness	Exports plus imports as percent of GDP	PWT 9.0
Commodity terms of trade	Index, based on commodity prices and net commodity exports	April 2016 REO: SSA
Oil exporters	Dummy (1 or 0)	WEO
Trading partners growth	Percent change	GEE
De facto exchange rate regime	DF: Hard = 1, conventional = 2, basket = 3, band = 4, crawl = 5, managed = 6, independent = 7	October 2016 REO: SSA
De jure exchange rate regime	DJ: Hard = 1, conventional = 2, basket = 3, band = 4, crawl = 5, managed = 6, independent = 7	October 2016 REO: SSA
Value-added agriculture	Percent of GDP	WDI
Gini coefficient	Gini index (World Bank estimate)	WDI
Health expenditure	Percent of GDP	WDI
Education expenditure	Percent of GDP	WDI
Social safety nets	Percent of population	ASPIRE
Bureaucracy	0–4 scale; higher numbers are better	ICRG
Corruption	0–6 scale; higher numbers are better	ICRG
Law and order	0–6 scale; higher numbers are better	ICRG

Note: ASPIRE = World Bank, Atlas of Social Protection Indicators of Resilience and Equity database; FAD = IMF, Fiscal Affairs Department database; GEE = IMF, Global Economic Environment database; ICRG = International Country Risk Guide database; IFS = IMF, International Financial Statistics database; PWT = Penn World Table 9.0; REO:SSA = *Regional Economic Outlook: Sub-Saharan Africa*; WDI = World Bank, World Development Indicators database; WEO = IMF, World Economic Outlook database.

REFERENCES

- Abiad, A., D. Furceri, and P. Topalova. 2016. "The Macroeconomic Effects of Public Investment: Evidence from Advanced Countries." *Journal of Macroeconomics* 50: 224–40.
- Auerbach, A., and Y. Gorodnichenko. 2013a. "Fiscal Multipliers in Recession and Expansion." In *Fiscal Policy after the Financial Crisis*, edited by A. Alesina and F. Giavazzi. Cambridge, MA: National Bureau of Economic Research.
- . 2013b. "Measuring the Output Responses to Fiscal Policy." *American Economic Journal: Economic Policy* 4 (2): 1–27.
- Ball, L., D. Furceri, D. Leigh, and P. Loungani. 2013. "The Distributional Effects of Fiscal Consolidation." IMF Working Paper 13/151, International Monetary Fund, Washington, DC.
- Batini, N., L. Eyraud, L. Forni, and A. Weber. 2014. "Fiscal Multipliers: Size, Determinants, and Use in Macroeconomic Projections." IMF Technical Notes and Manuals 2014/04, International Monetary Fund, Washington, DC.
- Baum, A., M. Poplawski-Ribeiro, and A. Weber. 2012. "Fiscal Multipliers and the State of the Economy." IMF Working Paper 12/286, International Monetary Fund, Washington, DC.
- Beegle, K. G., A. Coudouel, and E. Monsalve. 2017. "Realizing the Full Potential of Social Safety Nets in Africa." World Bank, Washington, DC.
- Blanchard, O., and D. Leigh. 2013. "Growth Forecast Errors and Fiscal Multipliers." *American Economic Review* 103 (3): 117–20.
- Dabla-Norris, E., P. Dallari, and T. Poghosyan. Forthcoming. "Fiscal Spillovers in the Euro Area: Letting the Data Speak." IMF Working Paper, International Monetary Fund, Washington, DC.
- Dell'Erba, S., K. Koloskova, and M. Poplawski-Ribeiro. 2014. "Medium-Term Fiscal Multipliers during Protracted Recessions." IMF Working Paper 14/213, International Monetary Fund, Washington, DC.
- DeLong J. B., and L. H. Summers. 2012. "Fiscal Policy in a Depressed Economy." Brookings Papers on Economic Activity, Brookings Institution, Washington, DC.
- Devries, P., Guajardo, J., D. Leigh, and A. Pescatori. 2011. "An Action-Based Analysis of Fiscal Consolidation in OECD Countries." IMF Working Paper 11/128, International Monetary Fund, Washington, DC.
- Fedelino, A., M. Horton, and A. Ivanova. 2009. "Computing Cyclically Adjusted Balances and Automatic Stabilizers." IMF Technical Notes and Manuals 09/05, International Monetary Fund, Washington, DC.
- Gaspar, V., L. Jaramillo, and P. Wingender. 2016. "Tax Capacity and Growth: Is There a Tipping Point?" IMF Working Paper 16/234, International Monetary Fund, Washington, DC.
- Gonzalez-Garcia, J., A. Lemus, and M. Mrkaic. 2013. "Fiscal Multipliers." In *The Eastern Caribbean Economic and Currency Union: Macroeconomics and Financial Systems*, edited by A. Schipke, A. Cebotari, and N. Thacker. Washington, DC: International Monetary Fund.
- Guerguil, M., M. Poplawski-Ribeiro, and A. Shabunina. 2014. "Fiscal Policy Response during the Crisis in Low-Income African Economies." In *Post-crisis Fiscal Policy*, edited by C. Cottarelli, P. Gerson, and A. Senhadji. Cambridge, MA: MIT Press.
- Gupta, S., B. Clements, E. Baldacci, and C. Mulas-Granados. 2005. "Fiscal Policy, Expenditure Composition, and Growth in Low-Income Countries." *Journal of International Money and Finance* 24: 441–63.
- Ilzetzki, E. 2011. "Fiscal Policy and Debt Dynamics in Developing Countries." Policy Research Working Paper series 5666. World Bank, Washington, DC.
- , E. Mendoza, and C. Vegh. 2013. "How Big (Small?) Are Fiscal Multipliers?" *Journal of Monetary Economics* 60: 239–54.
- International Monetary Fund (IMF). 2008. *World Economic Outlook: Financial Stress, Downturns, and Recoveries*. Washington, DC, October.
- . 2010a. "From Stimulus to Consolidation: Revenue and Expenditure Policies in Advanced and Emerging Economies." IMF Fiscal Affairs Department Paper, Washington, DC.
- . 2010b. "Will It Hurt? Macroeconomic Effects of Fiscal Consolidation." Chapter 3 in *World Economic Outlook*, Washington, DC, October.
- . 2013. "Energy Subsidy Reform in Sub-Saharan Africa: Experiences and Lessons." IMF African Department Paper, Washington, DC.
- . 2014. "Is It Time for an Infrastructure Push? The Macroeconomic Effects of Public Investment." Chapter 3 in *World Economic Outlook*, Washington, DC, October.
- . 2015. "Making Public Investment More Efficient." IMF Policy Paper, Washington DC.
- . 2016a. "Fiscal Policy: How to Adjust to a Large Fall in Commodity Prices." IMF Fiscal Affairs Department How-To Note 1 (September), Washington, DC.
- . 2016b. *Regional Economic Outlook: Sub-Saharan Africa*. Washington, DC, April.
- Jordà, Ò. 2005. "Estimation and Inference of Impulse Responses by Local Projections." *American Economic Review* 95 (1): 161–82.

- , and A. M. Taylor. 2016. "The Time for Austerity: Estimating the Average Treatment Effect of Fiscal Policy." *Economic Journal* 126 (590): 219–55.
- Keefer, P., and S. Knack. 2007. "Boondoggles, Rent-Seeking, and Political Checks and Balances: Public Investment under Unaccountable Governments." *Review of Economics and Statistics* 89 (3): 566–72.
- Kraay, A. 2010. "How Large is the Government Spending Multiplier? Evidence from World Bank Lending." *Quarterly Journal of Economics* 127: 829–887.
- Leeper, E. M., T. B. Walker, and S.-C.S. Yang. 2013. Fiscal Foresight and Information FLOws. *Econometrica* 81 (3): 1115–45.
- Mineshima, A., M. Poplawski-Ribeiro, and A. Weber. 2014. "Size of Fiscal Multipliers." In *Post-crisis Fiscal Policy*, edited by C. Cottarelli, P. Gerson, and A. Senhadji. Cambridge, MA: MIT Press.
- Mundlak, Y. 1978. "On the Pooling of Time Series and Cross Section Data." *Econometrica* 46 (1): 69–85.
- Oxford Policy Management. (OPM). 2015. "Shock-Responsive Social Protection Systems. A Research Program for DFID—Working Paper 1: Conceptualizing Shock-Responsive Social Protection." Oxford, United Kingdom.
- Stock, J., and M. Watson. 2007. "Why Has U.S. Inflation Become Harder to Forecast?" *Journal of Money, Credit and Banking* 39 (1): 13–33.
- Teulings, C., and N. Zubanov. 2014. "Is Economic Recovery a Myth? Robust Estimation of Impulse Responses." *Journal of Applied Econometrics* 29: 497–514.
- Woo, J., E. Bova, T. Kinda, and Y. S. Zhang. 2013. "Distributional Consequences of Fiscal Consolidation and the Role of Fiscal Policy: What Do the Data Say?" IMF Working Paper 13/195, International Monetary Fund, Washington, DC.

3. Economic Diversification in Sub-Saharan Africa

Sub-Saharan Africa has made great strides over the past two decades, with high growth rates and significant progress on social indicators, driven by improvements in policy frameworks but also favorable commodity prices and financing conditions. However, in contrast to growth spurts seen in other regions, the growth acceleration in the region has not been driven by an expanding manufacturing sector. Moreover, growth spells in sub-Saharan Africa have been shorter than elsewhere (IMF 2017c) and, in some countries, conflict has slowed or reversed progress on economic diversification.

With commodity prices expected to stay low for long (Chapter 1), interest has been reinvigorated in the consequences and causes of structural transformation and export diversification among commodity exporters. Other countries in sub-Saharan Africa share this interest, focusing on the need for structural transformation as a pathway to sustained inclusive growth. Attention has focused both on the composition of output, with its implications for growth and domestic revenues, and on the composition of exports, which impacts the sustainability and stability of external inflows and therefore the balance of payments and economic volatility more generally.

In the debate over structural transformation and export diversification, a direct link between economic diversification and development is typically made. A common element is the shift of resources from low-productivity activities to high-productivity activities. The traditional view—based on transformation experiences in other parts of the world—is that resources should move first from agriculture to industry and then to services (for example, Hansen and Prescott 2002, McMillan and Rodrik, 2011, and McMillan, Rodrik, and Verduzco-Gallo 2014). Following this line of thinking, some authors caution that sub-Saharan Africa is on a path of premature deindustrialization,

which could slow or even stunt development (for example, Rodrik 2015). An alternative view suggests reallocating resources from agriculture directly to services (for example, Carmignani and Mandeville 2010), given that manufacturing appears to be stagnating or declining as a share of GDP and employment, not just in sub-Saharan Africa, but also globally. Last, others (for example, Easterly and Reshef 2010) argue that (rather than shifting between sectors) sub-Saharan Africa should focus on moving up the quality ladder, which is an important factor underpinning growth in many low-income countries (IMF 2014).

Country experiences suggest a richer tapestry, with endowments defining starting positions for successful development strategies. Structural transformation and export diversification have to build on a country's comparative advantage. However, in some cases, structural transformation may lead export diversification; in others, export diversification can be the engine that drives structural transformation. Market size can be a limiting factor, with trade agreements providing opportunities to ease this constraint. Lastly, technological change may be redefining the “typical” path of structural transformation, with traditional sectors playing less of a role or a different role in some countries.

This chapter adds to the rich debate on economic diversification—structural transformation and export diversification—in emerging market and developing economies by focusing on sub-Saharan Africa. The chapter starts by providing an updated picture of structural change in the output and employment structures and the evolution of export diversification and quality in the region. While transformation and diversification are different aspects of development, the two are linked, and in the policy debate are often considered together. Next, the chapter traces the macroeconomic implications, showing that a more diversified economy in terms of production and export structure are associated with higher growth outcomes. In light of these results, the chapter then analyzes which policies promote structural change and export diversification.

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The main findings are as follows:

- While sub-Saharan Africa has achieved a period of strong growth, structural transformation has been slower than in other regions. The primary sector is larger and the manufacturing sector is smaller than in global peers and, in some countries, has declined in recent years. Still, workers have moved from low-productivity agriculture into higher-productivity manufacturing and services jobs, contributing to overall productivity growth.
- These patterns are mirrored in trade developments. Sub-Saharan Africa trails other regions in the export-to-GDP ratio, export diversification, export quality, and export complexity.
- This aggregate picture, however, masks the significant progress achieved in the region's other resource-intensive economies and non-resource-intensive economies. Some of these countries have achieved diversification at a similar pace to global peers. The region's commodity exporters, on the other hand, have seen increased specialization in exports, of primary commodities, reflecting higher prices and new production.
- Why worry? Because structural transformation and export diversification are positively associated with growth at early stages of development. Moreover, structural transformation and export diversification are linked. Trade flows are lower where the exporting country has a relatively small manufacturing sector and where exports are less diversified.
- Against this backdrop, the chapter concludes by identifying policies that are associated with structural transformation and export diversification. Cross-country data suggest that macroeconomic stability, access to credit, good infrastructure, a conducive regulatory environment, a skilled workforce, and income equality are all associated with higher economic diversification. Oil dependency, on the other side, is associated with less diversification.
- Country experiences illustrate the importance of these general recommendations and emphasize that the right policy mix is dependent on

country-specific circumstances. Successful policies build on a country's endowments and existing strengths and an enabling environment that allows the private sector to expand. They work best when they tackle specific challenges that firms face. At the same time, structural transformation and export diversification are not the only path to higher growth. Leveraging existing strengths, including natural resources, can also advance the development agenda.

PATTERNS OF STRUCTURAL TRANSFORMATION AND EXPORT DIVERSIFICATION

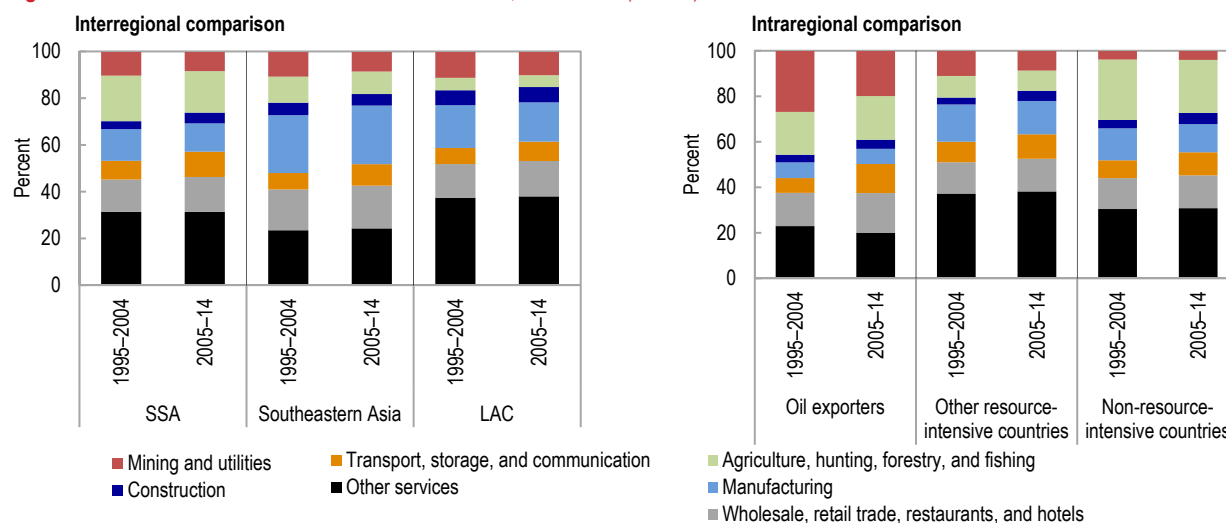
Structural Transformation in Sub-Saharan Africa Has Been Slower Than in Other Regions

To understand the evolution of structural transformation, it is necessary to look at the different shifts that have taken place in sub-Saharan Africa's output and employment structure.

Compared with other emerging market and developing economies, the share of the primary sector in sub-Saharan Africa's real GDP is large, while the share of manufacturing is generally smaller and that of services higher, in particular relative to southeast Asia (Figure 3.1). The share of the manufacturing sector in sub-Saharan Africa and Latin America and the Caribbean has declined over the past decade, while it has stayed broadly constant in southeast Asia.

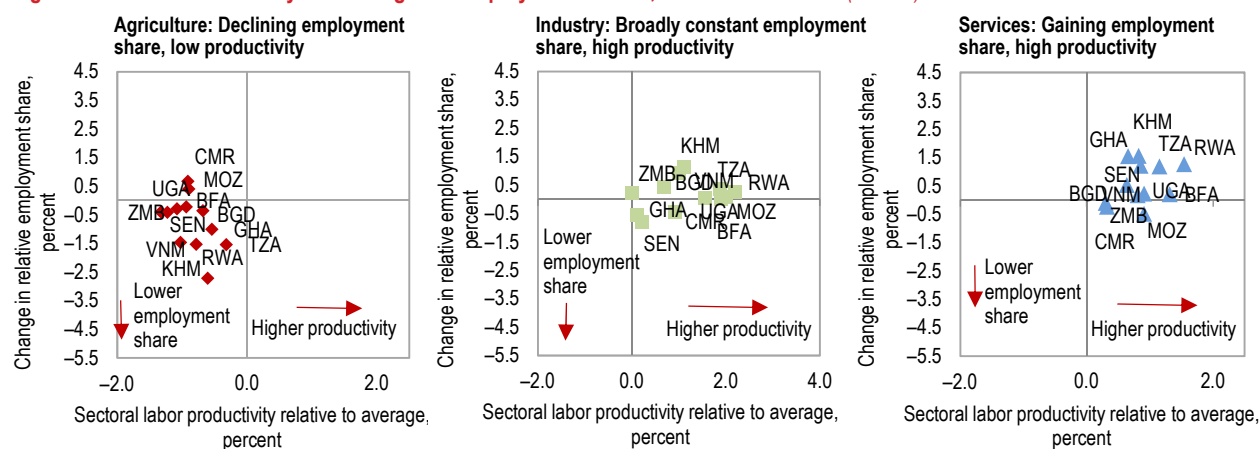
Within sub-Saharan Africa, trends vary between country groups. In oil exporters, mining and utilities constitute, unsurprisingly, a large share of GDP, while manufacturing is smaller than in the rest of the region. Wholesale, retail trade, restaurants, and hotels; and the transport, storage, and communication sectors expanded over the past two decades. In other resource-intensive countries, the "other services" category dominates output, and the manufacturing sector is roughly on par with that in non-resource-intensive countries. In non-resource-intensive countries, the agriculture, hunting, forestry, and fishing sector and other services sector make up half of real GDP.

These output trends are broadly mirrored by movements of labor in sub-Saharan African

Figure 3.1. Sub-Saharan Africa: Real Sectoral Shares, 1995–2014 (Percent)

Sources: UN Statistics; and IMF staff calculations.

Note: SSA = sub-Saharan Africa, LAC = Latin America and the Caribbean. See page 76 for country groupings table.

Figure 3.2. Labor Productivity and Changes in Employment Shares, 2000 versus Latest (Percent)

Source: IMF 2017b.

Note: See page 78 for country abbreviations.

countries. Workers have moved out of low-productivity agriculture mainly into services, and to a lesser extent into manufacturing. Rwanda, for example, saw a 4 percentage point decline in labor shares in its agricultural sector and a matching 4 percentage point increase in labor shares in its services sector.¹ Movements into agroprocessing, which have occurred, do not show at this level of aggregation, since agroprocessing is included in agriculture.

Productivity in the receiving sectors is typically higher than in agriculture (Figure 3.2; see also Fox and others 2013).² Therefore, these patterns of structural change—from low-productivity agriculture to higher-productivity services—have had a positive impact on overall productivity growth in sub-Saharan Africa (McMillan, Rodrik, and Verduzco-Gallo 2014).

¹ Labor productivity calculations were based on combining sectoral output levels with corresponding trends in sectoral employment levels based on household survey data (IMF 2017b). These movements may not fully reflect developments in the informal sector. For an estimate of informality across sub-Saharan African countries, see IMF 2017a.

² Other parts of agroprocessing are included in the agriculture sector where they would constitute higher productivity activities.

Box 3.1. Different Measures of Diversification

This chapter uses four main indices to measure structural transformation and diversification in the region.

- The export product diversification index reflects the number of products a country exports and the extent to which the export structure is concentrated in a few products. By construction, lower index values indicate higher levels of export diversification. Mathematically, this is the Theil index of export diversification (IMF 2014), following Cadot, Carrere, and Strauss-Kahn 2011, which consists of a “between” and a “within”

$$\begin{aligned} \text{Theil Index} &= \frac{1}{N} \sum_i \frac{\text{Export Value}_i}{\text{Average Exp. Value}} \cdot \ln \frac{\text{Export Value}_i}{\text{Average Exp. Value}} \\ &= \text{Theil}_{\text{between}} + \text{Theil}_{\text{within}} \end{aligned}$$

subindex. In this equation, i is the product index and N the total number of products. The “between” Theil index captures the extensive margin of diversification, that is how many goods a country exports. Lower values represent a higher number of products in the economy. The “within” Theil dimension captures the intensive margin, that is how concentrated a country’s export base is. Higher values represent a more concentrated distribution.

- The output diversification index is derived similarly to the export Theil index described above, using real subsectors from the United Nations sectoral database (IMF 2014).
- The export product quality index proxies the quality of a country’s export products by the markup they command. Mathematically, the index is measured by the export’s unit value adjusted for differences in production costs and the relative distance to the trading partner (Henn, Papageorgiou, and Spatafora 2013). The higher the cost a country can charge for its exports, adjusted for these factors, the higher the export quality according to this index. The index is normalized for each year to show export quality relative to the rest of the world, thus giving a relative ranking of each country for each year.
- The economic complexity index is a related concept that captures how diverse and complex the production of exports is, for example in terms of the technology used and the human capital required. The index is based on the number of other countries that produce a good. Mathematically, the complexity of goods is measured by their ubiquity; the fewer countries that export the product the more complex it is assumed to be (Simoes and Hidalgo 2011).

Export Diversification and Quality Indicators Show a Mixed Picture

While output and employment shares provide a good overview of the overall structure of the sub-Saharan African economy, focusing on indicators related to the region’s export structures provides insights into where countries have a competitive edge. In addition, trade data are available in more detail than data on the output structure, allowing for a more granular analysis.

We look at export shares, export diversification, and a measure of export quality, comparing sub-Saharan Africa with other regions. Export diversification refers to the variety of goods a country exports and how concentrated exports are, while export quality is proxied by the markup over costs (Box 3.1).

At the aggregate level, sub-Saharan Africa lags other regions in all but one area (Figure 3.3). Goods exports have increased as a share of GDP and are second only to the East Asia and Pacific region. However, service exports have remained flat as a share of GDP and are below those of other regions. Sub-Saharan Africa’s exports are the least diversified, and export quality is the lowest. These trends are mainly driven by the oil-exporting countries and, for the export diversification index in particular, may be due to large fluctuations in oil prices.

- *Oil exporters* have achieved a significant increase in their goods exports-to-GDP ratio, benefiting from oil discoveries and a relatively high oil price. With the dominant and increasing role of oil in these economies, service exports as a share of GDP, export diversification, and export quality have declined.

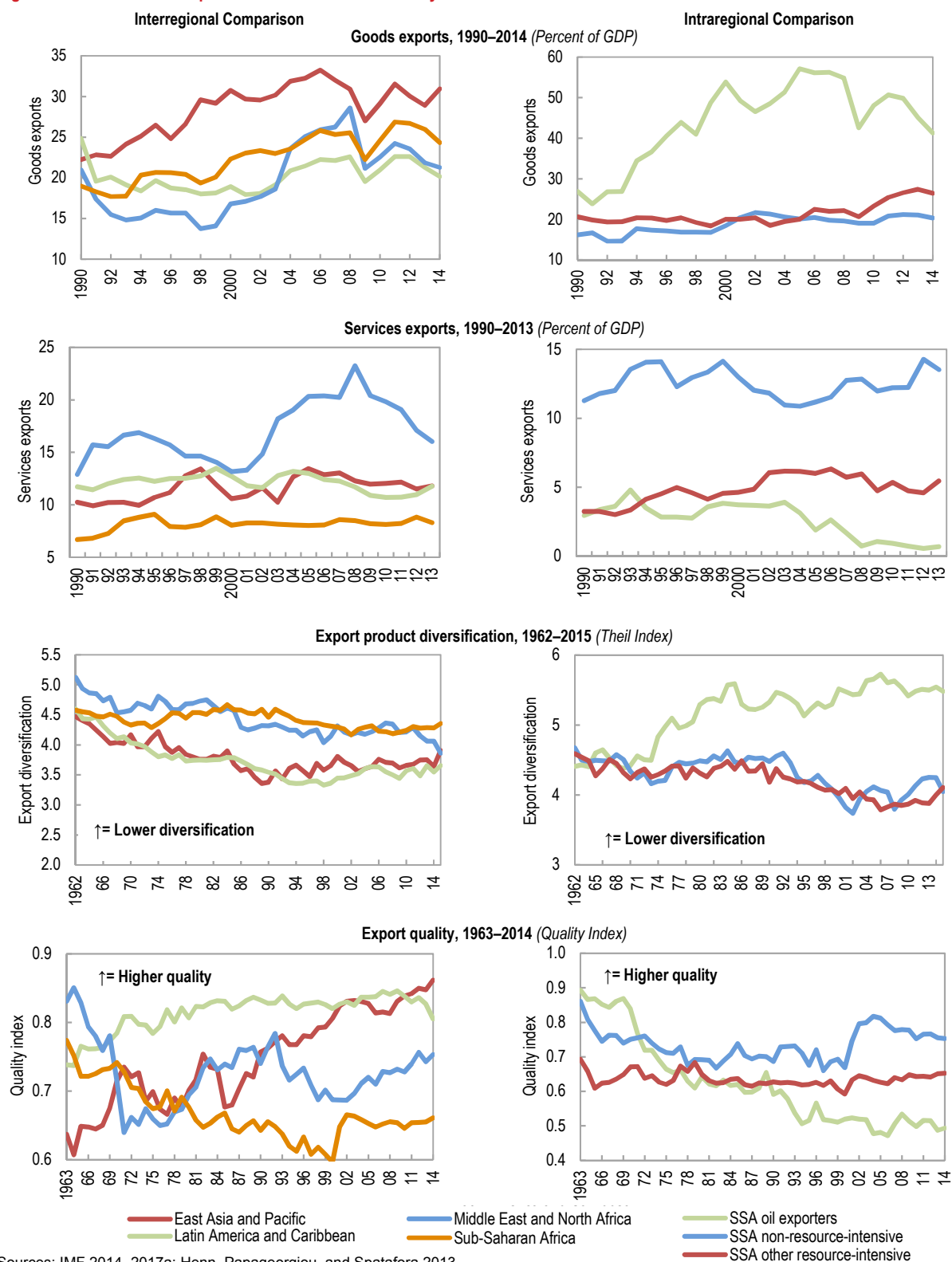
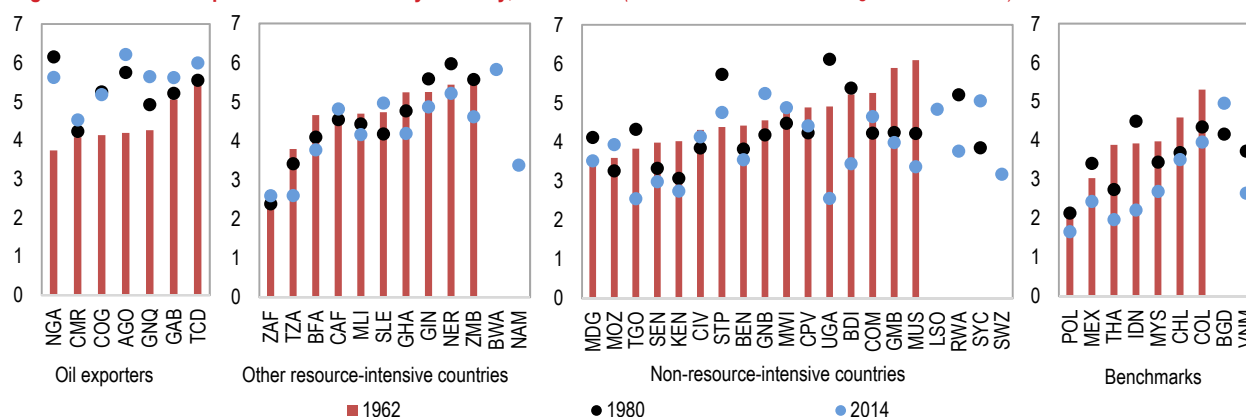
Figure 3.3. Measures of Export Diversification and Quality

Figure 3.4. Goods Export Diversification by Country, 1962–2014 (*Theil index; lower values = higher diversification*)

Source: IMF staff calculations.

Note: For Malawi, Tanzania, and Zambia the red bars represent the value for the diversification index in 1965; for Cabo Verde, Comoros, Equatorial Guinea, São Tomé and Príncipe, and Seychelles; blue dots represent the value for the diversification index in 2013. See page 76 for country groupings table and page 78 for country abbreviations.

- *Other resource-intensive economies* have seen increases in their goods exports and service exports to GDP ratios. Ghana, for example, more than doubled its services exports to GDP between the early 1990s and 2014. Export diversification and export quality have improved over the last 10 to 15 years, broadly in line with the start of the commodity supercycle.³ The group is now at the top in sub-Saharan Africa in terms of export quality.
- *Non-resource-intensive economies* realized increases in their goods exports-to-GDP ratio until about 2000, with the ratio flat thereafter. Service exports rose from 11 percent of GDP in 1990 to almost 14 percent of GDP by 2014—more than twice the level realized in the rest of sub-Saharan Africa. Tanzania, for example, more than doubled its service exports-to-GDP ratio, mirroring the shift of labor towards high-productivity services. Personal travel, other business services, and air transport were the three largest sectors in 2014.⁴ Export diversification increased steadily. The export quality indicator remained flat, suggesting that the group has kept pace with global developments in relative terms.

Zooming in at the country level, a few countries in sub-Saharan Africa have outperformed their peers in terms of export diversification in the past decades

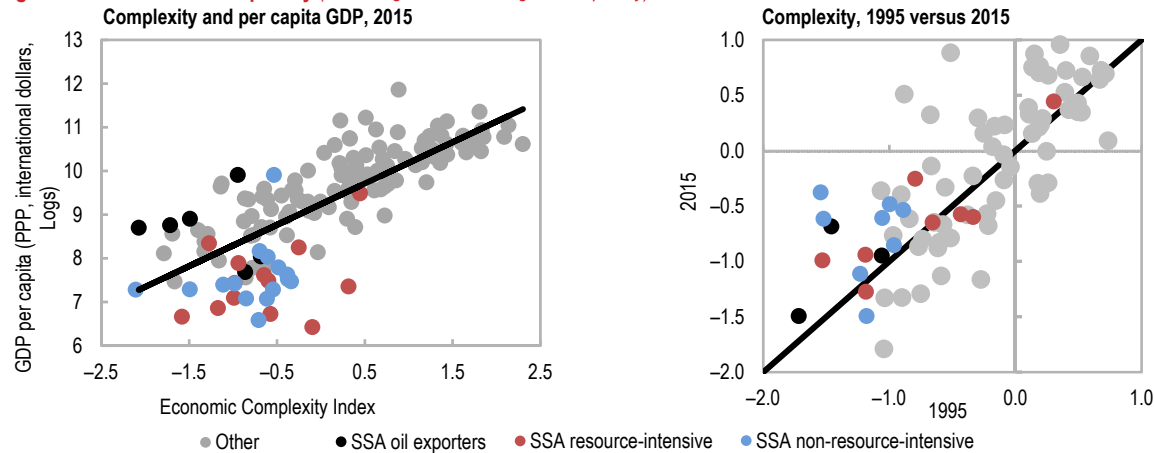
(Figure 3.4). For example, Mauritius was far less diversified than the average low-income and developing country in 1962, but has transformed from a mono-crop producer into an economy focused on manufacturing, and subsequently has become an important financial center in the region. Other countries that diversified their exports significantly over the past decades are members of the East African Community, such as Kenya, Tanzania, and Uganda, where efforts to diversify coincided with initiatives for more economic and regional integration. In fact, Uganda was among the least diversified countries in the region until the 1980s—a period when the country underwent episodes of civil conflict—but, by 2014, Uganda's level of diversification was on par with other emerging market and developing economies, such as Brazil and Mexico. Likewise, Kenya, Senegal, South Africa, Tanzania, and Togo are equally diversified as emerging markets, such as Chile, Indonesia, Malaysia, and Vietnam.

Export Complexity Is Rising but Still Trailing Other Regions

A complementary approach to looking at export diversification is the economic complexity index (Hausmann and others 2014). This index aggregates a country's exported goods, assigning a higher weight to goods that require greater underlying capabilities in their production, such as skills, knowledge, and infrastructure. For example,

³ This may result from the construction of the quality index itself, which adjusts unit values based on differences in production costs and distance between trading partners.

⁴ Across sub-Saharan Africa, travel and transport accounted for almost 70 percent of service exports in 2014.

Figure 3.5. Economic Complexity (Index; higher values = higher complexity)

Sources: Observatory of Economic Complexity; and World Bank, World Development Indicators.

Note: PPP = purchasing power parity; SSA = sub-Saharan Africa. See page 76 for country groupings table.

goods given the highest weight are machinery and appliances for specialized industries, while weight assigned to crude oil and cotton are among the lowest. Overall, complexity in sub-Saharan Africa is below that of other regions, although it has increased, particularly for non-resource-intensive countries (Figure 3.5).

Countries that have moved up in terms of economic complexity have tended to achieve that by producing goods that are more advanced, but require a similar set of existing underlying capabilities. To provide a systematic approach to assessing what types of products are more closely connected to each other, the “product space” network map shows all goods that are exported globally. Products closer to the center of the map, such as machinery and equipment, tend to be more complex to produce and more likely to be associated with underlying capabilities to produce a wider range of goods. In contrast, goods with lower complexity, such as commodities, tend to require fewer underlying capabilities and are located at the edge of the product space.

Southeast Asian countries have experienced some of the highest increases in complexity over time. For example, rapid growth in Thailand was accompanied by a transition from producing textiles to producing transport equipment and chemicals (Figure 3.6, panels 1 and 2).

Within sub-Saharan Africa, non-resource-intensive countries experiencing the largest increases in complexity since 1995 include Kenya, Senegal, and Uganda (not shown) (Figure 3.6, panels 3 and 4) in part due to moving from exporting basic foodstuffs to more processed foods. Malawi (not shown) also experienced a notable increase in complexity over this period as production moved from textiles to machinery.

The country with the highest level of complexity in sub-Saharan Africa is South Africa (Figure 3.6, panels 5 and 6). In 1995, South Africa was already producing a wide variety of goods implying a broad set of underlying capabilities. This enabled exports to expand into a wider set of more complex products such as transportation goods (for example, cars and motor parts) and chemicals. In contrast, Liberia predominantly exported primary commodities that populate nodes at the outer edges of the product space, and there has been little change over time (Figure 3.6, panels 7 and 8).

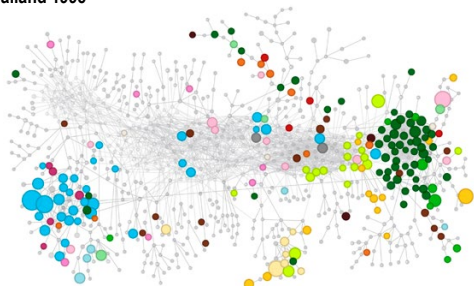
MACROECONOMIC GAINS FROM FURTHER ECONOMIC DIVERSIFICATION

Structural Transformation and Export Diversification Are Good for Growth

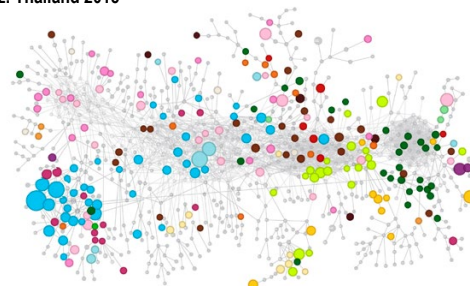
What do the trends discussed in the previous sections imply for sub-Saharan Africa’s macroeconomy? At the global level, the link between growth and economic diversification is well documented for

Figure 3.6. Economic Complexity across Countries: Export of Goods, 1995 and 2015

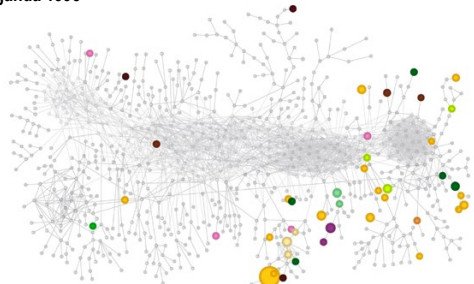
1. Thailand 1995



2. Thailand 2015



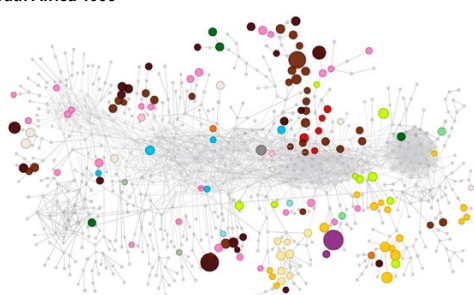
3. Uganda 1995



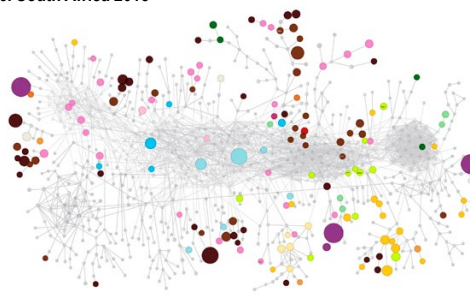
4. Uganda 2015



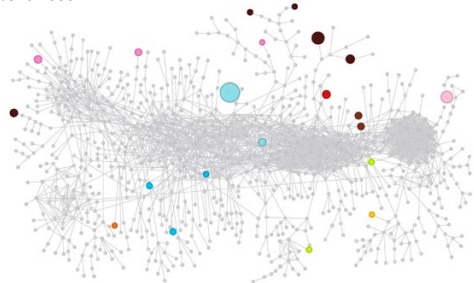
5. South Africa 1995



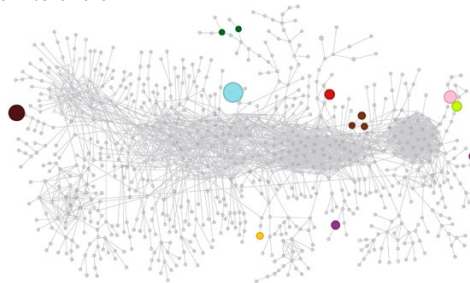
6. South Africa 2015



7. Liberia 1995



8. Liberia 2015



Source: Simoes and Hidalgo 2011.

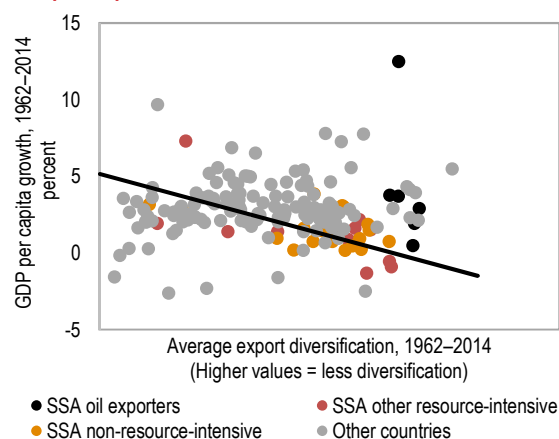
Note: Gray = Overall product space; size of dot = proportional to size of respective sector.

low-income countries. For example, Cadot, Carrere, and Strauss-Kahn 2011 and the IMF 2014 find a positive relationship between export diversification and per capita income for countries at lower levels of development. Likewise, more diversified economies experience higher average growth at lower income levels (Figure 3.7). Structural transformation contributes directly to growth when resources move from low-productivity to high-productivity sectors. Economic complexity has also been associated with better growth outcomes (Anand, Mishra, and Spatafora 2012). Better growth outcomes, in turn, are consistent with longer periods of poverty reduction.

For small states, with small domestic markets and a narrow resource base, however, pursuit of diversification may not be the optimal strategy. Indeed, countries such as Cabo Verde, Mauritius, and Seychelles have managed to achieve higher income per capita with a moderate level of diversification—reflecting other factors, such as institutions and macroeconomic policies.

To analyze the relationship between economic diversification and growth, this chapter employs an approach that seeks to address the possibility of endogeneity and model uncertainty, closely following Eicher and Kuenzel 2016. This Instrumental variable Bayesian model averaging approach starts from a large set of potential explanatory variable as growth drivers. The analysis uses

Figure 3.7. Sub-Saharan Africa: Export Diversification and GDP per Capita Growth



Sources: IMF 2014; and IMF, World Economic Outlook database.
Note: SSA = sub-Saharan Africa. See page 76 for country groupings table.

an unbalanced panel of 84 emerging market and developing economies, including 17 sub-Saharan African countries.⁵

The impact of the various measures of diversification on growth is presented in Table 3.1. Variables that show an inclusion probability of more than 0.5—which we interpret as evidence of an impact on growth (Eicher and Kuenzel 2016)—are highlighted in bold. All specifications also include traditional growth determinants such as initial GDP, investment, government expenditure, inflation, and the quality of institutions (see Annex 3.1).

Table 3.1. Explaining Economic Growth through Different Measures of Diversification in Developing Economies

	Export Diversification Index						Output Diversification	
	Total Theil		Between Theil		Within Theil		Inclusion Prob.	Cond. Mean
	Inclusion Prob.	Cond. Mean	Inclusion Prob.	Cond. Mean	Inclusion Prob.	Cond. Mean		
Export Diversification	0.102	−0.001	0.328	−0.012	0.146	−0.003		
Output Diversification							0.190	0.032
Diversification and Low Income	0.951	−0.007	0.817	−0.026	0.907	−0.847	0.974	−0.148
Div. and Lower Middle Income	0.094	0.000	0.179	0.009	0.115	−0.063	0.101	0.026
Div. and Upper Middle Income	0.065	0.008	0.063	−0.011	0.091	0.000	0.061	−0.002
Div. and SSA	0.208	−0.003	0.906	−0.033	0.258	−0.383	0.096	−0.006
Sargent test p-value	1.00		1.00		1.00		1.00	
Observations	583		583		583		531	

Source: IMF staff estimates.

Note: Other than diversification indices, initial GDP, investment, government expenditure, governance quality, population growth, and export quality index give a significant probability of more than 80 percent. For detail on full set of regressors, see the Annex 3.1. Variables that show an inclusion probability of more than 0.5 are in boldface type. Cond. = conditional; Div. = diversification; Prob. = probability; SSA = sub-Saharan Africa.

⁵ Sub-Saharan African countries in the sample include Cameroon, Ghana, Gambia, Kenya, Malawi, Mali, Mozambique, Niger, Sudan, Senegal, Sierra Leone, Tanzania, Togo, Uganda, South Africa, Zambia, and Zimbabwe.

We find that:

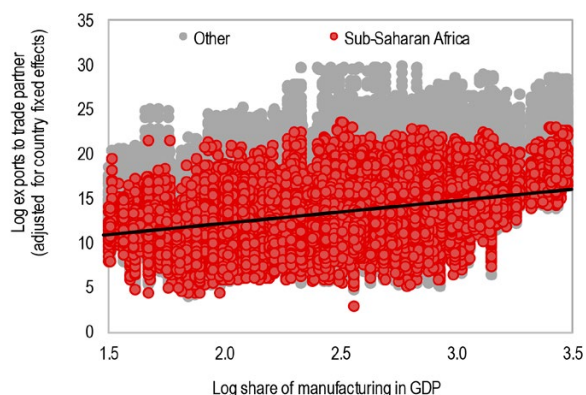
- Diversification is linked to higher growth in low-income countries, but not in countries with higher income levels. A one unit improvement in export diversification (roughly the difference between Senegal and Thailand) is matched by 0.7 percentage point higher per capita GDP growth in low-income countries. Improvements in output diversification have a similar, possibly even stronger, positive impact on growth.
- Looking at the two dimensions of export diversification, expanding the variety of exports—the extensive margin of diversification—is associated with higher growth gains in sub-Saharan African countries than in the other countries in the sample. In contrast, the effect of having a less concentrated export structure—the intensive margin of diversification—is not different in sub-Saharan Africa from that in other low-income countries.

Structural Transformation and Export Performance Are Linked

The stylized facts discussed so far in this chapter give rise to the question whether structural transformation and export performance are related (Figure 3.8). To test this link more formally, we augment a standard gravity model to explain goods exports with the share of manufacturing in the exporting country as well as measures of trade integration and diversification.⁶ The starting point is the analysis in IMF 2015, using a global sample starting in 1980 and updated through 2014 (Annex 3.1). Accounting for other standard determinants of trade flows, the results suggest the following (Table 3.2):

- Goods exports are lower where the exporting country has a relatively low share of manufacturing in GDP. The association between manufacturing and trade appears to be weaker for low-income countries, possibly reflecting a large share of agriculture in exports, and the growing importance of service exports.
- Diversification goes hand in hand with an exporter's trade value. In particular, both the

Figure 3.8. Size of Manufacturing Sector and Trade



Source: UN Comtrade database.

Note: Figure shows residuals of the variables from their regression on country and time fixed effects.

introduction of new product lines (the extensive margin of diversification) and a more balanced mix of existing products (the intensive margin) are significantly related to exports, with a stronger link at lower levels of economic development. This suggests that low-income countries may benefit overproportionately not only from expanding trade in existing sectors but also from tapping new sectors.

- The standard regressors included in gravity models of this type are significant with the expected sign: market size, common trade partner characteristics, determinants of trade costs, and institutions are strongly associated with exports.

Some countries, in particular in the East African Community's Kenya, Tanzania, and Uganda (IMF 2015, 2016), have made progress in integrating into global value chains. This process has been associated elsewhere in the world with higher levels of activity and income growth over time. In addition, Ethiopia, Kenya, Seychelles, South Africa, and Tanzania have seen the share of foreign value added in their exports increase by 5 percentage points or more in the past two decades. Sectors that have benefited the most from the deepening of integration include agriculture and agrobusiness (Ethiopia, Seychelles), manufacturing (Tanzania), and to a lesser extent textiles, transport, and tourism.

⁶ In a gravity model, the dependent variable is the bilateral exports flow between an exporter and an importer. Explanatory variables include characteristics of the exporter and the importer as well as the distance between the two trading partners.

Table 3.2. Results from Bilateral Trade Regressions**1. Diversification Measures to the Set of Potential Drivers**

	(1)	(2)	(3)	(4)
Lag Export Diversification Index	0.222 ***	0.159 ***		
Lag Extensive Margin			0.257 ***	0.118 ***
Lag Extensive Margin * LIC			0.230 **	0.164 *
Lag Intensive Margin			0.183 ***	0.148 ***
Lag Intensive Margin * LIC			0.166 ***	-0.0927 **
Lag Exporter In Manufacturing Share		0.834 ***		0.876 ***
Lag Exporter In Manufacturing Share of GDP * LIC				-0.393 ***
Constant	-24.60 ***	-25.93 ***	-23.90 ***	-25.30 ***
Observations	92,050	90,606	92,050	90,606
Number of Pairs	16,311	16,068	16,311	16,068

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.**2. Standard Drivers of Bilateral Trade**

Exporter In (population) (lag)	+	Importer Landlocked	-
Importer In (population) (lag)	+	Both WAEMU	+
Exporter In (GDP per capita) (lag)	+	Both CEMAC	
Importer In (GDP per capita) (lag)	+	Both SACU (lag 1)	-
Log of Distance	-	Exporter Infrastructure (lag 1)	+
Common Official Language	+	Importer Infrastructure (lag 1)	+
Common Language	+	Exporter Rule of Law (lag 1)	+
Common Colonizer	+	Importer rule of Law (lag 1)	+
Exporter Landlocked	-	Exporter In (terms of trade)	+

■ Positive association ■ Negative association ■ No association

Source: IMF staff calculations.

Note: All regressions include the standard drivers depicted in panel 2. Export diversification Theil index transformed so that higher values denote higher levels of diversification. CEMAC = Central African Economic and Monetary Community; LIC = low-income country; SACU = Southern African Customs Union; WAEMU = West African Economic and Monetary Union.

The increase in the depth of integration in some of these countries is of a similar magnitude to that experienced by countries such as Poland or Vietnam—now success stories within large global value chains. In addition, the experiences highlight sectors—agrobusiness, light manufacturing, tourism, and textiles—with potential for sub-Saharan Africa to leverage its comparative advantage. For example, Gabon used a combination of policies, including business facilitation initiatives, to enter into public-private partnerships with an international agribusiness company. This partnership led to the development and operation of two large-scale agricultural projects, a special economic zone, and a fertilizer plant and is intended to boost non-oil exports going forward.

GETTING THE POLICY MIX RIGHT

The growth benefits identified above support the emphasis placed by many countries on achieving greater structural transformation and export diversification. But how to achieve this? We approach this question through a combination of cross-country empirical analysis and individual country experiences.

Breaking down the process of structural transformation and export diversification provides a starting point for the empirical analysis. At its core, economic diversification requires a reallocation of resources—capital, companies, workers—from one activity to another. Productivity gains can help release resources from existing activities—the same output can be produced with fewer inputs. And productivity gains can also provide incentives to reallocate to new activities where the rewards are higher. Information about opportunities then provides incentives to move from one activity to the next.

Many of the drivers of economic diversification are akin to drivers of economic growth, not surprising given that they are parallel and mutually reinforcing processes. With information and incentives in place, the ease of reallocation determines how fast economic diversification occurs. Capital and labor need to move; companies need to move or be set up. From this perspective, the overall investment climate and the ease of labor mobility facilitate (or slow) economic diversification. Other key factors include macroeconomic and political stability, the regulatory environment, infrastructure, human capital, and natural resource dependence.

This reasoning is consistent with other studies showing that economic reforms that improve the quality of institutions, reduce barriers to innovation, technology adoption, and trade—together with political stability and the right mix of macro policies—are associated with higher growth and diversification (Acemoglu and Robinson 2008; Christiansen, Schindler, and Tressel 2013; IMF 2014; Ostry, Prati, and Spilimbergo 2009; Prati, Onarato, and Papageorgiou 2013).

These relationships are tested formally in a panel of 92 countries of all income levels. We trace the links between economic diversification indicators and potential drivers discussed above. The choice of potential determinants was in part determined by data availability. The regression results are summarized in Table 3.3. Figure 3.9 illustrates some of the key relationships. It is important to keep in mind that economic diversification is a complex

long-term process that is ultimately shaped by a country's idiosyncratic starting point. As such, it is not a relationship that is fully explained by a few common factors across countries. Our results suggest the following:

- Macroeconomic stability matters. In the scatter plot, high inflation is associated with lower export diversification, but the relationship

Table 3.3. Drivers of Economic Diversification

	Export Diversification			Output Diversification			Export Complexity		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Inflation	0.001 (0.000)	-0.028 * (0.015)	-0.025 (0.017)	0.000 (0.000)	0.003 (0.006)	0.006 (0.006)	0.000 (0.000)	-0.019 (0.012)	-0.016 (0.012)
External Debt	-0.003 * (0.002)	-0.007 (0.004)	-0.000 (0.004)	0.000 (0.000)	0.000 (0.001)	0.000 (0.001)	-0.003 *** (0.001)	-0.002 (0.002)	-0.000 (0.002)
Exchange Rate Overvaluation	-0.948 ** (0.464)	-0.358 (1.098)	-0.354 (1.156)	-0.084 (0.109)	-0.224 (0.366)	-0.136 (0.346)	-0.471 *** (0.173)	-0.632 (0.485)	-0.378 (0.545)
Share of Oil in Total Exports	-0.024 *** (0.003)	-0.026 *** (0.005)	-0.031 *** (0.005)	-0.003 *** (0.001)	-0.003 ** (0.001)	-0.002 * (0.001)	-0.011 *** (0.001)	-0.011 *** (0.003)	-0.011 *** (0.002)
Credit to the Private Sector	0.018 *** (0.003)	0.011 ** (0.005)	0.009 * (0.006)	0.001 *** (0.000)	0.002 * (0.001)	0.002 * (0.001)	0.005 *** (0.001)	0.003 (0.002)	0.002 (0.002)
Access to Electricity	0.012 *** (0.004)	0.014 * (0.008)	0.015 ** (0.007)	0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	0.008 *** (0.002)	0.007 ** (0.003)	0.008 *** (0.002)
Literacy	0.005 (0.005)	0.001 (0.008)	0.006 (0.009)	-0.002 ** (0.001)	-0.002 (0.001)	-0.002 (0.002)	0.005 ** (0.002)	0.006 (0.004)	0.006 (0.004)
Life Expectancy	0.005 (0.014)	-0.012 (0.027)	-0.021 (0.029)	0.001 (0.003)	0.008 ** (0.004)	0.012 ** (0.005)	0.001 (0.006)	0.000 (0.011)	-0.007 (0.010)
Gini Coefficient	-3.642 *** (1.178)	-4.293 ** (1.978)	-3.965 ** (1.978)	-8.007 *** (0.235)	-7.578 *** (0.397)	-7.689 *** (0.394)	1.075 ** (0.456)	0.729 (0.810)	0.805 (0.725)
Ease of Doing Business		0.673 *** (0.199)	0.563 ** (0.215)		-0.001 (0.029)	-0.029 (0.039)		0.151 * (0.085)	0.181 ** (0.089)
Government Stability			0.139 (0.091)			0.004 (0.016)			0.036 (0.034)
Voice and Accountability			0.210 (0.235)			0.085 * (0.045)			0.254 ** (0.101)
Internal Conflict			-0.206 ** (0.094)			-0.035 * (0.020)			-0.024 (0.036)
External Conflict			-0.017 (0.128)			0.043 (0.036)			-0.026 (0.047)
Constant	8.541 *** (2.343)	6.065 (5.467)	7.260 (5.944)	12.011 *** (0.594)	12.122 *** (1.694)	11.407 *** (1.680)	0.620 (0.814)	1.205 (2.313)	0.588 (2.764)
Observations	248	107	93	250	107	93	193	95	88
Number of Countries	92	74	60	92	74	60	92	74	60
R squared	0.551	0.653	0.714	0.943	0.931	0.937	0.655	0.690	0.737

Source: IMF staff estimates.

Note: Robust standard errors in parentheses. Regressions are based on five-year averages between 1990 and 2014. *** $p < .01$; ** $p < .05$; * $p < .1$.

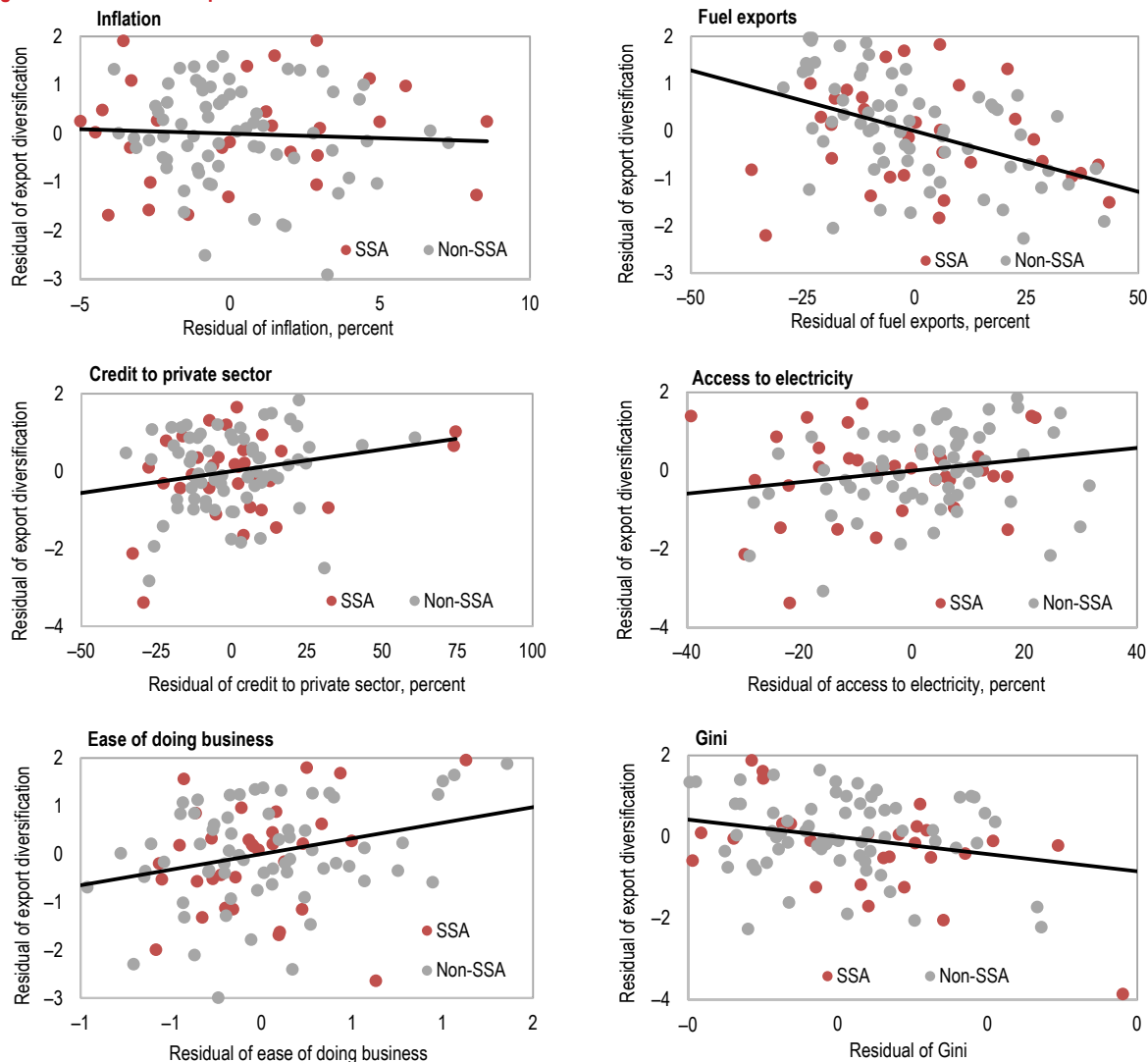
is not statistically significant. There is some evidence that external debt holds back economic diversification.

- The strongest finding across specifications is that a high share of oil exports in total exports is matched by lower economic diversification. Natural resource endowments, when developed, do hold back diversification.
- The availability of credit facilitates economic diversification, underscoring the importance of

financial sector development and stability for economic development and transformation.

- Infrastructure, here measured by access to electricity, is linked with higher economic diversification.
- The regulatory environment also matters, with the ease of doing business indicator being positively associated with economic diversification.
- Interestingly, we also find that higher income inequality holds back diversification.⁷

Figure 3.9. Drivers of Export Diversification



Source: IMF staff calculations.

Note: Observations and regression lines are conditional on all other regressors. SSA = sub-Saharan Africa.

⁷ Similarly, Kazandjian and others (2016) find that gender inequality is negatively associated with both output and export diversification.

Country Experiences

Country experiences illustrate how a particular policy mix worked, given a country's circumstances but also a number of common themes. Macroeconomic stability serves as the backdrop for successful diversification episodes. Countries build on their endowments and existing strengths. Sound institutions form an enabling environment that allows the private sector to expand. Supportive policies work best when they tackle specific challenges that firms may face. Last, good infrastructure and investment in human capital allow the private sector to exploit new opportunities.

Mauritius

Mauritius has achieved an impressive structural transformation over the last three decades. Starting out as a mono-crop economy, Mauritius developed its agriculture sector, then branched out into tourism while at the same time laying the foundation for manufacturing-export-led growth and later becoming a regional financial center. Mauritius's transition from an agricultural-based economy was aided, for example, by: establishing Special Economic Zones (Export Processing Zones 1971; The Mauritius Freeport 1992; Cybercity 2005), a comprehensive public investment program in physical and human capital; and entering into trade agreements.

The further transition to an open and globally competitive services platform was guided by a reform package entailing, for example, a simplified, rules-based tax system with reduced import taxes and generous depreciation allowances to facilitate investment and growth of small and medium-sized enterprises. Labor market programs assisted with skills retraining and job placement in new emerging sectors. Furthermore, a legacy of sound economic and political institutions also helped guide the economic transition process. Consequently, Mauritius has become a globally competitive upper-middle-income economy.

Burkina Faso

Burkina Faso has successfully raised productivity in the cotton sector, thus raising growth in the sector to 22 percent a year between 1994 and 2006, compared with 12 percent during 1980–93. This contributed to a doubling of per capita

GDP between 1995 and 2006. The cotton sector employs nearly 20 percent of the active labor force. Moreover, with virtually all cotton produced destined for foreign markets, improvements in the sector provided an important source of export growth. Even with the rapid increase in gold mining since the development of commercial gold operations over the last decade, cotton continued to represent 12 percent of total exports in 2016.

At the heart of the success of cotton in Burkina Faso is a reform model that deliberately tried to overcome financial, infrastructure, and scale constraints. Small-scale cotton producers, large cotton purchasing (and export) companies, and government collaborated in these efforts. The reform model was based on a mix of institution building, partial privatization, and the creation of complementary financial support mechanisms. What distinguished the reform process in Burkina Faso was the decision not to rapidly and completely privatize. Instead, reforms struck a balance between promoting competition, overcoming market failures, and establishing structures to facilitate cooperation.

A prefinancing fund was set up to overcome the financial constraints of small-scale cotton producers accessing credit. This Fund guarantees farmers access to seeds, fertilizer, and so forth, to start the planting season on affordable terms. The input fund also allows for improved bargaining potential through larger-volume purchases of inputs, as the cotton association purchases inputs for the entire sector in bulk, rather than farmers attempting to negotiate bilaterally. Farmers are guaranteed a price floor for their cotton, which provides an important source of risk minimization. The price floor is guaranteed by a Price Stabilization Fund, also operated by the cotton association, which pays out when global prices are below the floor and replenishes it when prices are above, thus providing an important source of hedging for producers who would be unable to do so individually. Both the Input Fund and the Price Stabilization Fund are designed to operate in a financially sustainable manner, but government and donor support was necessary at the inception and, at times, to maintain capital buffers.

Rwanda

Rwanda has channeled significant public resources into programs to boost growth, increase agricultural productivity, foster more access to financial services, and encourage higher-value economic activity. Infrastructure investment has focused on roads, electricity, access to the internet, and education, along with special enterprise zones to promote production of exports. The country has also embarked on a targeted strategy of public investment to promote Kigali as a regional and international hub for meetings, conferences, and exhibitions.

The strategy has borne fruit, with a noticeable shift of employment and output from basic agricultural to higher-value activity, especially services. Rwanda has experienced the fastest movement of labor across the two sectors among sub-Saharan African countries over the past 15 years. The sustained focus on high and inclusive growth, combined with maintenance of macroeconomic stability, has achieved tangible results over the past decade: growth rates have averaged 7.5 percent a year, close to doubling per capita income, and exports of goods and services have grown by 15 percent a year. At the same time, concerted policies have reduced gender inequality to the lowest level in sub-Saharan Africa, reduced poverty from about 60 to under 40 percent, and lowered income inequality. Due to extensive legal and structural reforms, Rwanda ranks number 2 in Africa in the World Bank's 2017 Doing Business indicators and fourth most improved country on the World Economic Forum's Global Competitiveness Index, garnering the highest scores for improving its institutional quality and labor market efficiency while diversifying the economy.

Recent public investments have included a large conference facility in Kigali and expansion of the national airlines for more intra-African routes and longer routes to India, China, and Europe. The aim of this public investment, which has increased debt ratios in the past five years, is to perpetuate Rwanda's growth momentum through stimulating more private-sector-led growth.

Uganda

Uganda's exports have traditionally been agrobased commodities, such as coffee. In recent years, the country has expanded into manufactured food,

beverages, and tobacco products. Moreover, Uganda increased production and exports of light manufactured building products such as steel and cement to neighboring countries.⁸ The government has supported this diversification by establishing and maintaining macroeconomic stability, expanding extension services, research and development, inputs and bulking, and marketing infrastructure. This is linked to development of industrial clusters along value chains and light manufacturing.

A number of formal policies have sought to facilitate diversification. The National Industrial Policy (2008) promotes manufacturing through emphasis on the application of science, technology, and innovation. The Uganda National Trade Policy (2008) aims at creating an enabling trade environment. The Leather and Leather Products Policy (2015) promotes the production and trading of value-added leather products and has boosted exports diversification. The improvement in electricity over time has helped to boost output surpluses, which have been exported to neighbors.

Economic diversification went hand in hand with a shift in the destination of exports, from western Europe to regional neighbors. In 1995, over three-quarters of exports went to Europe. Nowadays, half of Uganda's exports are to neighboring countries. Over this period, total export volumes grew on average by 10 percent a year. This shift in export destination suggests that when regional growth is strong, concentrating on regional trade integration can support diversification. The adoption of a customs union in 2005, conflict resolution in Sudan in 2005, and consequently the independence of South Sudan in 2011 have been supportive in enhancing regional trade.

Botswana

Botswana has leveraged its natural resource, diamonds, to promote diversification. Building on its dominant market position and a strong record of good governance and prudent economic management, the country has gradually expanded along the value chain for the diamond industry, including diamond trading, sorting, cutting, polishing, and retailing. There have been positive spillovers to supporting sectors such as manufacturing, trade, hotels, restaurants, and finance, which has given rise to

⁸ See also Selassie 2008 for a discussion of Uganda's structural transformation.

some degree of horizontal diversification. Attempts to promote the expansion of sectors such as textiles and automobile parts were held back by capacity constraints and the fact that such sectors lacked current or potential comparative advantage. The key lesson is that policies to promote diversification are most likely to be successful in sectors that have some type of comparative advantage, including based on endowments.

Togo

Togo has long benefited from a diverse export base. The postindependence reliance on phosphate mining decreased as the country expanded into the mineral value-added production of clinker, as well as agricultural exports and varied light manufacturing. Based on its geographic location, Togo has traditionally had a strong transportation sector, taking advantage of both the east/west coastal corridor and servicing its landlocked neighbors to the north.

To foster further structural transformation, Togo has introduced industrial policies in the form of an export processing zone, streamlining business licensing and customs procedures, providing tax exemptions, and allowing direct contracting with foreign investors in mining. The government has also pursued an ambitious program of infrastructure investment in roads, the airport, and the deep-sea port. Buoyed by the notable infrastructure improvements, transportation service provision has grown and yielded spillovers that have strengthened exports.

However, the outcomes of the policies to promote transformation and diversification have been mixed. Capital expenditures, along with tax exemptions to spur foreign investment, have pushed up public debt. In the mining sector, clinker production by state-owned enterprises was turned over to foreign investors who have expanded production. Foreign participation in the rest of the mining sector, by contrast, has yet to produce significant results.

Considerations for Policy Design

These country experiences illustrate how political and macroeconomic stability, an enabling environment, and in some cases, policies that effectively tackle specific constraints or challenges contribute to economic diversification. Good infrastructure is a crucial ingredient for this process, allowing the

private sector to exploit new opportunities and expand activities. Likewise, a workforce that has the right skills for such transformations and diversification is key.

At the same time, experience in many countries around the world suggest, that specific interventions often fail at a high fiscal cost and without generating growth or creating jobs. Power plants that are not connected to the grid, quality problems in construction that lead to delays and cost overruns, or efforts to kick-start activities for which the country has neither the endowments nor a comparative advantage are examples. Tax holidays and income tax exemptions have a poor record of attracting investment because they are not well targeted, but are costly in terms of revenue losses (IMF and others 2015). A tax system that is easy to comply with, however, is part of an environment conducive to business and likely much more important for economic diversification (for example, Dabla-Norris and others 2017).

The common elements of successful policy interventions are aligned with efficient public investment management: project selection based on sound analysis, project planning, and implementation. Structural transformation and export diversification do not happen overnight. They build on endowments and expand underlying capabilities, moving from one node of the economic complexity web to the next. As such, policies to foster economic diversification must be based on a long-term vision and implemented in a steady and sustained fashion.

CONCLUSIONS

While sub-Saharan Africa trails other regions in most measures of structural transformation and export diversification, this aggregate picture hides important success stories within the region. Economic diversification has been slow in the oil-exporting countries during a time when they benefited from new discoveries and high oil prices. The other resource-intensive economies and the non-resource-intensive economies have done better, with some making impressive gains. Still, in many sub-Saharan African countries reliance on the primary sector is higher and the manufacturing sector is smaller than in other regions. At the same time, services are playing a larger role.

These findings have macroeconomic implications. Progress on economic diversification can foster growth and strengthen resilience. This holds in particular for low-income countries. Development paths for individual countries will differ, depending on their circumstances and starting positions.

Policies to achieve economic diversification depend on country circumstances. Macroeconomic and political stability combined with conducive infrastructure lays the foundation for the private sector to operate under certainty and take advantage of new opportunities. Access to credit allows for investment, including in new sectors and activities. An educated and healthy workforce facilitates mobility. Specific policies have to build on a country's starting point, its endowments and circumstances. In some cases, addressing market failures can help. Trade integration can open new markets and opportunities. A key to success is endurance and consistency. Structural transformation is a long-term process that functions best with long-term policies.

Annex 3.1. Methodological Notes and Data

Linking Trade in Goods and Manufacturing

To quantify the link between the exporter country's trade position and various diversification measures the section uses a gravity model, including robust fixed effects in which the dependent variable is the logarithm of exports from one country to another as reported by the partner country. The baseline estimation sample covers 177 reporting countries with 191 trading partners between 1980 and 2014. Following the specification in the April 2015 *Regional Economic Outlook: Sub-Saharan Africa*, we estimate the following specification:

$$\ln x_{ijt} = \beta^{Ex} M_{it-1}^{Ex} + \gamma^{Ex} Div_{it-1}^{Ex} + \beta^{Im} M_{it-1}^{Im} + \theta I_{ijt-1} + v_t + u_{ijt}$$

In which, x_{ijt} captures exports from exporting country i to importing country j in year t , M_{it-1}^{Ex} and M_{it-1}^{Im} are possible determinants of export volumes from the exporter's and importer's side (lagged by one year to address simultaneity concerns), I_{ijt-1} are factors that represent trade cost between bilateral trade partners, and v_t and u_{ijt} represent time fixed effects and unobserved bilateral trade cost determinants, respectively. Finally, Div_{it-1}^{Ex} denotes the measures of diversification and output structure tested for in the analysis (sectoral shares, export diversification, and its subindices).

Robustly Identifying the Impact of Diversification on Growth

This section uses the unbalanced panel of 84 countries from 1965 to 2009 from Eicher and Kuenzel 2016 to test whether diversification, as measured by export and output diversification (Papageorgiou and Spatafora 2012), have an impact on average real GDP per capita growth (five-year averages), on top of the wide range of indicators previously identified as robust growth determinants in the literature. To address model uncertainty arising from the large number of possible candidate regressors (41 in total; regression table only reports regressor with probability > 0.5) and instruments, this chapter uses instrumental variable bayesian model averaging (IVBMA). IVBMA combines the instrumental variable and bayesian model averaging methodologies in a type of two-stage least square estimation that addresses model uncertainty in both stages. A detailed description of the methodology can be found in Eicher and Kuenzel 2016.

Endogenous regressors include export diversification indices (total Theil, between Theil, within Theil), output diversification index, interactions between diversification indices and income dummies, and sub-Saharan African dummy.

Exogenous regressors include income dummies (low income, lower middle income, upper middle income), life expectancy, fertility, regional dummies (east Asia, sub-Saharan Africa, Latin America), land near coast percentage, percentage land tropic, linguistic fractionalization, ethnic fractionalization, governance quality, religions fraction, expropriation risk, and legal system origins.

Instruments include log of land area, log of average population size, lag of log of population growth, lag of average ratio of investment to GDP, initial per capita GDP, lag inflation, lag of government expenditure, lag of education, lag of filtered openness, original fraction of religion, landlocked dummy, interaction dummies between income and landlocked, and interaction dummy between income and population.

Identifying Policies to Support Diversification

In assessing what policy matters for economic diversification, we use a simple regression model to capture the correlations between various explanatory variables and diversification measures. The choice of the explanatory variables is mainly based on past literature on drivers of economic growth, since the latter is highly correlated with economic diversification and structural transformation. The main regressors are grouped into macroeconomic variables such as inflation, misalignment in real effective exchange rate, external debt, and oil dependency; a financial variable of access to private credit, and infrastructure and human capital indices such as; access to electricity, literacy rate, life expectancy, and the measure of inequality via the Gini index. For a subsample of the data for which there were observations, we also include the Ease of Business index. The main dependent variable of interest is the measure of export product diversification, although we also conduct robustness checks with the other diversification measures of output diversification and economic complexity.

The data cover 92 countries between 1990 and 2014, and for each country we construct five-year averages for each regressor. A detailed description of the data can be found in Schimmelpfennig and others, forthcoming. Table 3.2 in the main text depicts the regression outcomes. Specifications 1, 4, and 7 include only the macroeconomic regressors, while specifications 2, 5, and 8 depict the main regressors of interest. Specifications 3, 6, and 9 include additional regressors on regulatory and political environments: IVBMA Regression for growth on diversification, the economic complexity index, and export quality (developing countries, 1965–2009).

Annex Table 3.1. IVBMA Regression for Growth on Diversification (Developing Economies, 1965–2009)

	Export Diversification Index						Output Diversification	
	Total Theil		Between Theil		Within Theil		Inclusion Prob.	Cond. Mean
	Inclusion Prob.	Cond. Mean	Inclusion Prob.	Cond. Mean	Inclusion Prob.	Cond. Mean		
Initial GDP	1.000	−0.021	1.000	−0.022	1.000	−0.021	1.000	−0.021
Investment	1.000	0.015	0.999	0.012	1.000	0.015	0.987	0.012
Government Expenditures	1.000	−0.122	1.000	−0.122	0.992	−0.123	1.000	−0.145
Governance Quality	1.000	0.011	1.000	0.011	1.000	0.010	0.999	0.013
Population Growth	0.996	−0.060	1.000	−0.056	0.990	−0.063	0.986	−0.060
Religion	0.992	0.051	0.999	0.055	0.978	0.049	0.996	0.058
Inflation	0.831	0.000	0.849	0.000	0.813	0.000	0.256	0.000
Export Diversification	0.102	−0.001	0.328	−0.012	0.146	−0.003		
Output Diversification							0.190	0.032
Interactions:								
Diversification and Low Income	0.951	−0.007	0.817	−0.026	0.907	−0.847	0.974	−0.148
Div. and Lower Middle Income	0.094	0.000	0.179	0.009	0.115	−0.063	0.101	0.026
Div. and Upper Middle Income	0.065	0.008	0.063	−0.011	0.091	0.000	0.061	−0.002
Div. and SSA	0.208	−0.003	0.906	−0.033	0.258	−0.383	0.096	−0.006
Sargent Test p-Value	1.00		1.00		1.00		1.00	
Observations	583		583		583		531	

Source: IMF staff estimates.

Note: Variables that show an inclusion probability of more than 0.5 are in boldface type. Cond. = conditional; Div. = diversification; IVBMA= Instrumental variable Bayesian model averaging; Prob. = probability; SSA = sub-Saharan Africa.

REFERENCES

- Acemoglu, D., and J. Robinson. 2008. "The Role of Institutions in Growth and development." Commission on Growth and Development, World Bank Working Paper 10, Washington, DC.
- Anand, R., S. Mishra, and N. Spatafora. 2012. "Structural Transformation and the Sophistication of Production." IMF Working Paper 12/59, International Monetary Fund, Washington, DC.
- Cadot, O., C. Carrere, and V. Strauss-Kahn. 2011. "Export Diversification: What's Behind the Hump?" *Review of Economics and Statistics* 93: 590–605.
- Carmignani, F., and T. Mandeville. 2010. "Never Been Industrialized: A Tale of African Structural Change," *Structural Change and Economic Dynamics* 31: 124–37.
- Christiansen, L., M. Schindler, and T. Tresselt. 2013. "Growth and Structural Reforms: A New Assessment." *Journal of International Economics* 89: 347–56.
- Dabla-Norris, E., F. Misch, D. Cleary, and M. Khwaja. 2017. "Tax Administration and Firm Performance: New Data and Evidence for Emerging Market and Developing Economies." IMF Working Paper 17/95, International Monetary Fund, Washington, DC.
- Easterly, W., and A. Reshef. 2010. "African Export Successes: Surprises, Stylized Facts, and Explanations." NBER Working Paper 16597, National Bureau of Economic Research, Cambridge, MA.
- Eicher, T., and D. Kuenzel. 2016. "The Elusive Effect of Trade on Growth: Export Diversity and Economic Take-Off." *Canadian Journal of Economics* 49 (1) 264–95.
- Fox, L., A. Thomas, C. Haines, and J. Huerta-Munoz. 2013. "Africa has Work to do: Employment Prospects in the New century," IMF Working Paper 13/321, International Monetary Fund, Washington, DC.
- Hansen, G. D., and E. C. Prescott. 2002. "Malthus to Solow." *American Economic Review* 92 (4): 1205–17.
- Hausmann, R., C. A. Hidalgo, S. Bustos, M. Coscia, S. Chung, J. Jimenez, A. Simoes, and M. A. Yildirim. 2014. "The Atlas of Economic Complexity—Mapping Paths to Prosperity." Cambridge, MA: MIT Press.
- Henn, C., C. Papageorgiou, and N. Spatafora. 2013. "Export Quality in Developing Countries." IMF Working Paper 13/108, International Monetary Fund, Washington, DC.
- International Monetary Fund (IMF). 2014. "Sustaining Long-Run Growth and Macroeconomic Stability in Low-Income Countries—the Role of Structural Transformation and Diversification." IMF Policy Paper, International Monetary Fund, Washington, DC.
- . 2015. *Regional Economic Outlook: Sub-Saharan Africa*. Chapter 3. Washington DC, April.
- . 2016. "Trade Integration and Global Value Chains in Sub-Saharan Africa: In Pursuit of the Missing Link." IMF Policy Paper, International Monetary Fund, Washington, DC.
- . 2017a. *Regional Economic Outlook: Sub-Saharan Africa*. Chapter 3. Washington, DC, October.
- . 2017b. *Rwanda 2017 Article IV Consultation: Selected Issues*. IMF Country Report No. 17/214, Washington, DC.
- . 2017c. *Regional Economic Outlook: Sub-Saharan Africa*. Chapter 2. Washington, DC, April.
- , Organisation for Economic Cooperation and Development, United Nations, and World Bank. 2015. "Options for Low-Income Countries' Effective and Efficient Use of Tax Incentives for Investment." Washington, DC.
- Kazandjian, R., L. Kolovich, K. Kochhar, and M. Newiak. 2016. "Gender Equality and Economic Diversification." IMF Working Paper 140, International Monetary Fund, Washington, DC.
- McMillan, M., and D. Rodrik. 2011. "Globalization, Structural Change, and Productivity Growth." NBER Working Paper 17143, National Bureau of Economic Research, Cambridge, MA.
- , and I. Verduzco-Gallo. 2014. "Globalization, Structural Change, and Productivity Growth with an Update on Africa." *World Development* 63: 11–32.
- Ostry, J., A. Prati, and A. Spilimbergo. 2009. "Structural Reforms and Economic Performance in Advanced and Developing Countries," IMF Occasional Paper 268, International Monetary Fund, Washington, DC.
- Papageorgiou, C., and N. Spatafora. 2012. "Economic Diversification in LICs: Stylized Facts and Macroeconomic Implications," IMF Staff Discussion Note, 12/13, International Monetary Fund, Washington, DC.
- Prati, A., M. Onorato, and C. Papageorgiou. 2013. "Which Reforms Work and under What Institutional Environment? Evidence from a New Data Set on Structural Reforms." *Review of Economics and Statistics* 95 (3): 946–68.
- Rodrik, D. 2015. "Premature Deindustrialization." NBER Working Paper 20935, National Bureau of Economic Research, Cambridge, MA.
- Selassie, A. 2008. "Beyond Macroeconomic Stability: The Quest for Industrialization in Uganda." IMF Working Paper 08/231, International Monetary Fund, Washington, DC.
- Simoes, A. J. G., and C. A. Hidalgo. 2011. "The Economic Complexity Observatory: An Analytical Tool for Understanding the Dynamics of Economic Development." Workshop at the Twenty-Fifth Association for the Advancement of Artificial Intelligence (AAAI) Conference on Artificial Intelligence, San Francisco, August 7–11.

Statistical Appendix

Unless otherwise noted, data and projections presented in this *Regional Economic Outlook* are IMF staff estimates as of 29 September, 2017, consistent with the projections underlying the October 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 77 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 2014–16 of more than US\$1,005.00 (World Bank, using the Atlas method).
- The low-income countries had average per capita gross national income in the years 2014–16 equal to or lower than US\$1,005.00 (World Bank, Atlas method).
- The countries in fragile situations had average CPIA scores of 3.2 or less in the years 2014–16

and/or had the presence of a peace-keeping or peace-building mission within the last three years.

- The membership of sub-Saharan African countries in the major regional cooperation bodies is shown on page 77: 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 Rep.	Burkina Faso	Burundi
Chad	Cabo Verde	Burundi	Mozambique	Chad	Central African Rep.	Cabo Verde
Congo, Republic of	Cameroon	Central African Rep.	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
	Senegal			Mali	Zimbabwe	Mozambique
	Seychelles			São Tomé & Príncipe		Rwanda
	São Tomé & Príncipe			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 Rep.	Comoros	Kenya	Botswana	Lesotho	Burkina Faso
Côte d'Ivoire	Chad	Congo, Dem. Rep. of	Rwanda	Congo, Dem. Rep. of	Namibia	Cabo Verde
Guinea-Bissau	Congo, Republic of	Eritrea	Tanzania	Lesotho	South Africa	Côte d'Ivoire
Mali	Equatorial Guinea	Ethiopia	Uganda	Madagascar	Swaziland	Gambia, The
Niger	Gabon	Kenya		Malawi		Ghana
Senegal		Madagascar		Mauritius		Guinea
Togo		Malawi		Mozambique		Guinea-Bissau
		Mauritius		Namibia		Liberia
		Rwanda		Seychelles		Mali
		Seychelles		South Africa		Niger
		Swaziland		Swaziland		Nigeria
		Uganda		Tanzania		Senegal
		Zambia		Zambia		Sierra Leone
		Zimbabwe		Zimbabwe		Togo

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, Democratic Republic of	KEN	Kenya	RWA	Rwanda	ZAF	South Africa
COG	Congo, Republic 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, Common Surveillance database, and IMF, World Economic Outlook database, 29 September, 2017.

¹ Fiscal year data.

² In constant 2009 U.S. dollars. The Zimbabwe dollar ceased circulating in early 2009. Data are based on IMF staff estimates of price and exchange rate developments in U.S. dollars. Staff estimates of U.S. dollar values may differ from authorities' estimates.

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

Tables SA4–SA5

Sources: IMF, World Economic Outlook database, 29 September, 2017.

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

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

Table SA20

Source: IMF, World Economic Outlook database, 29 September, 2017.

¹ Including grants.

² Fiscal year data.

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

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

Tables SA22–SA23

Source: IMF, Information Notice System.

¹ An increase indicates appreciation.

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

Table SA27

Source: IMF, International Financial Statistics.

¹ Includes offshore banking assets.

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

Table SA28

Source: IMF, International Financial Statistics.

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

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

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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	-0.7	1.5	1.6
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	4.3	4.5	4.8
Burkina Faso	5.9	3.0	8.4	6.6	6.5	5.7	4.2	4.0	5.9	6.4	6.5
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	1.0	3.8	4.0	4.1
Cameroon	3.1	1.9	3.3	4.1	4.6	5.6	5.9	5.8	4.7	4.0	4.6
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	0.6	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	3.0
Congo, Rep. of	4.3	7.8	8.7	3.4	3.8	3.3	6.8	2.6	-2.8	-3.6	2.8
Côte d'Ivoire	1.8	3.3	2.0	-4.2	10.1	9.3	8.8	8.9	7.7	7.6	7.3
Equatorial Guinea	15.5	1.3	-8.9	6.5	8.3	-4.1	-0.7	-9.1	-9.7	-7.4	-7.8
Eritrea	-2.1	3.9	2.2	8.7	7.0	3.1	5.0	4.8	3.7	3.3	3.6
Ethiopia ¹	11.8	10.0	10.6	11.4	8.7	9.9	10.3	10.4	8.0	8.5	8.5
Gabon	1.3	-2.3	6.3	7.1	5.3	5.5	4.4	3.9	2.1	1.0	2.7
Gambia, The	3.3	6.4	6.5	-4.3	5.6	4.8	0.9	4.3	2.2	3.0	3.5
Ghana	6.2	4.8	7.9	14.0	9.3	7.3	4.0	3.8	3.5	5.9	8.9
Guinea	3.7	-1.5	4.2	5.6	5.9	3.9	3.7	3.5	6.6	6.7	5.8
Guinea-Bissau	3.2	3.4	4.6	8.1	-1.7	3.3	1.0	5.1	5.1	5.0	5.0
Kenya	4.6	3.3	8.4	6.1	4.6	5.9	5.4	5.7	5.8	5.0	5.5
Lesotho	4.0	4.5	6.9	4.5	5.3	3.6	3.4	2.5	2.4	4.6	3.1
Liberia	7.3	5.1	6.1	7.4	8.2	8.7	0.7	0.0	-1.6	2.6	4.0
Madagascar	5.8	-4.7	0.3	1.5	3.0	2.3	3.3	3.1	4.2	4.3	5.3
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	5.8	5.3	5.0
Mauritius	4.3	3.0	4.1	3.9	3.2	3.2	3.6	3.5	3.9	3.9	4.0
Mozambique	8.1	6.4	6.7	7.1	7.2	7.1	7.4	6.6	3.8	4.7	5.3
Namibia	4.3	0.3	6.0	5.1	5.1	5.6	6.4	6.0	1.1	0.8	2.5
Niger	5.2	-0.7	8.4	2.2	11.8	5.3	7.5	4.0	5.0	4.2	4.7
Nigeria	7.7	8.4	11.3	4.9	4.3	5.4	6.3	2.7	-1.6	0.8	1.9
Rwanda	9.0	6.3	7.3	7.8	8.8	4.7	7.6	8.9	5.9	6.2	6.8
São Tomé & Príncipe	5.7	4.0	4.5	4.8	4.5	4.3	4.1	4.0	4.1	5.0	5.5
Senegal	4.5	2.4	4.3	1.9	4.5	3.6	4.1	6.5	6.7	6.8	7.0
Seychelles	4.8	-1.1	5.9	5.4	3.7	6.0	4.5	5.0	4.5	4.1	3.4
Sierra Leone	5.8	3.2	5.3	6.3	15.2	20.7	4.6	-20.5	6.1	6.0	6.1
South Africa	4.8	-1.5	3.0	3.3	2.2	2.5	1.7	1.3	0.3	0.7	1.1
South Sudan	...	...	...	...	-52.4	29.3	2.9	-0.2	-13.8	-6.3	-3.4
Swaziland	4.2	4.5	3.5	2.0	3.5	4.8	3.6	1.1	-0.0	0.3	-0.9
Tanzania	6.5	5.4	6.4	7.9	5.1	7.3	7.0	7.0	7.0	6.5	6.8
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	2.2	4.7	4.6	5.7	2.3	4.4	5.2
Zambia	7.7	9.2	10.3	5.6	7.6	5.1	4.7	2.9	3.4	4.0	4.5
Zimbabwe ²	-7.4	7.4	15.4	16.3	13.6	5.3	2.8	1.4	0.7	2.8	0.8
Sub-Saharan Africa	6.6	3.9	7.0	5.1	4.4	5.3	5.1	3.4	1.4	2.6	3.4
Median	4.8	3.3	6.0	4.9	5.1	5.3	4.5	3.8	3.8	4.2	4.6
Excluding Nigeria and South Africa	6.9	3.9	6.1	6.1	5.4	6.6	5.8	4.7	3.6	4.4	5.1
Oil-exporting countries	8.6	6.7	9.2	4.7	3.9	5.7	5.9	2.5	-1.5	0.8	1.8
Excluding Nigeria	11.0	2.3	3.5	4.2	2.7	6.4	4.6	2.3	-1.3	0.5	1.6
Oil-importing countries	5.3	2.0	5.4	5.4	4.7	5.1	4.5	4.0	3.4	3.9	4.4
Excluding South Africa	5.6	4.4	7.0	6.7	6.3	6.6	6.1	5.5	5.1	5.5	6.0
Middle-income countries	6.6	3.6	6.9	4.5	4.3	4.8	4.6	2.7	0.4	1.8	2.6
Excluding Nigeria and South Africa	7.3	2.8	5.1	5.3	6.1	5.9	4.9	3.9	2.9	3.6	4.5
Low-income countries	6.3	5.1	7.4	7.1	4.7	7.3	6.7	5.7	4.4	5.3	5.7
Excluding low-income countries in fragile situations	8.1	6.7	7.8	8.1	6.3	7.4	7.5	7.4	6.1	6.6	6.9
Countries in fragile situations	3.5	3.2	6.0	3.6	3.7	7.3	6.1	4.0	2.4	3.7	4.3
CFA franc zone	4.9	2.6	4.0	2.8	6.1	4.5	5.7	4.2	3.3	3.8	4.6
CEMAC	6.3	2.3	3.6	4.4	5.9	2.7	4.7	1.9	-0.6	0.3	2.1
WAEMU	3.6	2.9	4.4	1.3	6.3	6.1	6.6	6.2	6.3	6.4	6.4
COMESA (SSA members)	6.2	5.7	8.1	7.4	6.1	6.3	6.4	6.1	4.7	5.2	5.5
EAC-5	6.2	5.2	7.4	6.9	4.5	6.1	5.9	6.1	5.4	5.4	5.9
ECOWAS	6.8	7.0	9.7	5.0	5.1	5.8	6.1	3.2	0.4	2.4	3.4
SACU	4.8	-1.6	3.4	3.4	2.4	3.0	2.0	1.3	0.5	0.9	1.3
SADC	6.2	0.5	4.3	4.4	3.8	4.4	3.5	2.7	1.5	2.2	2.5

See sources and footnotes on page 78.

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

See sources and footnotes on page 78.

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	-3.6	-1.5	-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	3.1	3.3	3.6
Burkina Faso	2.7	-0.1	5.2	3.5	3.3	2.6	1.2	1.1	4.1	3.5	3.7
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	2.6	2.7	2.8
Cameroon	0.3	-0.8	0.8	1.6	2.0	3.0	3.3	3.2	2.1	1.4	2.0
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	-2.1	-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	-0.0
Congo, Rep. of	1.7	5.2	6.1	0.9	1.3	0.8	4.2	0.1	-5.2	-6.0	0.3
Côte d'Ivoire	-0.8	0.6	-0.6	-6.6	7.3	6.5	6.0	6.2	5.0	4.9	4.6
Equatorial Guinea	12.1	-1.5	-11.5	3.6	5.3	-6.8	-3.4	-11.6	-12.1	-9.8	-10.2
Eritrea	-5.2	0.6	-1.1	5.2	3.6	-0.2	1.6	1.4	0.4	0.0	0.3
Ethiopia ¹	9.2	8.3	8.8	9.6	7.0	8.2	8.6	8.7	6.3	6.8	6.7
Gabon	-1.5	-5.9	2.4	3.2	1.4	1.5	2.9	2.4	0.7	-0.4	1.3
Gambia, The	0.0	3.1	3.1	-7.4	2.2	1.4	-2.3	1.0	-1.0	-0.3	0.2
Ghana	3.6	2.2	5.2	11.2	6.6	4.6	1.4	1.2	0.9	3.3	6.1
Guinea	1.4	-4.1	1.5	2.9	3.2	1.3	1.1	1.0	4.0	4.1	3.2
Guinea-Bissau	1.0	1.1	3.8	5.8	-3.8	1.0	-1.2	2.8	2.8	2.7	2.7
Kenya	1.8	0.5	6.1	3.4	1.5	3.1	2.4	2.8	2.9	2.2	2.6
Lesotho	3.7	4.3	6.6	4.3	5.0	3.3	3.2	2.3	2.1	4.4	2.8
Liberia	5.7	0.8	1.8	4.7	5.5	5.9	-1.9	-2.5	-3.9	0.2	1.5
Madagascar	2.8	-7.4	-2.5	-1.4	0.2	-0.6	0.5	0.3	1.3	1.5	2.5
Malawi	3.5	5.3	3.9	1.9	-1.0	2.3	2.7	0.1	-0.6	1.6	2.1
Mali	0.9	1.3	2.1	0.1	-3.7	-0.7	3.6	2.6	2.4	1.9	1.6
Mauritius	3.8	2.8	3.9	3.7	2.9	3.0	3.4	3.4	3.8	3.5	3.6
Mozambique	5.0	3.4	3.7	4.1	4.2	4.2	4.5	3.7	1.1	2.0	2.5
Namibia	2.9	-1.2	4.5	3.5	3.1	3.7	4.4	4.0	-0.8	0.0	1.7
Niger	1.5	-4.1	5.1	-0.9	8.5	2.1	4.3	0.8	1.9	1.1	1.6
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	4.2
São Tomé & Príncipe	3.0	1.0	1.5	1.9	1.8	1.7	1.6	1.4	1.6	2.6	3.1
Senegal	1.7	-0.4	1.2	-1.2	1.3	0.4	0.9	3.2	3.5	3.6	3.8
Seychelles	3.7	-1.5	3.0	8.2	2.7	4.1	2.9	3.0	3.8	3.3	2.2
Sierra Leone	2.4	1.2	3.3	4.3	13.0	18.2	2.4	-21.6	4.1	4.1	4.1
South Africa	3.5	-2.9	1.6	1.8	0.7	1.0	0.2	-0.3	-1.3	-0.9	-0.5
South Sudan	...	...	...	...	-54.7	23.4	-1.6	-4.4	-18.0	-10.8	-8.1
Swaziland	3.2	3.4	2.4	0.8	2.2	3.6	2.4	-0.1	-1.2	-1.0	-2.2
Tanzania	3.6	2.7	3.8	5.3	2.7	5.2	4.9	4.9	4.9	4.4	4.7
Togo	-0.7	0.7	1.3	2.0	3.1	3.3	2.6	2.5	2.2	2.2	2.5
Uganda	4.7	4.5	4.2	3.4	-0.9	1.7	1.6	2.6	-0.7	1.4	2.1
Zambia	4.7	6.0	7.1	2.4	4.4	1.9	1.5	-0.2	0.3	0.8	1.3
Zimbabwe ²	-8.1	6.4	14.4	15.2	8.4	2.4	0.2	-1.1	-1.9	0.2	-1.7
Sub-Saharan Africa	4.2	1.5	4.6	2.7	1.9	2.9	2.6	1.0	-1.0	0.3	1.0
<i>Median</i>	2.9	0.8	3.2	3.0	2.7	2.6	2.4	1.1	1.3	1.6	2.1
Excluding Nigeria and South Africa	4.1	1.2	3.5	3.5	2.7	3.9	3.2	2.2	1.1	1.9	2.6
Oil-exporting countries	5.7	3.8	6.2	1.9	1.0	2.8	3.0	-0.2	-4.2	-2.0	-0.9
Excluding Nigeria	7.9	-0.6	0.6	1.3	-0.2	3.3	1.8	-0.5	-4.0	-2.2	-1.1
Oil-importing countries	3.2	-0.1	3.3	3.3	2.5	2.9	2.4	1.8	1.3	1.7	2.2
Excluding South Africa	3.0	1.8	4.5	4.2	3.6	4.1	3.6	3.0	2.6	3.1	3.6
Middle-income countries	4.3	1.2	4.5	2.2	1.9	2.3	2.2	0.3	-1.9	-0.6	0.2
Excluding Nigeria and South Africa	4.6	0.2	2.5	2.6	3.3	3.2	2.3	1.3	0.4	1.1	2.0
Low-income countries	3.5	2.5	4.7	4.5	2.0	4.7	4.1	3.1	1.9	2.8	3.2
Excluding low-income countries in fragile situations	5.1	4.0	5.2	5.6	3.8	5.0	5.2	5.1	3.9	4.3	4.6
Countries in fragile situations	0.9	0.6	3.3	1.0	0.8	4.4	3.2	1.1	-0.4	0.8	1.4
CFA franc zone	2.0	-0.3	1.1	-0.0	3.2	1.6	3.0	1.6	0.7	1.1	2.0
CEMAC	3.4	-0.6	0.8	1.6	3.1	-0.1	2.2	-0.4	-2.9	-2.0	-0.2
WAEMU	0.6	0.0	1.5	-1.6	3.3	3.2	3.6	3.3	3.5	3.5	3.5
COMESA (SSA members)	3.5	3.2	5.7	4.9	3.3	3.8	3.9	3.6	2.3	2.7	3.0
EAC-5	3.3	2.3	4.7	4.1	1.6	3.5	3.2	3.5	2.8	2.8	3.3
ECOWAS	3.9	4.1	6.8	2.2	2.3	2.9	3.3	0.4	-2.3	-0.3	0.7
SACU	3.5	-2.9	2.0	2.0	1.0	1.5	0.5	-0.2	-1.0	-0.6	-0.2
SADC	4.4	-1.3	2.4	2.5	1.8	2.4	1.5	0.7	-0.5	0.2	0.5

See sources and footnotes on page 78.

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	30.9	20.6
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	3.7	3.7
Burkina Faso	3.8	0.9	-0.6	2.8	3.8	0.5	-0.3	0.9	-0.2	1.5	2.0
Burundi	11.4	10.6	6.5	9.6	18.2	7.9	4.4	5.6	5.5	18.0	20.2
Cabo Verde	2.9	1.0	2.1	4.5	2.5	1.5	-0.2	0.1	-1.4	1.0	1.5
Cameroon	2.7	3.0	1.3	2.9	2.4	2.1	1.9	2.7	0.9	0.7	1.1
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	1.9
Comoros	4.0	4.8	3.9	2.2	5.9	1.6	1.3	2.0	1.8	2.0	2.0
Congo, Dem. Rep. of	14.6	46.1	23.5	14.9	0.9	0.9	1.2	1.0	18.2	41.7	44.0
Congo, Rep. of	3.7	4.3	0.4	1.8	5.0	4.6	0.9	2.7	3.6	-0.4	-1.1
Côte d'Ivoire	3.2	1.0	1.4	4.9	1.3	2.6	0.4	1.2	0.7	1.0	2.0
Equatorial Guinea	4.4	5.7	5.3	4.8	3.4	3.2	4.3	1.7	1.4	1.7	1.8
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	8.1	8.0
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	8.3	7.1
Ghana	13.3	13.1	6.7	7.7	7.1	11.7	15.5	17.2	17.5	11.8	9.0
Guinea	25.0	4.7	15.5	21.4	15.2	11.9	9.7	8.2	8.2	8.5	8.2
Guinea-Bissau	4.2	-1.6	1.1	5.1	2.1	0.8	-1.0	1.5	1.5	2.8	2.5
Kenya	8.3	10.6	4.3	14.0	9.4	5.7	6.9	6.6	6.3	8.0	5.2
Lesotho	6.9	5.8	3.3	6.0	5.5	5.0	4.6	4.3	6.4	6.6	6.0
Liberia	9.8	7.4	7.3	8.5	6.8	7.6	9.9	7.7	8.8	12.8	9.9
Madagascar	12.5	9.0	9.2	9.5	5.7	5.8	6.1	7.4	6.7	7.8	6.8
Malawi	11.5	8.4	7.4	7.6	21.3	28.3	23.8	21.9	21.7	13.0	9.6
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	4.2	5.0
Mozambique	10.2	3.3	12.7	10.4	2.1	4.2	2.3	2.4	19.2	17.5	10.5
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	0.3	1.0	2.1
Nigeria	11.6	12.5	13.7	10.8	12.2	8.5	8.0	9.0	15.7	16.3	14.8
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	4.5	5.2
Senegal	3.3	-2.2	1.2	3.4	1.4	0.7	-1.1	0.1	0.9	2.1	2.2
Seychelles	9.0	31.8	-2.4	2.6	7.1	4.3	1.4	4.0	-1.0	2.8	2.3
Sierra Leone	12.5	9.2	17.8	18.5	13.8	9.8	8.3	9.0	11.5	16.9	10.6
South Africa	5.5	7.1	4.3	5.0	5.6	5.8	6.1	4.6	6.3	5.4	5.3
South Sudan	...	...	...	...	45.1	-0.0	1.7	52.8	379.8	182.2	45.0
Swaziland	6.2	7.4	4.5	6.1	8.9	5.6	5.7	5.0	8.0	7.0	5.4
Tanzania	6.6	12.1	7.2	12.7	16.0	7.9	6.1	5.6	5.2	5.4	5.0
Togo	3.8	3.7	1.4	3.6	2.6	1.8	0.2	1.8	0.9	0.8	1.2
Uganda	7.5	13.0	3.7	15.0	12.7	4.9	3.1	5.4	5.5	5.8	5.6
Zambia	13.7	13.4	8.5	8.7	6.6	7.0	7.8	10.1	17.9	6.8	7.4
Zimbabwe ¹	39.9	6.2	3.0	3.5	3.7	1.6	-0.2	-2.4	-1.6	2.5	9.5
Sub-Saharan Africa	8.8	9.8	8.1	9.4	9.3	6.6	6.3	7.0	11.3	11.0	9.5
Median	7.2	7.3	4.3	5.4	6.0	4.9	4.4	4.3	5.5	5.4	5.3
Excluding Nigeria and South Africa	9.2	9.4	6.5	10.7	9.1	5.7	5.3	6.7	10.8	10.3	8.2
Oil-exporting countries	10.9	11.5	12.0	10.0	11.2	7.5	7.1	8.9	17.8	17.1	13.9
Excluding Nigeria	9.1	8.8	7.4	7.6	8.4	4.9	4.6	8.5	23.7	19.4	11.5
Oil-importing countries	7.7	8.6	5.4	9.0	7.9	5.9	5.7	5.6	6.9	7.1	6.7
Excluding South Africa	9.3	9.7	6.2	11.6	9.3	6.0	5.5	6.1	7.2	7.9	7.3
Middle-income countries	8.6	9.5	8.5	8.3	8.4	6.9	6.9	7.1	11.6	11.1	9.6
Excluding Nigeria and South Africa	8.8	8.3	6.1	8.3	6.4	6.0	6.1	6.7	11.2	9.8	7.3
Low-income countries	9.8	10.8	6.9	13.4	12.2	5.4	4.5	6.6	10.3	10.9	9.1
Excluding low-income countries in fragile situations	9.4	8.9	5.8	16.6	14.4	6.0	4.6	5.9	6.0	6.6	6.1
Countries in fragile situations	8.3	10.4	6.7	7.4	7.4	4.2	3.4	6.2	13.4	13.5	11.0
CFA franc zone	3.1	2.7	1.1	3.2	3.3	1.7	1.2	1.8	0.6	1.1	1.6
CEMAC	2.7	4.6	1.5	2.7	3.8	2.2	2.7	2.7	1.3	1.0	1.3
WAEMU	3.4	0.9	0.8	3.6	2.8	1.3	-0.1	1.0	0.1	1.2	1.9
COMESA (SSA members)	11.5	13.0	7.3	15.4	11.3	6.1	5.8	6.7	8.4	10.0	9.7
EAC-5	7.8	11.6	5.1	13.2	12.3	6.3	5.5	5.7	5.7	6.7	5.5
ECOWAS	10.3	10.3	11.1	9.6	10.3	7.6	7.3	8.2	12.8	12.9	11.6
SACU	5.7	7.2	4.4	5.1	5.8	5.8	6.0	4.5	6.2	5.4	5.3
SADC	7.9	9.8	6.9	7.6	7.1	6.3	6.0	5.5	10.4	10.3	9.0

See sources and footnotes on page 78.

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	23.4	17.6
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	4.4	3.0
Burkina Faso	4.1	-1.8	-0.3	5.1	1.7	0.1	-0.1	1.3	-1.6	2.0	2.0
Burundi	12.5	4.6	4.1	14.9	11.8	9.0	3.7	7.1	9.5	18.6	21.5
Cabo Verde	3.5	-0.4	3.4	3.6	4.1	0.1	-0.4	-0.5	-0.3	1.1	1.7
Cameroon	3.1	0.9	2.6	2.7	2.5	1.7	2.6	1.5	0.3	1.2	1.1
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	0.7	2.3
Comoros	4.4	2.2	6.7	4.9	1.0	3.5	0.0	2.0	0.8	1.9	2.1
Congo, Dem. Rep. of	17.2	53.4	9.8	8.7	2.8	1.1	1.0	0.9	23.6	50.0	40.0
Congo, Rep. of	6.0	-1.8	2.6	1.8	7.5	2.1	0.5	3.2	0.8	-1.3	-0.9
Côte d'Ivoire	3.9	-1.7	5.1	2.0	3.4	0.4	0.9	1.4	1.1	1.5	2.0
Equatorial Guinea	4.3	5.0	5.4	4.9	2.6	4.9	2.6	1.6	1.6	1.7	1.9
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	9.2	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	7.6	6.4
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	8.2	8.0
Guinea-Bissau	4.9	-6.4	5.7	3.4	1.6	-0.1	-0.1	2.4	1.6	2.5	2.5
Kenya	9.0	8.0	5.8	18.9	3.2	7.1	6.0	8.0	6.3	5.1	5.2
Lesotho	7.2	3.5	3.6	7.2	5.0	5.5	2.0	7.5	4.4	6.5	6.0
Liberia	9.5	9.7	6.6	11.4	7.7	8.5	7.7	8.0	12.5	12.4	9.1
Madagascar	13.6	8.0	10.2	6.9	5.8	6.3	6.0	7.6	7.0	7.7	6.8
Malawi	11.6	7.6	6.3	9.8	34.6	23.5	24.2	24.9	20.0	11.1	8.3
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	5.0	4.0
Mozambique	9.2	4.2	16.6	5.5	2.2	3.0	1.1	11.1	21.1	14.0	8.0
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	-2.4	2.0	2.0
Nigeria	10.3	13.9	11.8	10.3	12.0	8.0	8.0	9.6	18.5	16.0	15.1
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	5.5	5.0
Senegal	3.8	-4.5	4.3	2.7	1.1	-0.1	-0.8	0.4	2.1	2.0	2.2
Seychelles	16.1	-2.5	0.4	5.5	5.8	3.4	0.5	3.2	-0.2	3.0	3.2
Sierra Leone	12.4	10.8	18.4	16.9	12.0	8.5	9.8	10.1	17.4	12.0	9.5
South Africa	6.4	6.3	3.5	6.2	5.7	5.4	5.3	5.3	6.7	5.2	5.4
South Sudan	...	...	...	...	25.2	-8.8	9.9	109.9	479.7	111.4	25.0
Swaziland	7.7	4.5	4.5	7.8	8.3	4.4	6.2	4.9	9.0	6.5	4.4
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	2.8	-0.4	1.8	1.6	0.5	...	...
Uganda	8.4	10.9	1.5	23.7	4.3	5.5	2.1	8.4	5.7	5.9	5.3
Zambia	13.4	9.9	7.9	7.2	7.3	7.1	7.9	21.1	7.5	5.8	8.0
Zimbabwe ¹	...	-7.7	3.2	4.9	2.9	0.3	-0.8	-2.5	-0.9	7.0	10.0
Sub-Saharan Africa	8.9	9.1	7.7	10.0	8.2	6.1	6.1	8.2	12.5	10.4	9.2
<i>Median</i>	7.3	4.7	5.3	7.0	5.0	4.4	3.7	4.5	5.1	5.7	5.1
Excluding Nigeria and South Africa	9.6	7.6	7.1	11.8	6.9	5.2	5.2	8.5	11.5	9.4	7.5
Oil-exporting countries	9.8	12.1	10.8	9.5	10.5	6.9	7.2	10.2	21.2	15.6	13.5
Excluding Nigeria	8.5	7.4	8.1	7.4	6.7	4.0	5.0	11.8	28.4	14.7	9.5
Oil-importing countries	8.4	7.1	5.5	10.4	6.5	5.5	5.3	6.7	6.9	7.0	6.5
Excluding South Africa	10.0	7.7	6.8	13.3	7.0	5.6	5.2	7.5	6.9	7.9	7.0
Middle-income countries	8.5	9.1	7.9	8.5	8.1	6.6	6.6	8.0	13.0	10.2	9.5
Excluding Nigeria and South Africa	8.8	6.3	7.2	8.5	5.6	6.0	5.9	8.4	11.9	7.9	6.7
Low-income countries	10.7	9.3	7.1	15.9	8.5	4.4	4.4	8.6	11.0	11.0	8.4
Excluding low-income countries in fragile situations	10.1	7.5	7.1	20.6	9.1	5.0	3.9	7.5	5.7	6.7	5.6
Countries in fragile situations	9.3	8.2	6.4	7.0	6.9	2.8	4.0	8.0	15.1	13.8	10.1
CFA franc zone	3.7	0.1	2.8	3.5	2.9	1.2	1.3	1.5	0.2	1.4	1.7
CEMAC	3.4	1.9	2.1	4.1	3.2	2.6	2.4	1.7	0.5	1.1	1.4
WAEMU	4.0	-1.6	3.3	3.0	2.7	0.0	0.3	1.3	-0.1	1.7	1.9
COMESA (SSA members)	12.5	10.7	7.5	17.6	7.4	6.3	5.3	8.5	7.9	10.4	9.2
EAC-5	8.4	9.9	4.4	19.6	6.6	6.1	4.5	7.5	5.9	5.6	5.4
ECOWAS	9.6	10.7	10.2	9.1	10.2	7.1	7.4	8.7	14.7	12.7	11.8
SACU	6.5	6.3	3.6	6.3	5.8	5.3	5.2	5.1	6.6	5.2	5.3
SADC	8.4	9.0	6.1	8.2	6.9	5.6	5.3	7.2	11.5	9.5	8.5

See sources and footnotes on page 78.

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	7.8	6.7
Benin	20.7	21.9	23.1	24.1	22.6	27.8	28.6	26.0	24.6	28.7	27.4
Botswana	30.0	37.3	35.4	38.7	38.1	32.9	27.9	32.1	23.8	25.1	26.3
Burkina Faso	18.5	17.9	18.0	15.4	14.9	18.2	20.8	13.3	14.5	16.3	16.9
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	40.8	43.8	47.6	47.5	37.2	31.6	37.0	38.7	37.0	39.9	41.7
Cameroon	16.5	21.0	20.3	20.5	20.7	21.6	22.9	21.3	20.2	20.1	20.8
Central African Rep.	10.1	13.2	14.3	12.2	15.0	8.7	10.2	13.9	13.7	15.4	16.0
Chad	22.5	30.1	34.4	28.4	31.4	27.4	30.4	26.9	16.7	19.7	20.4
Comoros	10.7	12.4	15.4	14.9	16.8	20.4	18.6	18.5	21.1	21.7	21.7
Congo, Dem. Rep. of	11.0	13.9	13.7	10.1	14.2	16.8	22.8	20.2	11.8	12.5	14.1
Congo, Rep. of	22.0	23.0	19.8	24.6	25.0	29.4	40.5	40.7	43.8	29.5	27.4
Côte d'Ivoire	8.4	7.1	11.7	2.2	13.9	17.9	16.7	18.2	19.6	19.4	20.1
Equatorial Guinea	29.5	39.4	38.1	32.0	41.1	30.3	29.5	21.7	10.4	7.5	7.6
Eritrea	15.9	9.3	9.3	10.0	9.5	8.7	7.9	7.6	7.4	7.2	6.7
Ethiopia ¹	22.7	24.7	25.5	32.1	37.1	34.1	38.0	39.4	38.5	37.2	37.6
Gabon	25.4	29.1	26.1	25.3	29.2	33.4	36.0	34.9	34.2	33.9	32.9
Gambia, The	21.1	19.6	21.3	18.9	27.8	20.0	20.9	19.7	18.7	19.3	20.2
Ghana	22.2	21.4	25.9	12.8	17.0	13.3	18.8	16.7	14.5	13.7	14.7
Guinea	12.0	6.3	5.5	9.1	14.7	11.6	6.4	7.3	25.2	23.3	19.0
Guinea-Bissau	6.8	6.0	6.6	5.4	7.4	6.7	7.8	9.9	13.0	11.1	12.1
Kenya	18.9	19.3	20.7	21.7	21.5	20.1	22.4	17.7	20.7	21.4	21.0
Lesotho	21.9	25.4	24.9	30.2	31.6	30.2	27.0	28.6	28.6	28.8	28.4
Liberia	...	...	...	...	...	...	...	...	...	...	...
Madagascar	29.7	35.6	23.4	17.6	17.6	15.9	15.6	13.1	15.2	19.2	21.5
Malawi	19.4	24.5	22.8	12.4	12.1	12.7	12.0	12.2	10.2	11.6	12.5
Mali	22.4	22.0	24.0	19.7	17.2	17.8	17.6	17.4	17.4	20.0	19.2
Mauritius	25.6	21.3	23.7	26.0	24.8	25.2	23.0	21.2	20.4	20.5	20.6
Mozambique	15.1	14.6	18.3	25.7	47.4	54.5	55.4	45.3	42.7	44.3	57.2
Namibia	22.6	26.5	24.1	22.4	26.7	25.1	33.6	34.6	25.7	25.4	26.6
Niger	23.2	32.1	49.5	43.9	39.5	40.2	39.3	42.4	39.6	42.3	42.7
Nigeria	16.5	19.4	17.3	16.2	14.9	14.9	15.8	15.5	12.6	13.0	13.4
Rwanda	18.1	23.4	23.0	23.5	25.8	26.5	25.3	26.5	26.1	24.6	25.1
São Tomé & Príncipe	41.6	38.9	55.9	44.6	35.6	28.2	25.2	32.1	27.7	35.4	24.8
Senegal	26.3	22.1	22.1	25.6	29.3	27.5	24.5	25.2	26.9	27.1	27.5
Seychelles	28.6	27.3	36.6	35.4	38.1	38.5	37.7	33.8	30.2	32.2	32.7
Sierra Leone	10.2	10.0	31.1	41.9	27.9	12.7	13.1	13.8	12.5	17.2	17.2
South Africa	20.2	20.7	19.5	19.7	20.0	21.3	20.8	20.7	19.4	19.1	19.0
South Sudan	...	...	...	5.5	10.7	12.8	20.6	14.5	17.3	9.3	23.3
Swaziland	16.6	15.2	14.3	12.8	12.1	12.7	12.9	12.2	12.1	12.2	12.6
Tanzania	26.3	25.1	27.3	33.2	28.5	30.3	30.1	27.2	24.6	25.3	25.5
Togo	19.2	22.8	23.9	23.5	23.8	24.5	25.7	27.0	27.4	25.9	24.0
Uganda	29.3	27.1	26.7	28.7	28.4	27.4	25.7	24.8	24.4	25.4	27.8
Zambia	33.2	30.3	29.9	33.6	31.8	34.0	34.0	42.8	41.7	41.9	43.6
Zimbabwe ²	...	14.7	22.4	20.3	12.0	11.5	11.9	12.6	15.5	14.0	13.7
Sub-Saharan Africa	19.4	20.9	20.3	19.7	20.3	20.3	21.2	20.4	18.9	19.0	19.5
<i>Median</i>	20.9	21.9	23.0	22.0	23.2	21.4	22.9	21.0	20.3	20.3	20.9
Excluding Nigeria and South Africa	20.8	21.9	22.7	21.9	23.9	23.4	24.9	23.3	22.4	22.5	23.2
Oil-exporting countries	17.1	20.2	18.3	16.8	16.8	16.5	17.8	16.4	13.7	13.5	13.8
Excluding Nigeria	18.4	22.1	21.0	18.1	21.7	20.8	22.9	18.6	16.6	14.9	15.1
Oil-importing countries	21.0	21.4	21.8	21.8	22.8	23.1	23.8	23.3	22.5	22.7	23.3
Excluding South Africa	21.5	21.8	23.3	23.2	24.6	24.3	25.5	24.8	24.2	24.6	25.4
Middle-income countries	18.9	20.4	19.4	18.4	18.7	18.8	19.5	18.8	17.0	16.9	17.1
Excluding Nigeria and South Africa	20.1	21.3	21.8	19.9	22.3	21.5	23.0	21.1	20.2	19.7	19.9
Low-income countries	21.7	22.6	23.9	24.1	25.7	25.6	27.1	25.8	24.8	25.4	26.8
Excluding low-income countries in fragile situations	23.7	24.2	26.0	30.0	31.4	31.9	33.0	31.6	30.3	30.7	32.0
Countries in fragile situations	16.6	17.8	18.8	14.3	17.0	17.3	19.2	18.4	18.3	17.7	18.4
CFA franc zone	19.6	22.3	23.5	21.0	24.2	24.6	25.6	24.1	22.9	22.6	22.7
CEMAC	21.9	27.7	26.6	25.1	28.3	27.0	29.8	27.2	23.9	21.9	22.0
WAEMU	17.4	17.2	20.7	17.1	20.3	22.4	21.9	21.5	22.1	23.1	23.2
COMESA (SSA members)	22.5	23.0	23.0	24.2	24.9	24.4	26.1	25.8	25.6	25.9	26.7
EAC-5	23.3	23.1	24.2	27.1	25.4	25.4	25.8	22.9	22.9	23.5	24.0
ECOWAS	17.0	19.0	18.4	16.3	16.1	15.9	16.9	16.5	14.6	15.1	15.5
SACU	20.6	21.4	20.2	20.5	20.9	21.8	21.5	21.6	19.8	19.6	19.6
SADC	20.6	21.2	20.5	20.9	21.3	22.3	22.4	21.5	19.7	19.8	20.4

See sources and footnotes on page 78.

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	3.3	3.1	2.2
Benin	14.0	13.6	14.9	16.8	15.1	20.4	20.0	17.6	17.4	20.0	20.3
Botswana	40.9	29.9	32.2	41.5	39.6	41.8	43.2	40.5	42.1	29.5	29.1
Burkina Faso	8.1	13.2	15.8	13.9	7.9	7.0	12.7	5.3	7.7	9.2	9.7
Burundi	1.5	9.2	3.7	1.0	-3.8	-4.3	-3.4	-6.7	-4.1	-5.4	-5.8
Cabo Verde	31.3	29.2	35.2	31.2	24.6	26.8	27.9	33.8	33.3	33.8	35.6
Cameroon	15.5	17.6	17.5	17.5	17.1	17.7	18.6	17.2	16.5	16.5	17.3
Central African Rep.	4.6	4.1	4.1	4.6	10.4	5.7	4.6	4.9	4.6	5.6	9.5
Chad	23.0	21.9	25.9	22.6	23.6	18.2	21.5	14.6	7.5	17.8	17.7
Comoros	4.4	5.5	15.2	10.0	9.5	12.1	10.6	18.9	10.9	12.2	10.4
Congo, Dem. Rep. of	7.0	7.9	12.5	8.1	6.0	11.5	18.0	16.3	8.4	7.9	12.0
Congo, Rep. of	15.5	8.9	27.7	21.4	42.8	31.1	28.9	-2.2	-26.3	13.5	29.9
Côte d'Ivoire	9.5	13.8	13.6	12.6	12.7	16.6	18.1	17.5	18.5	16.5	17.3
Equatorial Guinea	41.6	31.4	22.4	29.3	34.2	33.3	35.5	17.6	0.5	0.9	1.5
Eritrea	-19.9	-9.7	-9.3	1.2	5.9	3.6	4.0	1.3	4.0	4.6	4.1
Ethiopia ¹	19.7	15.4	24.5	33.1	31.2	28.1	30.7	31.3	32.0	28.9	30.2
Gabon	41.7	33.5	41.0	46.3	46.9	40.4	43.4	29.3	24.0	24.6	26.1
Gambia, The	12.6	7.1	20.7	6.7	19.9	9.8	10.1	4.7	9.8	10.0	8.2
Ghana	14.1	16.0	17.3	3.8	5.3	1.3	9.3	9.0	7.8	7.9	9.2
Guinea	8.1	0.6	-0.9	-9.3	-5.2	-1.0	-7.0	-8.1	-6.7	-1.8	-2.3
Guinea-Bissau	3.2	0.2	-1.8	4.1	-1.0	1.7	8.4	11.9	14.0	11.2	11.5
Kenya	16.3	14.9	14.8	12.5	13.1	11.3	12.1	10.9	15.5	15.3	14.0
Lesotho	36.6	28.6	16.3	17.5	23.0	21.2	20.1	23.8	21.0	20.3	19.0
Liberia	...	...	...	...	...	...	...	...	...	...	...
Madagascar	20.4	14.5	13.7	10.8	10.7	10.0	15.3	11.2	16.0	14.5	16.2
Malawi	12.8	20.5	26.2	3.8	2.8	4.3	3.6	2.7	-3.3	2.5	4.5
Mali	15.6	15.6	13.3	14.7	15.0	14.9	12.9	12.1	10.3	13.0	13.7
Mauritius	20.0	15.0	14.3	13.2	18.5	19.0	17.0	16.3	16.3	13.7	13.3
Mozambique	9.4	4.4	8.1	4.4	14.9	11.5	17.2	5.0	5.6	18.7	11.4
Namibia	30.4	23.2	19.4	15.9	19.9	17.2	24.1	20.9	11.6	18.0	20.0
Niger	14.1	7.7	25.5	21.5	24.8	25.2	23.7	24.4	24.1	23.7	24.4
Nigeria	30.6	24.1	20.8	18.8	18.7	18.6	16.0	12.3	13.2	14.9	14.4
Rwanda	6.0	6.6	6.4	4.9	7.3	10.5	8.6	8.7	7.6	10.8	10.5
São Tomé & Príncipe	14.3	14.2	33.0	16.9	13.7	14.5	3.3	19.1	21.6	25.1	15.0
Senegal	16.7	15.4	17.7	17.6	18.4	17.0	15.5	17.7	21.5	22.0	22.2
Seychelles	14.8	12.4	17.2	12.4	17.0	26.5	14.6	15.2	11.8	16.6	18.1
Sierra Leone	4.5	-1.7	9.6	-16.9	-4.0	-4.8	-7.2	-5.9	-9.3	-1.9	0.3
South Africa	16.0	18.0	18.0	17.5	14.8	15.4	15.5	16.3	16.1	16.2	15.8
South Sudan	...	...	...	23.3	-5.2	8.9	18.9	7.3	20.0	9.9	18.8
Swaziland	15.2	6.4	3.2	7.6	15.3	13.7	11.6	23.0	12.8	11.1	12.9
Tanzania	20.9	18.3	21.2	21.6	19.3	14.9	21.8	24.7	23.0	19.7	19.2
Togo	10.4	17.2	17.6	15.4	16.3	11.4	15.7	15.9	17.6	17.7	16.7
Uganda	26.5	21.4	18.7	18.7	21.6	20.4	17.2	17.7	20.1	19.8	20.7
Zambia	32.1	36.2	37.4	38.3	37.1	33.4	36.1	38.9	37.3	38.3	40.8
Zimbabwe ²	...	0.4	19.3	17.9	3.3	3.3	3.8	4.9	15.5	15.4	18.3
Sub-Saharan Africa	21.7	18.6	19.6	18.5	18.1	17.3	17.2	14.7	14.9	15.7	15.9
Median	15.3	14.5	17.5	15.7	15.2	14.9	15.6	15.6	13.6	15.1	15.4
Excluding Nigeria and South Africa	19.6	15.3	19.5	18.9	19.2	17.4	18.6	15.5	15.5	16.0	16.8
Oil-exporting countries	29.6	21.4	21.8	20.7	21.0	19.9	17.2	11.2	11.4	13.5	13.5
Excluding Nigeria	26.9	14.5	24.3	25.5	27.1	23.2	20.4	8.1	6.4	9.5	11.1
Oil-importing countries	16.7	16.6	18.0	16.9	15.9	15.5	17.1	17.3	17.5	17.3	17.5
Excluding South Africa	17.2	15.6	18.0	16.6	16.6	15.5	18.0	17.8	18.1	17.8	18.3
Middle-income countries	23.2	19.9	20.2	18.9	18.7	18.0	16.9	14.0	14.2	15.2	15.1
Excluding Nigeria and South Africa	22.6	16.8	21.3	20.3	22.0	19.4	19.3	14.1	13.8	14.6	15.4
Low-income countries	15.8	13.6	17.4	17.3	15.9	15.1	17.9	17.0	17.3	17.4	18.3
Excluding low-income countries in fragile situations	18.5	15.6	19.7	21.9	21.7	19.5	22.4	22.2	22.6	21.9	21.9
Countries in fragile situations	11.4	10.9	14.9	11.9	10.7	11.5	13.5	9.5	8.0	11.3	14.0
CFA franc zone	18.8	17.8	19.8	20.1	22.0	20.8	21.8	15.7	12.7	16.2	17.8
CEMAC	25.9	22.2	24.5	25.5	29.8	26.3	27.5	15.9	7.8	15.3	18.5
WAEMU	12.2	13.8	15.5	15.1	14.5	15.8	16.7	15.6	16.6	16.8	17.3
COMESA (SSA members)	17.9	16.0	18.8	19.0	18.6	17.7	19.1	19.2	20.3	19.7	20.8
EAC-5	19.1	16.9	17.2	16.3	16.4	14.1	16.0	16.7	18.3	17.2	16.7
ECOWAS	25.4	21.2	19.4	16.4	16.5	16.3	15.0	12.2	12.9	14.3	14.1
SACU	17.4	18.5	18.4	18.3	16.1	16.6	17.0	17.7	17.2	16.9	16.6
SADC	18.8	16.4	19.6	19.1	17.7	16.9	17.2	15.9	15.8	15.7	15.6

See sources and footnotes on page 78.

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	-5.0	-6.8	-5.5
Benin	-0.6	-3.1	-0.4	-1.3	-0.3	-1.9	-2.3	-7.6	-5.9	-6.1	-4.0
Botswana	4.5	-13.3	-7.5	-0.1	0.8	5.6	3.7	-4.6	-1.1	-0.0	-1.6
Burkina Faso	-0.8	-4.7	-3.0	-1.4	-3.1	-4.0	-2.0	-2.2	-3.3	-5.5	-4.6
Burundi	-8.2	-5.1	-3.6	-3.5	-3.8	-1.8	-3.6	-5.3	-6.2	-8.5	-9.5
Cabo Verde	-3.4	-5.8	-10.5	-7.7	-10.3	-9.3	-7.6	-4.6	-3.5	-4.0	-4.4
Cameroon	8.6	-0.0	-1.1	-2.6	-1.6	-4.0	-4.0	-2.7	-6.1	-3.6	-2.8
Central African Rep.	0.5	-0.6	-1.5	-2.4	-0.0	-6.5	3.0	-0.6	1.6	-0.3	0.6
Chad	1.2	-9.2	-4.2	2.4	0.5	-2.1	-4.2	-3.1	-2.0	1.7	1.5
Comoros	-1.7	0.6	7.0	1.4	3.3	17.8	-0.5	4.4	-7.3	-4.5	-5.2
Congo, Dem. Rep. of	-0.0	0.9	-1.0	-1.0	1.9	3.1	1.2	0.9	0.1	-0.3	0.6
Congo, Rep. of	14.6	4.9	15.7	16.0	7.3	-4.5	-11.3	-41.7	-12.9	-1.8	3.8
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	16.3	-6.5	-4.5	0.8	-7.2	-5.8	-7.2	-12.6	-9.8	-6.6	-5.5
Eritrea	-17.9	-14.7	-16.0	-16.2	-15.3	-15.1	-14.4	-14.2	-14.0	-13.8	-12.6
Ethiopia ¹	-3.4	-0.9	-1.3	-1.6	-1.2	-1.9	-2.6	-1.9	-2.4	-2.4	-2.5
Gabon	8.5	6.8	2.7	1.7	6.2	-3.1	6.0	-1.1	-4.7	-3.6	-1.0
Gambia, The	-3.2	-2.7	-4.7	-4.7	-4.4	-8.5	-5.8	-8.1	-9.7	-2.5	-3.6
Ghana	-5.2	-7.2	-10.1	-7.4	-11.3	-12.0	-10.9	-5.4	-8.9	-4.5	-3.7
Guinea	-1.1	-4.9	-9.6	-0.9	-2.5	-3.9	-3.2	-6.9	-0.1	-0.5	-1.9
Guinea-Bissau	-5.4	2.9	-0.2	-1.4	-2.3	-1.8	-2.6	-3.0	-4.8	-1.9	-2.1
Kenya	-1.9	-4.3	-4.4	-4.1	-5.0	-5.7	-7.4	-8.1	-8.7	-8.4	-6.6
Lesotho	7.7	-3.4	-3.6	-9.1	4.3	-2.2	-0.8	-0.5	-6.9	-4.5	-1.2
Liberia	-0.5	-10.1	-5.7	-3.1	-1.6	-4.7	-1.8	-10.2	-5.3	-7.9	-7.3
Madagascar	-2.6	-2.5	-0.9	-2.4	-2.6	-4.0	-2.3	-3.3	-1.3	-5.1	-4.7
Malawi	-2.3	-3.6	1.8	-4.1	-1.8	-6.4	-4.8	-6.2	-7.1	-5.3	-3.1
Mali	3.6	-3.7	-2.6	-3.4	-1.0	-2.4	-2.9	-1.8	-3.9	-3.5	-3.3
Mauritius	-3.9	-3.6	-3.2	-3.2	-1.8	-3.5	-3.2	-3.6	-3.7	-3.4	-3.2
Mozambique	-2.9	-4.9	-3.8	-4.8	-3.9	-2.7	-10.7	-7.2	-5.7	-7.3	-7.0
Namibia	2.0	-0.1	-4.5	-6.7	-2.3	-3.2	-5.9	-8.0	-7.7	-4.8	-6.0
Niger	7.1	-5.3	-2.4	-1.5	-1.1	-2.6	-8.0	-9.1	-6.2	-7.5	-6.2
Nigeria	4.7	-5.4	-4.2	0.4	0.2	-2.3	-2.1	-3.4	-4.7	-5.0	-4.5
Rwanda	0.6	0.3	-0.7	-0.9	-2.5	-1.3	-4.0	-2.8	-2.3	-1.9	-2.1
São Tomé & Príncipe	30.7	-19.3	-11.7	-12.5	-11.2	1.9	-5.3	-6.3	-2.7	-2.1	-2.8
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	0.2	0.7	0.1
Sierra Leone	2.2	-2.3	-5.0	-4.5	-5.2	-2.4	-3.6	-4.5	-8.6	-5.9	-5.4
South Africa	-0.1	-5.3	-4.9	-3.9	-4.4	-4.3	-4.2	-4.6	-4.0	-4.5	-4.3
South Sudan	...	...	...	4.6	-14.8	-3.5	-9.2	-20.3	-23.1	5.8	-1.5
Swaziland	1.3	-2.9	-9.0	-3.8	3.5	0.8	-1.1	-4.6	-10.5	-8.2	-5.1
Tanzania	-2.5	-4.5	-4.8	-3.6	-4.1	-3.9	-3.0	-3.3	-3.1	-3.4	-4.3
Togo	-1.6	-3.9	-2.5	-6.5	-6.4	-5.2	-6.8	-8.9	-9.6	-4.6	-2.7
Uganda	-0.8	-2.1	-5.7	-2.7	-3.0	-4.0	-4.7	-4.6	-3.9	-3.2	-4.9
Zambia	2.1	-2.1	-2.4	-1.8	-2.8	-6.2	-5.7	-9.3	-5.8	-8.0	-7.8
Zimbabwe ²	-3.4	-2.0	0.7	-0.5	0.0	-1.7	-1.4	-1.0	-8.4	-5.1	-3.4
Sub-Saharan Africa	1.6	-4.6	-3.5	-1.2	-1.8	-3.2	-3.7	-4.4	-4.7	-4.7	-4.3
<i>Median</i>	-0.7	-3.6	-3.4	-2.6	-2.3	-3.2	-3.6	-4.6	-5.0	-4.5	-3.7
Excluding Nigeria and South Africa	1.2	-3.7	-2.1	-0.3	-1.7	-3.2	-4.7	-5.0	-5.1	-4.7	-4.1
Oil-exporting countries	5.5	-5.0	-2.3	2.2	0.7	-2.2	-3.1	-4.3	-5.1	-5.1	-4.4
Excluding Nigeria	7.2	-4.2	2.3	5.7	1.7	-2.0	-5.7	-6.5	-6.0	-5.3	-4.1
Oil-importing countries	-0.6	-4.3	-4.4	-3.7	-3.8	-4.0	-4.2	-4.5	-4.5	-4.5	-4.2
Excluding South Africa	-1.2	-3.5	-4.0	-3.5	-3.3	-3.8	-4.2	-4.4	-4.8	-4.5	-4.1
Middle-income countries	2.2	-4.9	-3.6	-1.0	-1.7	-3.3	-3.7	-4.5	-5.1	-5.1	-4.5
Excluding Nigeria and South Africa	2.8	-4.1	-1.5	0.6	-1.1	-3.8	-5.5	-5.9	-6.3	-5.7	-4.7
Low-income countries	-1.3	-3.0	-2.9	-1.8	-2.5	-2.5	-3.5	-3.9	-3.6	-3.3	-3.3
Excluding low-income countries in fragile situations	-1.6	-2.9	-3.3	-2.5	-2.6	-3.0	-4.0	-3.6	-3.3	-3.6	-3.8
Countries in fragile situations	0.4	-2.2	-0.6	-0.0	-1.7	-2.1	-3.4	-5.8	-4.4	-3.2	-2.5
CFA franc zone	4.8	-2.0	-0.7	-0.3	-1.3	-3.6	-3.6	-6.0	-5.3	-4.0	-2.9
CEMAC	9.6	-0.8	1.1	2.5	0.1	-4.1	-3.8	-8.4	-6.3	-3.0	-1.5
WAEMU	-0.1	-3.2	-2.5	-3.6	-2.9	-3.1	-3.4	-4.1	-4.5	-4.7	-3.8
COMESA (SSA members)	-1.7	-2.3	-2.8	-2.6	-2.2	-3.1	-3.9	-4.2	-4.7	-4.8	-4.2
EAC-5	-1.9	-3.7	-4.5	-3.4	-4.2	-4.5	-5.2	-5.6	-5.8	-5.7	-5.5
ECOWAS	2.9	-5.1	-4.5	-0.9	-1.1	-3.2	-2.8	-3.7	-5.0	-4.8	-4.3
SACU	0.2	-5.3	-5.0	-3.9	-4.0	-3.8	-3.8	-4.7	-4.1	-4.3	-4.2
SADC	0.2	-5.1	-3.3	-1.8	-2.1	-2.9	-4.2	-4.1	-4.0	-4.7	-4.3

See sources and footnotes on page 78.

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	-5.0	-6.8	-5.5
Benin	-2.7	-6.0	-1.8	-3.7	-2.1	-2.8	-3.2	-8.2	-6.6	-7.5	-5.8
Botswana	3.8	-14.3	-7.8	-0.6	0.8	5.4	3.4	-4.7	-1.2	-0.2	-1.8
Burkina Faso	-10.2	-10.6	-7.5	-6.4	-8.0	-9.5	-6.2	-5.7	-5.8	-10.0	-8.5
Burundi	-24.2	-24.0	-26.3	-25.3	-21.9	-19.2	-17.3	-14.9	-9.1	-11.3	-12.2
Cabo Verde	-9.1	-11.4	-17.3	-10.6	-13.1	-11.9	-9.4	-7.0	-6.0	-7.2	-5.8
Cameroon	2.3	-0.8	-1.7	-3.1	-2.0	-4.3	-4.3	-2.8	-6.4	-3.9	-3.1
Central African Rep.	-5.5	-5.9	-7.0	-4.9	-4.9	-9.3	-7.8	-7.8	-4.4	-5.6	-5.4
Chad	-0.7	-11.8	-5.5	0.8	-2.2	-4.3	-6.1	-6.5	-4.9	-3.2	-2.4
Comoros	-7.8	-9.1	-7.8	-6.0	-6.0	-9.7	-9.9	-10.8	-16.2	-15.5	-13.0
Congo, Dem. Rep. of	-1.1	-2.0	-4.6	-2.9	-0.3	1.3	-3.1	-2.2	-2.4	-2.7	-2.5
Congo, Rep. of	14.2	4.6	15.7	15.5	7.1	-4.9	-11.7	-42.6	-13.8	-2.7	3.0
Côte d'Ivoire	-2.0	-1.9	-2.3	-4.3	-3.7	-3.5	-3.9	-4.3	-5.3	-6.0	-5.3
Equatorial Guinea	16.3	-6.5	-4.5	0.8	-7.2	-5.8	-7.2	-12.6	-9.8	-6.6	-5.5
Eritrea	-24.8	-17.3	-21.3	-19.4	-16.5	-15.6	-14.8	-14.6	-14.3	-14.0	-12.9
Ethiopia ¹	-7.5	-5.2	-4.5	-4.8	-2.9	-3.4	-3.7	-3.0	-3.2	-3.3	-3.4
Gabon	8.5	6.8	2.7	1.7	6.2	-3.1	6.0	-1.1	-4.7	-3.6	-1.0
Gambia, The	-4.8	-6.9	-8.7	-9.9	-13.4	-10.8	-9.5	-10.0	-11.4	-9.3	-9.1
Ghana	-8.6	-10.2	-12.4	-9.5	-12.8	-12.5	-11.7	-7.3	-9.5	-5.2	-4.2
Guinea	-1.7	-5.1	-9.9	-3.5	-4.6	-5.0	-6.3	-8.1	-1.4	-2.7	-3.8
Guinea-Bissau	-14.2	-13.0	-9.8	-8.1	-4.7	-5.2	-12.1	-9.5	-8.8	-6.3	-6.1
Kenya	-2.9	-5.0	-5.0	-4.6	-5.5	-6.2	-7.9	-8.6	-9.1	-8.9	-7.3
Lesotho	6.2	-6.0	-9.9	-15.8	-3.1	-6.2	-2.5	-3.7	-9.5	-6.6	-3.2
Liberia	-0.7	-12.6	-7.5	-4.7	-4.1	-7.8	-8.6	-20.4	-14.9	-15.4	-11.5
Madagascar	-9.2	-4.2	-2.8	-4.3	-3.8	-5.3	-4.6	-4.8	-4.8	-8.6	-8.3
Malawi	-12.3	-11.1	-8.2	-7.7	-10.6	-13.1	-8.0	-9.9	-10.0	-7.6	-5.1
Mali	-6.2	-7.8	-5.1	-6.6	-1.2	-5.2	-5.1	-4.5	-5.5	-5.8	-5.4
Mauritius	-4.2	-5.2	-3.9	-3.9	-2.5	-3.9	-3.4	-3.7	-4.3	-5.0	-4.5
Mozambique	-9.7	-13.3	-12.0	-12.3	-8.9	-7.9	-15.0	-10.2	-7.8	-8.8	-9.5
Namibia	1.9	-0.4	-4.6	-6.8	-2.4	-3.4	-6.0	-8.1	-7.8	-4.9	-6.0
Niger	-7.6	-9.7	-7.0	-5.2	-7.2	-10.6	-13.5	-14.5	-12.3	-12.2	-10.7
Nigeria	4.7	-5.4	-4.2	0.4	0.2	-2.3	-2.1	-3.4	-4.7	-5.0	-4.5
Rwanda	-9.8	-11.1	-12.5	-12.3	-10.2	-10.6	-11.7	-9.1	-7.5	-6.4	-6.4
São Tomé & Príncipe	-7.9	-34.6	-31.4	-32.0	-29.4	-11.0	-15.3	-17.7	-17.6	-17.1	-17.1
Senegal	-4.5	-7.6	-7.4	-8.3	-8.0	-8.1	-8.4	-7.7	-7.0	-6.3	-5.7
Seychelles	-1.8	0.8	-0.3	0.9	-1.9	-3.9	0.5	1.1	-1.1	-2.6	-2.1
Sierra Leone	-7.5	-8.4	-10.3	-10.1	-9.0	-5.0	-7.8	-9.9	-11.7	-8.6	-7.5
South Africa	-0.1	-5.3	-4.9	-3.9	-4.4	-4.3	-4.2	-4.6	-4.0	-4.5	-4.3
South Sudan	...	...	...	1.7	-20.9	-9.9	-15.6	-26.8	-23.3	5.3	-2.1
Swaziland	0.8	-3.4	-9.0	-3.8	3.4	0.3	-2.8	-5.3	-11.4	-8.9	-5.8
Tanzania	-7.2	-8.1	-8.2	-6.9	-7.0	-6.3	-4.7	-4.1	-3.9	-4.3	-5.2
Togo	-2.7	-5.4	-4.5	-9.6	-8.8	-8.6	-9.1	-11.2	-12.5	-9.2	-6.9
Uganda	-6.0	-4.5	-8.2	-4.4	-4.9	-5.0	-5.8	-5.9	-5.0	-4.8	-6.3
Zambia	-5.7	-4.5	-3.9	-2.4	-4.5	-7.6	-6.5	-9.5	-6.0	-8.7	-8.4
Zimbabwe ²	-3.4	-2.5	0.7	-0.5	0.0	-1.7	-1.4	-1.0	-8.4	-5.1	-3.4
Sub-Saharan Africa	0.4	-5.6	-4.3	-1.9	-2.5	-3.9	-4.4	-5.0	-5.3	-5.3	-4.8
Median	-4.4	-6.3	-7.0	-4.7	-4.6	-5.3	-6.5	-7.7	-7.0	-6.3	-5.5
Excluding Nigeria and South Africa	-1.9	-5.9	-4.0	-2.0	-3.3	-4.7	-6.2	-6.4	-6.1	-5.8	-5.2
Oil-exporting countries	5.1	-5.1	-2.3	2.1	0.5	-2.4	-3.3	-4.5	-5.2	-5.2	-4.5
Excluding Nigeria	5.8	-4.6	2.1	5.3	1.2	-2.6	-6.2	-7.1	-6.2	-5.6	-4.3
Oil-importing countries	-2.4	-5.9	-5.8	-4.9	-4.9	-5.1	-5.3	-5.5	-5.4	-5.4	-5.1
Excluding South Africa	-5.0	-6.5	-6.6	-5.8	-5.4	-5.7	-6.1	-6.1	-6.1	-5.9	-5.5
Middle-income countries	1.7	-5.2	-3.9	-1.2	-1.9	-3.5	-3.9	-4.7	-5.3	-5.3	-4.7
Excluding Nigeria and South Africa	1.0	-5.1	-2.3	0.0	-1.7	-4.3	-6.0	-6.5	-6.8	-6.3	-5.2
Low-income countries	-6.4	-7.1	-6.7	-5.2	-5.5	-5.4	-6.3	-6.2	-5.3	-5.2	-5.2
Excluding low-income countries in fragile situations	-7.4	-7.5	-7.3	-6.5	-5.7	-5.9	-6.2	-5.3	-4.7	-5.1	-5.4
Countries in fragile situations	-2.8	-4.8	-3.2	-2.2	-4.0	-4.6	-6.4	-8.5	-6.4	-5.4	-4.7
CFA franc zone	1.4	-3.8	-2.0	-1.7	-2.6	-5.3	-5.2	-7.7	-6.8	-5.9	-4.7
CEMAC	7.0	-1.6	0.6	2.1	-0.5	-4.6	-4.4	-9.1	-7.1	-4.1	-2.4
WAEMU	-4.6	-6.0	-4.7	-5.9	-5.0	-6.0	-6.1	-6.5	-6.7	-7.2	-6.3
COMESA (SSA members)	-5.3	-5.2	-5.5	-4.6	-4.1	-4.7	-5.6	-5.6	-5.9	-6.0	-5.5
EAC-5	-5.6	-6.6	-7.5	-6.2	-6.4	-6.5	-6.8	-6.9	-6.7	-6.8	-6.6
ECOWAS	1.8	-5.8	-5.0	-1.4	-1.6	-3.7	-3.3	-4.3	-5.5	-5.5	-4.9
SACU	0.2	-5.4	-5.1	-4.0	-4.1	-3.8	-3.9	-4.7	-4.1	-4.3	-4.3
SADC	-0.7	-5.9	-4.0	-2.3	-2.7	-3.4	-4.7	-4.5	-4.4	-5.1	-4.8

See sources and footnotes on page 78.

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	18.6	17.1	16.6
Benin	16.6	17.2	17.5	16.4	17.4	17.6	16.3	16.7	14.7	16.5	16.1
Botswana	41.5	36.1	32.1	35.7	36.2	37.5	38.1	31.2	31.9	32.3	30.2
Burkina Faso	13.1	13.6	15.3	15.7	17.5	19.0	17.5	15.9	17.1	18.1	18.8
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	22.1	21.8	22.7	21.6	21.9	21.1	24.4	24.0	25.1	25.9
Cameroon	18.2	16.7	16.0	17.5	17.5	17.6	17.8	17.9	16.0	16.2	16.9
Central African Rep.	9.4	10.8	11.6	10.8	11.5	5.6	4.9	7.1	8.2	8.9	9.4
Chad	14.1	12.3	18.9	23.2	21.7	18.5	15.8	10.5	9.6	11.6	11.9
Comoros	14.1	13.9	14.3	16.1	19.3	15.5	14.5	16.6	14.5	15.8	17.1
Congo, Dem. Rep. of	8.6	10.7	12.1	11.8	14.4	12.9	14.3	13.6	9.5	8.1	8.4
Congo, Rep. of	42.2	29.9	36.6	40.9	42.5	44.7	40.2	29.6	31.5	31.7	32.1
Côte d'Ivoire	17.5	18.0	17.7	14.0	18.6	18.4	17.1	18.8	18.4	18.4	18.7
Equatorial Guinea	33.7	33.4	26.6	28.3	28.0	24.9	24.4	28.8	18.7	20.0	19.8
Eritrea	22.3	13.3	13.3	14.2	14.2	14.1	14.1	13.9	13.9	13.9	14.4
Ethiopia ¹	13.9	11.9	14.0	13.4	13.8	14.3	13.8	14.4	15.2	14.2	14.2
Gabon	28.7	29.4	25.8	23.5	30.2	31.6	29.7	21.1	17.1	18.8	18.7
Gambia, The	15.8	16.2	14.9	16.1	16.4	16.3	18.5	19.7	18.4	18.7	17.4
Ghana	13.6	13.4	14.4	17.1	17.0	16.3	17.7	17.6	16.6	18.1	18.2
Guinea	9.5	11.1	10.6	12.5	15.5	13.7	13.8	13.7	15.0	15.4	16.2
Guinea-Bissau	9.4	9.1	10.8	10.1	9.1	8.0	12.6	13.8	12.4	12.9	13.5
Kenya	18.7	18.1	19.2	19.0	18.7	19.2	19.3	18.7	18.4	18.4	18.8
Lesotho	48.9	51.8	38.3	38.0	49.6	47.7	50.1	48.1	39.0	40.9	42.5
Liberia	15.1	20.6	25.0	24.3	26.0	25.0	23.5	22.0	21.0	21.5	22.9
Madagascar	11.7	9.9	11.2	9.7	9.6	9.6	10.1	10.4	11.2	11.6	11.8
Malawi	16.4	19.4	21.8	18.4	18.3	21.6	21.8	21.1	20.8	22.4	21.6
Mali	15.0	15.1	15.2	14.0	14.4	14.5	14.9	16.4	16.7	18.3	17.9
Mauritius	19.4	21.2	21.2	20.7	20.8	21.0	20.5	21.8	21.1	23.2	22.6
Mozambique	12.7	15.6	17.9	19.8	21.9	26.2	27.5	25.0	24.0	23.2	23.6
Namibia	28.5	30.8	27.8	29.8	31.3	32.1	34.0	34.1	30.8	32.1	31.5
Niger	13.7	14.3	13.6	14.2	15.3	16.6	17.6	18.0	14.5	16.5	16.7
Nigeria	21.2	10.1	12.4	17.7	14.3	11.0	10.5	7.7	5.3	5.2	5.7
Rwanda	12.7	12.4	12.8	13.9	15.5	16.2	16.5	18.4	18.5	17.6	17.6
São Tomé & Príncipe	32.1	17.4	18.5	20.2	16.8	20.6	15.1	16.5	14.5	15.5	16.1
Senegal	20.8	19.0	19.6	20.5	20.5	20.0	21.5	22.2	24.0	22.5	23.0
Seychelles	36.5	32.9	34.2	37.2	36.7	33.8	34.3	33.4	36.6	37.6	36.9
Sierra Leone	8.8	9.1	9.9	11.4	11.3	10.7	9.8	10.8	12.1	12.7	13.9
South Africa	27.3	26.4	26.5	26.9	27.0	27.3	27.6	28.3	28.9	29.1	29.4
South Sudan	...	...	...	22.7	10.8	15.4	20.8	14.6	31.8	38.6	29.0
Swaziland	29.6	29.0	20.8	20.6	30.4	29.1	29.5	27.7	23.7	26.2	26.2
Tanzania	10.8	12.1	12.0	12.3	12.7	13.1	13.3	13.7	14.7	15.3	15.4
Togo	16.3	15.8	18.0	16.7	17.6	18.1	18.2	19.6	18.9	20.3	20.9
Uganda	12.2	10.8	10.6	12.8	11.6	11.6	12.3	13.5	13.9	14.8	15.1
Zambia	15.2	13.3	14.2	17.1	17.0	16.2	18.1	18.6	17.9	16.5	17.8
Zimbabwe ²	6.0	11.2	21.8	24.2	24.9	24.6	23.8	24.3	21.7	21.7	21.1
Sub-Saharan Africa	23.3	19.0	20.5	23.0	21.7	20.0	19.2	17.5	16.4	17.0	16.9
<i>Median</i>	16.1	15.7	17.6	17.5	17.5	18.1	17.8	18.4	17.9	18.1	17.9
Excluding Nigeria and South Africa	21.7	19.9	21.8	23.8	23.7	22.6	21.8	19.5	17.6	17.6	17.6
Oil-exporting countries	25.4	16.4	18.9	24.2	21.3	17.9	16.3	12.2	9.1	9.4	9.5
Excluding Nigeria	34.4	29.4	33.9	36.6	36.0	32.8	29.9	23.8	18.4	17.9	17.4
Oil-importing countries	22.1	20.8	21.6	22.1	22.1	21.8	21.9	21.9	21.4	21.8	21.9
Excluding South Africa	16.5	15.9	16.7	17.2	17.8	17.8	18.1	17.9	17.4	17.6	17.7
Middle-income countries	25.5	20.4	21.7	24.6	23.1	21.0	20.1	18.1	16.8	17.5	17.3
Excluding Nigeria and South Africa	27.7	24.9	26.7	29.4	29.5	27.6	26.3	23.0	19.7	19.5	19.4
Low-income countries	12.3	12.6	14.3	15.4	15.2	15.5	15.7	15.4	15.1	15.2	15.3
Excluding low-income countries in fragile situations	12.7	12.7	13.5	14.1	14.6	15.4	15.3	15.4	15.6	15.7	15.8
Countries in fragile situations	15.6	15.1	17.8	18.5	18.7	18.3	18.1	16.6	15.8	16.1	16.2
CFA franc zone	21.2	20.0	20.3	20.8	22.2	21.8	20.7	19.2	17.7	18.4	18.7
CEMAC	25.4	23.4	23.4	25.3	26.3	25.6	24.0	20.3	17.2	18.1	18.3
WAEMU	16.8	16.7	17.0	15.6	17.6	17.8	17.5	18.3	18.1	18.7	18.9
COMESA (SSA members)	15.0	14.3	15.8	16.2	16.5	16.4	16.7	16.8	16.1	15.9	16.1
EAC-5	14.5	14.3	14.7	15.2	15.2	15.5	15.8	16.1	16.4	16.7	17.0
ECOWAS	19.5	11.6	13.3	17.3	15.0	12.5	12.0	10.0	8.7	9.1	9.4
SACU	28.0	27.1	26.8	27.3	27.6	28.0	28.5	28.7	29.1	29.4	29.6
SADC	27.1	25.3	26.8	28.3	28.3	27.5	26.9	25.4	23.7	23.6	23.6

See sources and footnotes on page 78.

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	23.9	22.1
Benin	19.4	23.2	19.2	20.1	19.5	20.4	19.4	24.9	21.3	23.9	21.9
Botswana	37.6	50.3	39.9	36.3	35.4	32.2	34.7	35.8	33.1	32.5	31.9
Burkina Faso	23.3	24.2	22.8	22.1	25.5	28.4	23.7	21.6	22.9	28.1	27.4
Burundi	38.1	38.0	40.8	42.2	37.5	33.2	31.8	27.2	21.2	22.5	23.0
Cabo Verde	31.8	33.4	39.2	33.3	34.7	33.8	30.5	31.4	30.0	32.3	31.7
Cameroon	15.9	17.5	17.7	20.5	19.5	21.9	22.2	20.6	22.4	20.2	20.0
Central African Rep.	14.9	16.6	18.6	15.7	16.4	14.9	12.7	14.9	12.6	14.5	14.8
Chad	14.8	24.1	24.4	22.4	23.9	22.8	22.0	17.0	14.5	14.8	14.4
Comoros	21.9	23.0	22.1	22.1	25.3	25.2	24.4	27.4	30.7	31.3	30.1
Congo, Dem. Rep. of	9.8	12.7	16.6	14.7	14.6	11.6	17.4	15.8	11.8	10.8	11.0
Congo, Rep. of	28.0	25.3	21.0	25.4	35.4	49.6	52.0	72.1	45.2	34.4	29.1
Côte d'Ivoire	19.5	19.9	20.0	18.2	22.3	21.9	21.0	23.1	23.7	24.4	24.0
Equatorial Guinea	17.4	39.8	31.2	27.5	35.2	30.7	31.6	41.4	28.5	26.6	25.3
Eritrea	47.1	30.6	34.6	33.6	30.7	29.7	28.9	28.5	28.2	28.0	27.3
Ethiopia ¹	21.5	17.1	18.5	18.2	16.6	17.8	17.5	17.3	18.4	17.6	17.6
Gabon	20.2	22.6	23.1	21.7	23.9	34.7	23.8	22.3	21.8	22.5	19.8
Gambia, The	20.6	23.1	23.6	26.0	29.8	27.0	28.0	29.7	29.8	28.0	26.5
Ghana	22.1	23.6	26.8	26.6	29.8	28.7	29.4	25.0	26.1	23.3	22.4
Guinea	11.2	16.2	20.5	16.0	20.0	18.6	20.2	21.8	16.4	18.1	20.0
Guinea-Bissau	23.6	22.1	20.5	18.2	13.8	13.2	24.7	23.3	21.2	19.1	19.6
Kenya	21.6	23.1	24.2	23.6	24.2	25.4	27.2	27.3	27.5	27.3	26.1
Lesotho	42.7	57.8	48.2	53.8	52.7	53.9	52.7	51.7	48.4	47.5	45.7
Liberia	15.8	33.2	32.5	29.0	30.1	32.8	32.1	42.4	35.9	36.9	34.3
Madagascar	20.9	14.1	14.0	14.1	13.4	14.9	14.7	15.1	16.0	20.2	20.0
Malawi	28.6	30.5	30.0	26.1	28.9	34.7	29.8	30.9	30.8	30.0	26.7
Mali	21.2	22.8	20.3	20.6	15.5	19.7	20.0	20.9	22.2	24.0	23.3
Mauritius	23.7	26.3	25.1	24.6	23.3	24.9	23.9	25.5	25.4	28.2	27.1
Mozambique	22.5	28.9	29.9	32.2	30.8	34.1	42.5	35.2	31.8	32.0	33.0
Namibia	26.6	31.1	32.4	36.7	33.8	35.5	40.0	42.2	38.5	37.0	37.5
Niger	21.3	23.9	20.6	19.4	22.5	27.2	31.1	32.5	26.8	28.7	27.5
Nigeria	16.5	15.5	16.7	17.4	14.1	13.4	12.6	11.1	10.0	10.1	10.2
Rwanda	22.5	23.5	25.3	26.2	25.7	26.8	28.3	27.5	26.0	24.0	24.0
São Tomé & Príncipe	40.0	51.9	49.9	52.2	46.2	31.5	30.5	34.3	32.1	32.6	33.1
Senegal	25.3	26.6	27.0	28.8	28.5	28.1	29.8	29.9	31.0	28.8	28.7
Seychelles	38.3	32.1	34.6	36.3	38.6	37.8	33.8	32.4	37.7	40.1	39.0
Sierra Leone	16.4	17.5	20.2	21.5	20.3	15.7	17.6	20.7	23.8	21.3	21.4
South Africa	27.4	31.7	31.4	30.9	31.4	31.6	31.8	32.9	32.9	33.5	33.7
South Sudan	...	...	...	21.0	31.6	25.3	36.4	41.3	55.1	33.3	31.2
Swaziland	28.8	32.4	29.8	24.4	27.0	28.8	32.2	33.0	35.1	35.1	32.0
Tanzania	18.0	20.2	20.2	19.1	19.8	19.4	17.9	17.8	18.6	19.5	20.6
Togo	19.0	21.2	22.5	26.2	26.4	26.7	27.3	30.8	31.4	29.5	27.8
Uganda	18.1	15.3	18.8	17.2	16.6	16.7	18.2	19.4	18.9	19.6	21.4
Zambia	21.0	17.8	18.1	19.5	21.5	23.8	24.6	28.1	24.0	25.3	26.2
Zimbabwe ²	9.4	13.7	21.2	24.7	24.8	26.2	25.2	25.3	30.2	26.9	24.4
Sub-Saharan Africa	23.0	24.6	24.8	24.9	24.2	23.9	23.6	22.5	21.7	22.3	21.7
Median	21.5	23.6	23.3	24.4	25.5	26.8	27.3	27.4	26.1	26.9	26.1
Excluding Nigeria and South Africa	23.6	25.8	25.8	25.8	26.9	27.3	27.9	25.9	23.7	23.5	22.9
Oil-exporting countries	20.3	21.5	21.2	22.1	20.7	20.3	19.6	16.6	14.3	14.6	13.9
Excluding Nigeria	28.6	33.9	31.8	31.3	34.8	35.5	36.1	31.0	24.6	23.5	21.8
Oil-importing countries	24.5	26.7	27.4	26.9	27.0	26.9	27.2	27.4	26.8	27.2	27.0
Excluding South Africa	21.4	22.4	23.3	23.0	23.2	23.5	24.2	24.0	23.5	23.5	23.3
Middle-income countries	23.8	25.7	25.6	25.8	25.0	24.6	24.0	22.8	22.1	22.8	22.1
Excluding Nigeria and South Africa	26.7	30.0	29.0	29.3	31.2	31.8	32.3	29.5	26.5	25.8	24.7
Low-income countries	18.6	19.8	21.0	20.6	20.7	20.8	22.0	21.6	20.4	20.5	20.6
Excluding low-income countries in fragile situations	20.1	20.2	20.8	20.6	20.3	21.3	21.5	20.8	20.3	20.8	21.2
Countries in fragile situations	18.3	19.9	21.0	20.7	22.6	22.9	24.5	25.1	22.3	21.5	20.9
CFA franc zone	19.9	23.8	22.3	22.4	24.8	27.1	26.0	26.9	24.6	24.3	23.4
CEMAC	18.4	25.0	22.9	23.2	26.9	30.2	28.4	29.4	24.3	22.1	20.7
WAEMU	21.4	22.7	21.7	21.6	22.6	23.8	23.5	24.9	24.8	25.9	25.2
COMESA (SSA members)	20.3	19.5	21.3	20.8	20.6	21.2	22.3	22.4	22.0	21.9	21.6
EAC-5	20.2	20.9	22.3	21.4	21.6	22.0	22.6	23.0	23.2	23.5	23.5
ECOWAS	17.7	17.4	18.3	18.8	16.6	16.1	15.3	14.3	14.2	14.6	14.3
SACU	27.9	32.5	31.8	31.3	31.7	31.9	32.3	33.4	33.2	33.7	33.8
SADC	27.7	31.2	30.8	30.6	31.0	30.9	31.6	29.9	28.1	28.7	28.3

See sources and footnotes on page 78.

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	75.8	65.1	66.0
Benin	24.4	25.6	28.7	29.9	26.7	25.3	30.5	42.4	50.3	53.4	53.6
Botswana	7.7	17.6	19.4	20.3	18.9	17.5	17.3	16.4	15.5	15.5	15.0
Burkina Faso	32.8	29.1	30.7	28.1	28.2	28.8	30.6	33.4	35.7	36.5	37.7
Burundi	134.4	25.7	46.9	42.7	41.4	36.1	35.8	46.1	48.0	58.8	67.9
Cabo Verde	73.8	65.2	72.4	78.8	91.1	102.5	115.9	126.0	129.7	128.8	130.8
Cameroon	30.1	10.1	11.5	13.2	15.4	19.0	26.2	34.2	35.2	35.7	35.4
Central African Rep.	69.6	21.1	21.4	21.8	23.5	38.5	54.8	51.1	44.3	38.8	33.4
Chad	24.8	31.6	30.1	30.6	28.8	30.5	39.4	43.3	51.2	47.6	43.3
Comoros	65.1	53.6	50.7	45.7	42.6	17.8	23.3	25.6	32.1	27.6	27.5
Congo, Dem. Rep. of	101.6	84.5	30.9	24.5	22.7	20.0	17.5	16.1	16.8	17.0	15.8
Congo, Rep. of	119.1	63.3	22.2	23.8	28.6	34.2	46.8	96.3	115.0	117.7	116.0
Côte d'Ivoire	76.6	64.2	63.0	69.2	45.0	43.4	44.8	47.8	47.8	48.7	48.3
Equatorial Guinea	1.9	4.3	7.9	5.9	7.3	6.1	11.0	28.1	38.4	53.8	64.3
Eritrea	158.9	144.6	143.8	133.0	127.6	128.4	126.5	127.1	125.5	127.4	128.0
Ethiopia ¹	67.9	37.8	40.5	43.9	36.9	42.4	46.3	60.0	57.9	59.7	59.1
Gabon	41.7	26.0	21.3	21.4	21.4	31.1	34.1	44.7	64.2	66.5	66.1
Gambia, The	107.3	62.6	69.6	77.3	77.0	83.3	104.9	105.3	120.2	112.7	108.1
Ghana	39.2	36.1	46.3	42.6	47.9	57.2	70.2	72.2	73.4	70.5	66.1
Guinea	79.9	61.3	68.8	58.1	27.2	34.0	35.1	42.1	42.9	42.9	47.2
Guinea-Bissau	197.4	159.0	66.0	49.8	53.1	54.7	52.3	49.0	47.3	43.3	42.1
Kenya	45.2	41.1	44.4	43.0	43.9	44.0	48.6	51.6	52.6	56.2	56.0
Lesotho	49.3	32.3	30.2	31.4	35.4	37.8	42.1	49.7	47.8	46.3	45.5
Liberia	548.8	173.9	33.4	29.6	27.0	27.5	33.2	39.5	45.0	50.8	56.1
Madagascar	56.6	33.7	31.7	32.2	33.0	33.9	34.7	35.5	38.7	41.9	42.8
Malawi	62.9	35.6	29.6	30.6	43.9	59.3	55.2	61.1	60.2	54.7	53.2
Mali	29.2	21.9	25.3	24.0	25.4	26.4	27.3	30.7	35.9	34.7	35.5
Mauritius	49.5	52.3	52.0	52.2	51.5	53.9	57.5	62.3	61.5	59.9	60.7
Mozambique	49.7	41.9	43.3	38.0	40.1	53.1	62.4	88.1	113.6	88.2	85.6
Namibia	23.3	15.5	16.0	26.2	23.7	24.2	25.5	39.4	40.0	41.5	43.6
Niger	43.3	27.7	24.3	27.8	26.9	26.3	32.0	41.0	46.3	51.5	52.8
Nigeria	15.5	8.6	9.6	12.1	12.6	12.4	12.5	13.2	17.6	21.3	22.8
Rwanda	45.2	19.5	20.0	19.9	20.0	26.7	29.1	33.4	37.6	40.2	42.1
São Tomé & Príncipe	207.5	72.4	79.5	78.0	81.0	71.1	69.6	86.0	94.0	87.5	83.6
Senegal	32.5	34.2	35.5	40.7	42.8	46.9	54.4	56.9	60.6	61.1	59.9
Seychelles	155.7	106.1	82.2	82.5	80.1	68.2	72.7	67.7	69.0	66.2	60.6
Sierra Leone	94.1	48.1	46.8	44.8	36.8	30.5	35.0	45.3	55.9	60.3	63.3
South Africa	30.5	30.1	34.7	38.2	41.0	44.1	47.0	49.3	51.7	53.0	55.6
South Sudan	...	...	...	0.0	8.9	17.6	34.8	65.7	33.1	19.0	13.6
Swaziland	14.1	10.2	13.7	14.2	14.8	15.3	14.3	18.5	25.2	31.1	35.3
Tanzania	33.5	24.4	27.3	27.8	29.2	30.9	33.8	36.7	37.2	37.4	38.3
Togo	93.8	85.8	48.8	42.4	44.7	56.4	65.2	75.6	80.8	79.7	77.0
Uganda	39.4	19.2	22.4	23.4	24.5	27.6	30.7	33.3	37.3	38.6	39.9
Zambia	54.4	20.5	18.9	20.8	25.4	27.1	35.6	61.4	60.5	55.6	60.0
Zimbabwe ²	49.8	51.4	59.3	41.6	38.8	48.3	49.6	51.9	69.7	70.7	68.5
Sub-Saharan Africa	33.3	26.2	27.8	28.4	28.4	29.9	32.3	38.3	43.2	45.1	45.7
<i>Median</i>	49.6	33.9	32.6	31.4	29.5	33.9	35.8	47.8	48.0	53.0	53.6
Excluding Nigeria and South Africa	47.2	34.5	35.6	32.5	31.8	35.1	40.1	50.8	54.2	53.5	53.8
Oil-exporting countries	21.2	13.1	16.1	16.1	16.2	17.1	19.4	25.4	31.7	34.5	35.1
Excluding Nigeria	33.8	22.2	31.0	23.8	23.7	27.5	35.5	56.9	65.2	60.6	61.3
Oil-importing countries	40.9	35.2	36.1	37.6	38.1	40.9	44.1	48.9	51.1	51.8	52.8
Excluding South Africa	52.6	39.7	37.6	37.0	35.7	38.6	42.2	48.6	50.7	51.1	51.3
Middle-income countries	28.4	23.0	26.4	27.8	27.8	28.9	30.8	36.2	41.8	44.2	44.9
Excluding Nigeria and South Africa	39.9	30.6	35.9	33.5	32.3	35.6	41.7	55.1	59.4	57.8	58.0
Low-income countries	58.6	40.2	35.3	31.2	31.1	34.4	38.1	45.8	47.8	48.1	48.4
Excluding low-income countries in fragile situations	43.6	29.3	31.0	31.8	30.9	34.9	39.0	48.6	50.3	50.4	50.8
Countries in fragile situations	80.1	58.1	43.5	36.1	33.5	35.5	39.2	45.8	48.2	48.6	48.5
CFA franc zone	45.2	33.1	29.1	29.4	26.9	29.6	35.1	44.6	49.8	51.2	51.0
CEMAC	38.9	21.7	17.0	17.2	18.4	22.3	29.6	43.9	52.2	54.3	54.2
WAEMU	51.9	44.4	42.1	43.4	36.4	37.2	40.6	45.2	48.1	49.0	49.0
COMESA (SSA members)	59.4	41.4	36.9	35.6	35.5	37.8	41.0	48.1	49.9	51.7	52.2
EAC-5	42.1	29.8	33.2	32.8	33.9	35.4	39.1	42.7	44.5	46.9	47.6
ECOWAS	27.4	18.6	18.4	20.1	19.1	19.8	20.3	22.3	28.4	31.7	32.1
SACU	29.4	29.1	33.4	37.0	39.4	42.1	44.6	47.3	49.3	50.7	53.1
SADC	34.0	31.0	34.9	35.3	36.2	38.7	42.1	49.5	52.8	51.8	53.6

See sources and footnotes on page 78.

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	41.8	36.9	36.8
Benin	30.4	38.7	41.9	42.8	41.3	44.6	49.0	51.8	48.7	48.6	50.2
Botswana	46.7	52.7	43.5	37.7	35.4	32.3	27.3	27.9	27.4	27.2	26.7
Burkina Faso	23.9	28.0	29.7	29.7	30.5	32.6	35.2	38.9	39.9	41.2	41.7
Burundi	22.3	24.3	27.5	25.7	25.4	23.5	23.0	22.5	21.8	20.7	23.5
Cabo Verde	75.1	77.5	80.1	78.5	82.1	89.4	95.6	98.9	104.1	105.7	107.5
Cameroon	19.4	22.3	23.4	24.2	22.7	23.3	23.8	24.5	25.0	24.6	24.6
Central African Rep.	15.9	16.1	17.8	19.2	18.3	28.5	29.1	27.5	26.2	25.7	25.7
Chad	8.9	11.0	11.4	12.0	12.4	13.3	15.6	15.9	15.8	16.6	17.2
Comoros	26.0	30.4	34.1	34.9	38.3	36.9	38.3	43.8	46.0	46.0	46.0
Congo, Dem. Rep. of	6.6	10.1	10.5	10.6	11.6	11.5	11.8	12.1	12.5	12.0	12.6
Congo, Rep. of	17.1	23.3	23.3	27.2	33.1	33.5	37.7	46.1	42.3	41.3	38.8
Côte d'Ivoire	11.3	14.1	15.7	18.7	15.3	14.9	15.0	15.8	15.5	15.7	17.4
Equatorial Guinea	6.4	10.5	12.3	10.6	14.8	16.7	14.7	19.3	19.2	23.7	29.1
Eritrea	130.2	121.6	123.2	114.7	114.1	118.3	119.9	118.6	119.7	122.3	123.8
Ethiopia ¹	34.6	24.8	27.0	27.6	25.3	27.1	28.1	28.5	29.1	29.6	30.2
Gabon	17.0	20.3	19.5	20.5	23.2	24.8	24.4	25.6	24.4	26.2	27.0
Gambia, The	39.0	48.7	49.9	55.7	54.5	56.6	58.6	52.3	55.0	55.0	54.6
Ghana	22.8	28.0	29.9	30.4	30.0	28.8	32.5	33.2	33.9	34.4	33.4
Guinea	13.6	18.4	26.4	25.1	22.2	22.6	23.8	26.9	25.5	24.8	24.8
Guinea-Bissau	19.1	24.6	29.6	33.4	32.2	38.6	46.4	49.2	47.8	49.6	51.1
Kenya	35.7	36.5	40.1	40.6	40.5	42.1	43.1	42.5	38.5	38.3	42.3
Lesotho	29.6	35.9	32.3	30.3	30.0	35.5	32.9	32.3	31.7	32.1	32.3
Liberia	19.5	31.4	35.5	42.0	36.3	34.8	34.6	34.8	32.2	31.0	33.7
Madagascar	23.6	24.5	24.7	26.1	25.7	25.2	25.4	26.2	28.3	28.9	28.4
Malawi	15.8	19.8	22.1	25.1	25.7	26.0	24.5	24.3	22.9	22.9	23.1
Mali	25.6	24.7	24.5	24.4	27.0	28.2	27.8	28.9	28.9	30.1	31.8
Mauritius	98.5	99.5	100.4	98.8	100.5	99.8	102.9	108.5	110.6	110.6	110.6
Mozambique	17.0	24.2	24.7	27.7	30.6	33.4	38.5	42.1	37.0	34.6	35.0
Namibia	40.8	63.2	62.6	64.0	57.2	56.7	53.6	55.5	53.4	54.1	54.1
Niger	15.6	18.5	20.3	20.2	22.6	23.3	27.3	27.0	28.1	29.6	30.7
Nigeria	16.0	24.3	20.8	18.8	21.3	19.3	20.9	20.9	22.6	22.1	21.9
Rwanda	16.6	17.2	18.3	20.0	19.8	20.9	22.4	24.9	24.1	23.9	24.0
São Tomé & Príncipe	33.4	37.1	38.7	38.0	39.0	38.3	38.8	40.3	34.6	32.4	32.4
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	58.3	69.1	66.4	71.7	74.4	71.7
Sierra Leone	16.7	22.6	23.5	23.1	21.9	19.8	21.7	24.0	25.6	23.1	22.7
South Africa	72.5	77.7	75.8	74.6	72.9	71.0	70.8	73.5	72.7	72.8	72.8
South Sudan	...	...	...	9.5	19.8	14.7	17.6	38.2	28.8	12.6	13.1
Swaziland	19.3	25.1	25.3	24.8	24.7	26.2	25.0	26.4	30.0	30.5	34.3
Tanzania	21.8	23.3	25.1	24.7	23.8	22.7	23.3	24.3	22.8	22.9	23.4
Togo	33.3	41.3	45.6	46.9	45.3	46.8	48.2	53.6	56.7	60.1	63.4
Uganda	18.5	17.9	21.7	19.8	19.8	19.9	21.0	20.9	21.9	22.7	23.5
Zambia	18.0	17.8	18.4	19.1	19.6	20.5	20.9	25.8	20.6	20.9	23.5
Zimbabwe ²	10.5	16.5	23.1	25.7	26.5	25.5	27.6	29.5	35.0	36.4	35.4
Sub-Saharan Africa	34.8	39.2	37.5	36.3	36.5	35.4	36.2	37.6	37.5	37.0	37.2
Median	21.8	24.7	26.7	27.2	27.0	28.5	28.1	29.5	30.0	30.5	32.3
Excluding Nigeria and South Africa	24.9	28.8	29.4	29.4	29.2	29.7	31.1	33.1	32.0	31.6	32.4
Oil-exporting countries	16.5	25.8	22.3	20.9	22.9	21.7	23.6	25.0	25.4	24.4	24.3
Excluding Nigeria	17.8	29.4	26.5	26.0	27.2	28.1	30.7	35.7	32.9	30.4	30.7
Oil-importing countries	46.5	48.7	48.5	47.9	46.4	45.5	45.7	47.0	45.9	45.6	45.8
Excluding South Africa	27.0	28.6	30.3	30.5	29.8	30.2	31.2	32.3	31.7	32.0	32.8
Middle-income countries	38.0	43.4	40.7	39.7	39.7	38.3	39.1	40.5	40.4	39.9	40.1
Excluding Nigeria and South Africa	26.7	33.3	32.9	33.7	32.8	33.5	35.1	37.6	35.7	35.0	35.9
Low-income countries	22.6	23.2	25.2	24.6	25.0	25.4	26.7	28.3	28.1	28.1	28.7
Excluding low-income countries in fragile situations	24.2	23.5	25.7	25.7	25.1	25.9	27.5	28.5	28.0	28.3	28.9
Countries in fragile situations	18.4	21.1	22.7	22.7	23.9	23.5	24.4	26.9	26.6	26.0	26.6
CFA franc zone	18.5	21.7	23.1	24.1	24.5	25.8	27.0	29.2	29.2	30.0	31.0
CEMAC	14.7	17.9	18.7	19.5	21.0	22.3	23.1	25.8	25.2	26.0	26.6
WAEMU	22.1	25.3	27.2	28.6	27.8	29.0	30.5	32.2	32.3	33.0	34.3
COMESA (SSA members)	29.9	28.5	30.7	30.8	30.4	31.1	31.8	32.6	32.1	32.4	33.8
EAC-5	26.3	26.7	29.7	29.3	28.9	29.2	30.1	30.2	28.4	28.5	30.3
ECOWAS	17.8	24.9	22.8	21.6	23.3	21.9	23.6	24.1	25.5	25.4	25.5
SACU	69.7	75.4	73.2	71.8	70.0	68.0	67.4	69.9	69.1	69.1	69.1
SADC	53.3	58.5	56.3	55.6	53.9	52.5	52.7	55.1	53.5	52.6	52.4

See sources and footnotes on page 78.

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	14.1	16.6	19.4
Benin	15.6	6.2	11.6	9.1	9.0	17.3	16.7	7.9	-2.6	7.6	11.7
Botswana	17.4	-1.3	4.9	-3.1	0.7	1.3	-0.7	2.0	14.3	5.6	4.5
Burkina Faso	6.9	18.2	19.1	13.8	15.9	10.6	11.3	19.7	11.9	12.0	9.9
Burundi	21.1	19.8	29.4	5.7	18.0	9.7	11.3	1.5	6.4	7.9	33.4
Cabo Verde	12.5	3.5	5.4	4.6	6.3	11.4	7.4	6.3	8.4	6.8	7.5
Cameroon	10.5	6.9	11.3	10.6	1.4	10.8	10.8	9.1	5.6	2.6	5.4
Central African Rep.	7.5	11.7	16.1	13.8	1.6	5.6	14.6	5.3	5.8	8.7	10.8
Chad	23.6	-4.6	25.3	14.2	13.4	8.6	26.5	-4.7	-7.7	5.8	7.4
Comoros	7.6	13.3	19.4	9.6	16.0	2.8	8.1	17.1	10.3	5.5	6.3
Congo, Dem. Rep. of	52.5	49.7	30.9	22.9	21.8	18.6	12.6	10.5	21.8	39.9	55.7
Congo, Rep. of	30.1	5.3	37.6	34.5	21.1	0.7	13.1	-11.2	-15.4	-3.3	-6.3
Côte d'Ivoire	12.0	24.4	19.3	17.2	-7.6	9.7	13.8	17.0	7.0	11.6	20.7
Equatorial Guinea	30.7	29.9	33.5	7.7	57.8	7.3	-14.1	-10.9	-16.4	19.8	15.6
Eritrea	11.2	15.7	15.6	14.6	17.9	17.5	17.2	13.9	15.7	15.5	14.7
Ethiopia ¹	18.1	19.9	24.4	36.5	32.9	24.2	26.9	24.2	20.4	18.5	19.3
Gabon	14.2	2.2	19.2	26.5	15.7	6.1	1.6	-0.5	-7.0	8.7	5.8
Gambia, The	16.5	19.4	13.7	11.0	7.8	15.1	11.2	-0.9	15.3	11.4	9.6
Ghana	31.3	26.0	34.4	32.2	24.3	19.1	36.8	23.3	24.8	22.7	15.9
Guinea	35.5	25.9	74.4	9.4	1.0	14.1	12.3	20.3	9.9	11.6	14.2
Guinea-Bissau	25.7	4.4	29.6	39.1	-6.0	22.5	21.1	25.4	7.7	14.3	10.3
Kenya	14.9	16.0	21.6	19.1	14.1	15.6	16.7	14.1	3.6	13.3	23.9
Lesotho	20.7	8.8	0.9	4.9	6.4	31.5	1.5	6.4	7.4	13.4	9.2
Liberia	33.6	30.6	28.0	41.3	-2.1	7.6	2.1	1.7	-4.5	-1.8	11.3
Madagascar	17.2	10.2	9.6	16.4	6.9	5.3	11.1	14.6	19.9	15.0	10.4
Malawi	27.6	23.9	33.9	35.7	22.9	35.1	20.7	23.7	15.2	17.3	15.1
Mali	5.6	16.0	9.0	15.3	15.2	7.4	7.1	13.2	7.3	11.1	12.5
Mauritius	13.0	2.4	6.9	6.4	8.2	5.8	8.7	10.2	9.1	4.9	7.0
Mozambique	22.2	34.6	17.6	23.9	25.6	21.2	27.3	21.7	2.4	9.5	13.1
Namibia	17.3	59.6	8.7	11.6	6.0	13.7	6.9	10.2	4.9	8.2	8.4
Niger	15.7	18.3	22.0	6.2	31.2	10.1	25.7	3.6	8.5	10.7	10.7
Nigeria	37.2	17.1	6.9	4.0	29.1	1.0	20.4	5.9	16.4	14.6	15.5
Rwanda	23.6	13.0	16.9	26.7	14.1	15.8	18.8	21.1	7.6	13.0	13.2
São Tomé & Príncipe	29.8	8.2	25.1	10.4	20.3	13.9	16.8	13.1	-4.8	-1.0	7.0
Senegal	9.5	10.9	14.1	6.7	6.8	8.0	11.4	13.4	12.0	10.0	9.0
Seychelles	7.9	7.0	13.5	4.5	-0.6	23.7	26.6	2.9	12.1	10.0	2.2
Sierra Leone	24.5	31.3	28.5	22.6	22.5	16.7	16.6	4.9	17.9	11.3	13.4
South Africa	18.9	1.8	6.9	8.3	5.2	5.9	7.3	10.3	6.1	6.3	6.5
South Sudan	...	...	...	...	33.9	-1.6	21.2	117.4	142.5	1.6	36.2
Swaziland	15.7	26.8	7.9	5.5	10.0	15.9	3.9	13.6	26.4	7.2	17.1
Tanzania	22.0	17.7	25.4	18.2	12.5	10.0	15.6	18.8	6.9	12.6	14.5
Togo	15.7	16.2	16.3	15.9	8.9	10.3	9.8	20.2	12.9	12.5	12.7
Uganda	19.1	16.6	41.5	10.5	14.9	9.5	15.2	11.7	11.1	14.4	15.0
Zambia	25.6	7.7	29.9	21.7	17.9	20.8	12.6	35.2	-5.7	14.0	27.0
Zimbabwe ²	1.4	340.0	68.6	33.1	19.9	4.6	12.6	8.2	19.0	10.5	7.5
Sub-Saharan Africa	25.4	14.7	13.4	12.5	16.6	7.8	15.3	11.1	11.3	12.5	14.2
<i>Median</i>	17.7	16.1	19.2	14.0	14.1	10.6	12.6	11.7	8.5	11.1	11.7
Excluding Nigeria and South Africa	22.6	20.5	21.6	20.9	14.6	13.2	15.7	15.0	10.5	13.7	16.5
Oil-exporting countries	36.7	16.4	8.8	9.3	24.5	3.4	17.9	6.8	14.1	13.4	14.8
Excluding Nigeria	36.3	14.8	14.2	25.6	13.1	9.8	11.6	9.2	8.0	10.3	12.8
Oil-importing countries	18.7	13.5	16.9	14.9	11.2	11.1	13.4	14.5	9.4	11.8	13.8
Excluding South Africa	18.7	22.4	24.1	19.5	15.1	14.4	17.0	16.8	11.2	14.7	17.5
Middle-income countries	27.0	12.2	10.2	10.4	16.2	6.1	14.6	9.2	10.5	11.7	13.1
Excluding Nigeria and South Africa	25.3	17.0	17.5	21.1	11.4	12.8	13.9	12.4	7.3	12.6	15.7
Low-income countries	19.4	24.8	26.7	20.7	18.4	13.7	17.7	17.8	14.0	14.9	17.4
Excluding low-income countries in fragile situations	18.7	18.4	25.6	21.2	20.3	15.4	20.0	18.6	11.4	14.3	15.5
Countries in fragile situations	19.3	30.6	27.4	20.5	11.6	10.2	14.1	14.4	13.6	13.8	18.9
CFA franc zone	14.4	13.2	19.2	14.6	12.0	8.9	10.0	6.9	1.8	8.6	10.4
CEMAC	18.7	9.2	22.5	16.2	18.3	7.5	6.6	-1.3	-5.3	5.6	5.4
WAEMU	10.7	17.1	16.1	13.2	6.3	10.1	13.2	14.5	7.9	10.9	14.2
COMESA (SSA members)	19.1	24.7	26.4	22.0	18.9	16.4	17.1	17.5	11.9	16.6	21.4
EAC-5	18.6	16.7	26.9	16.9	13.8	12.2	16.0	15.3	6.5	13.1	18.2
ECOWAS	31.2	17.9	11.1	7.6	24.2	4.1	20.1	8.7	15.4	14.5	15.2
SACU	18.8	3.2	6.9	7.8	5.1	6.2	6.8	10.0	6.7	6.4	6.7
SADC	23.6	11.9	11.4	14.5	7.9	9.3	10.2	12.6	8.3	10.6	12.3

See sources and footnotes on page 78.

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	-0.2
Benin	16.4	11.9	8.5	11.5	9.4	10.6	6.0	-1.8	11.7
Botswana	21.2	10.3	11.1	21.8	21.5	13.8	13.7	9.0	9.0
Burkina Faso	14.4	1.7	14.7	23.5	24.1	26.3	18.9	7.0	7.5
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	3.6
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	13.2
Chad	17.3	21.0	30.2	24.4	32.1	2.7	40.2	2.3	-5.1
Comoros	11.4	44.1	25.9	8.9	22.4	12.6	9.6	16.8	7.2
Congo, Dem. Rep. of	91.1	41.1	18.0	17.1	25.2	26.5	23.0	17.4	28.7
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	15.0
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 ¹	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	7.2
Guinea-Bissau	-35.4	-23.6	66.5	85.9	39.9	-14.0	-3.9	-0.9	10.6
Kenya	19.9	13.9	20.3	30.9	10.4	20.1	22.2	17.0	4.3
Lesotho	28.3	23.9	28.8	25.1	42.2	10.3	11.8	8.2	5.8
Liberia	36.0	31.5	40.1	32.4	11.2	27.2	5.6	8.1	4.5
Madagascar	24.8	6.5	11.2	7.0	4.8	16.2	18.4	16.5	8.2
Malawi	41.2	39.5	52.4	20.5	25.4	14.4	20.0	29.9	4.6
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	14.5
Namibia	14.7	10.5	9.8	10.4	18.4	13.4	17.9	13.8	8.6
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	4.6	23.4
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	8.3
Senegal	13.1	3.8	10.1	19.0	10.0	12.6	6.4	7.1	5.7
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	9.1	16.7
South Africa	17.8	3.0	3.3	5.7	9.3	6.6	7.2	8.3	5.1
South Sudan	...	...	...	...	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	11.6
Tanzania	35.8	9.6	20.0	27.2	18.2	15.3	19.4	24.8	8.1
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	-9.4
Zimbabwe ²	5.8	388.2	143.3	62.8	27.1	3.7	4.7	-2.3	-3.6
Sub-Saharan Africa	30.2	16.5	8.4	13.5	13.3	12.1	15.5	12.0	12.4
Median	20.1	12.5	19.6	23.8	18.2	13.4	14.1	9.3	7.8
Excluding Nigeria and South Africa	28.7	20.5	21.8	25.8	19.9	16.5	17.7	18.6	9.2
Oil-exporting countries	44.0	24.8	0.6	9.3	10.4	11.8	16.2	7.0	18.6
Excluding Nigeria	37.4	32.3	19.7	30.6	20.9	18.3	11.4	13.7	6.7
Oil-importing countries	22.4	11.0	14.4	16.6	15.5	12.4	15.0	15.8	8.2
Excluding South Africa	26.1	16.9	22.4	24.3	19.6	16.0	19.8	20.1	10.0
Middle-income countries	31.1	14.9	3.8	10.4	11.0	11.6	14.4	9.7	11.5
Excluding Nigeria and South Africa	29.9	18.9	17.2	25.6	18.0	18.9	16.2	17.5	3.9
Low-income countries	27.4	22.5	27.4	25.9	22.1	13.9	19.4	19.7	15.3
Excluding low-income countries in fragile situations	30.4	13.9	24.7	23.8	23.5	12.2	18.0	22.2	13.1
Countries in fragile situations	21.6	31.1	28.5	24.5	20.3	17.7	21.8	17.8	17.3
CFA franc zone	15.0	10.3	15.9	23.0	12.5	16.9	16.1	11.6	7.5
CEMAC	18.3	11.5	20.4	31.9	11.6	17.7	17.2	6.5	1.6
WAEMU	12.5	9.1	11.8	15.0	13.5	16.2	15.1	16.1	12.5
COMESA (SSA members)	28.5	20.2	26.7	26.1	21.2	13.9	18.3	20.0	9.7
EAC-5	26.7	12.9	24.2	29.3	14.4	14.7	19.1	19.8	6.5
ECOWAS	39.0	19.4	-0.1	7.5	9.2	12.3	19.3	8.6	19.8
SACU	17.9	3.7	3.9	6.8	10.1	7.3	7.8	8.4	5.4
SADC	26.4	15.3	11.2	13.6	14.9	10.5	9.9	13.0	5.1

See sources and footnotes on page 78.

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	21.5
Benin	16.3	20.8	22.0	22.9	22.2	22.6	22.6	21.7	23.4
Botswana	22.1	28.9	25.3	27.5	31.3	32.0	31.0	33.8	31.7
Burkina Faso	16.7	17.0	17.3	18.8	20.7	25.3	29.1	28.8	28.4
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	61.8	62.2
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	12.5
Chad	2.6	3.9	4.2	4.8	5.8	5.9	7.6	8.4	8.6
Comoros	8.9	14.8	17.5	17.8	20.6	21.7	22.9	26.1	26.7
Congo, Dem. Rep. of	2.1	4.4	4.1	4.0	4.5	4.8	5.3	5.8	6.3
Congo, Rep. of	2.8	5.0	5.4	6.6	9.6	11.3	14.2	21.3	24.7
Côte d'Ivoire	14.3	16.4	16.6	16.9	16.8	18.3	19.7	23.0	24.2
Equatorial Guinea	2.7	5.8	6.7	7.0	5.3	7.5	9.1	15.4	19.1
Eritrea	24.5	16.6	14.8	13.7	11.4	10.5	9.8	9.1	8.6
Ethiopia ¹	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	12.3
Gambia, The	12.6	15.4	15.9	17.4	16.5	17.9	15.4	12.8	10.3
Ghana	11.7	15.5	15.4	15.3	16.1	16.8	19.6	21.4	19.1
Guinea	3.9	3.5	4.2	7.0	5.9	7.2	9.7	11.6	10.7
Guinea-Bissau	1.9	4.3	6.7	10.1	14.5	12.1	11.6	9.7	9.7
Kenya	23.5	25.8	28.0	31.2	30.1	32.5	34.9	35.2	32.1
Lesotho	8.0	10.5	12.1	13.5	17.9	17.8	18.2	18.2	17.5
Liberia	6.9	12.0	14.8	16.4	16.1	18.3	18.8	20.1	20.3
Madagascar	10.1	11.3	11.5	11.2	10.8	11.7	12.6	13.2	12.9
Malawi	6.7	10.9	13.8	13.9	14.6	12.5	11.7	12.2	10.4
Mali	15.9	15.5	16.0	17.1	17.3	18.8	20.5	22.6	24.9
Mauritius	75.1	82.7	87.9	91.3	100.8	108.1	100.3	104.3	96.9
Mozambique	12.4	23.8	26.8	25.7	27.2	28.2	32.0	35.1	34.5
Namibia	48.0	48.0	48.0	48.6	48.5	47.9	49.9	53.4	53.2
Niger	8.4	12.2	12.3	13.3	14.1	13.7	14.1	15.2	16.3
Nigeria	12.0	21.1	15.9	14.2	13.3	13.0	13.8	13.7	15.7
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	26.4
Senegal	22.5	24.7	25.6	28.8	29.5	32.9	34.0	34.1	33.4
Seychelles	25.1	20.1	24.4	23.9	22.5	21.3	25.2	25.3	26.9
Sierra Leone	4.0	7.2	7.7	7.5	5.4	4.7	4.7	5.3	5.6
South Africa	71.4	74.6	70.4	67.6	68.6	67.3	67.0	68.2	66.9
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	21.2
Tanzania	10.4	13.2	13.7	14.4	14.7	14.6	15.6	17.1	16.1
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	13.2	12.9	13.5	13.9	13.9
Zambia	8.8	10.0	9.2	10.0	12.0	11.7	13.4	15.7	12.1
Zimbabwe ²	3.7	8.2	16.5	22.5	24.5	23.5	23.7	22.8	21.9
Sub-Saharan Africa	28.2	31.8	29.1	27.8	28.0	27.7	27.9	28.7	28.5
Median	10.7	14.2	15.3	15.3	16.1	16.8	16.6	19.8	19.1
Excluding Nigeria and South Africa	13.4	16.5	17.1	17.6	18.4	19.2	20.0	21.6	20.6
Oil-exporting countries	10.7	19.2	15.3	13.8	13.7	13.8	14.5	15.3	16.2
Excluding Nigeria	7.3	14.2	13.6	12.9	14.7	15.9	16.3	19.6	17.7
Oil-importing countries	39.3	40.7	39.1	38.2	38.4	37.9	37.9	38.7	37.1
Excluding South Africa	15.3	17.3	18.2	19.2	19.6	20.2	21.1	22.3	21.4
Middle-income countries	33.0	37.2	33.4	32.2	32.1	31.8	32.0	32.9	32.7
Excluding Nigeria and South Africa	16.3	20.6	20.8	22.0	22.8	24.3	25.2	27.8	25.7
Low-income countries	9.8	11.5	12.6	12.7	13.2	13.3	14.1	14.9	15.0
Excluding low-income countries in fragile situations	11.1	12.9	14.0	14.3	14.4	14.6	15.3	16.2	16.1
Countries in fragile situations	8.8	10.3	11.3	11.2	12.3	12.6	13.6	15.4	16.2
CFA franc zone	11.3	13.0	13.3	14.7	15.1	16.9	18.2	20.3	21.5
CEMAC	6.2	7.8	7.9	9.2	9.5	11.1	12.2	14.7	15.7
WAEMU	15.9	17.8	18.4	19.9	20.3	22.2	23.6	25.1	26.1
COMESA (SSA members)	15.5	16.6	18.0	19.2	19.3	19.7	20.1	20.7	19.4
EAC-5	15.3	17.2	18.8	20.5	20.2	20.9	22.3	23.1	21.7
ECOWAS	12.6	19.8	16.1	15.1	14.6	14.7	15.8	16.1	17.7
SACU	67.8	71.0	66.9	64.4	65.5	64.1	63.9	65.2	63.8
SADC	48.1	50.8	48.1	46.6	47.4	46.5	46.0	47.5	45.2

See sources and footnotes on page 78.

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	30.0	28.9	26.6
Benin	13.7	14.3	17.9	16.0	13.2	15.5	15.8	15.9	16.4	17.9	18.9
Botswana	50.9	40.5	40.6	50.0	48.4	61.9	60.8	52.1	50.0	49.4	49.0
Burkina Faso	10.6	12.6	21.0	26.2	23.7	26.5	26.1	24.8	25.5	25.6	25.5
Burundi	7.8	6.7	8.9	10.1	9.4	8.8	7.2	5.6	5.5	5.2	5.0
Cabo Verde	35.8	33.2	38.3	42.2	45.0	47.0	48.1	41.9	45.1	44.8	45.4
Cameroon	27.8	22.0	24.4	28.1	27.9	27.1	26.8	23.7	21.3	21.0	20.2
Central African Rep.	13.2	10.7	11.8	13.5	12.5	14.4	13.0	12.6	12.7	12.9	12.4
Chad	45.5	35.2	37.8	40.6	38.2	33.4	31.5	26.5	24.4	32.7	33.3
Comoros	14.8	13.8	15.7	16.6	14.9	15.6	16.8	17.0	15.8	14.2	13.8
Congo, Dem. Rep. of	29.5	27.4	43.0	41.6	32.8	38.1	35.2	27.2	25.7	30.4	35.0
Congo, Rep. of	83.5	69.6	75.5	79.5	75.3	70.4	68.0	63.2	55.0	65.5	83.6
Côte d'Ivoire	48.5	50.7	50.5	53.1	48.9	41.5	39.2	38.2	31.8	29.8	28.5
Equatorial Guinea	79.7	72.6	81.2	76.3	74.3	64.9	59.7	49.0	46.5	46.9	36.8
Eritrea	5.8	4.5	4.8	14.4	19.1	17.0	18.0	13.2	15.8	17.6	16.8
Ethiopia ¹	14.6	10.6	15.5	18.2	13.9	12.5	11.6	9.3	7.3	7.1	7.4
Gabon	59.1	52.0	59.2	61.0	64.9	61.5	54.5	43.5	36.2	40.6	39.1
Gambia, The	30.6	25.4	23.8	26.5	30.9	29.4	29.2	24.7	24.0	21.0	22.5
Ghana	23.8	29.7	29.3	36.9	40.1	33.9	39.4	44.7	40.8	41.2	41.7
Guinea	22.0	19.1	22.3	25.5	28.2	23.0	22.3	18.7	29.2	34.9	38.7
Guinea-Bissau	17.0	18.8	20.1	25.7	15.5	18.3	20.2	27.7	26.6	27.9	27.4
Kenya	23.5	20.0	22.5	24.0	22.2	19.9	18.3	16.6	14.6	14.4	13.9
Lesotho	45.8	37.5	37.4	39.6	37.9	33.7	35.6	44.6	41.1	40.3	39.1
Liberia	57.3	40.2	42.1	46.3	50.0	45.3	40.7	32.6	30.4	29.5	29.0
Madagascar	26.9	22.4	24.1	26.8	29.0	30.0	32.8	32.1	33.5	33.2	32.4
Malawi	17.1	17.0	19.6	17.6	23.9	30.7	28.9	25.5	29.1	27.5	27.4
Mali	24.0	22.9	22.9	21.6	26.9	24.9	22.5	24.0	22.9	22.1	21.3
Mauritius	55.6	47.0	50.9	51.7	52.9	47.3	49.8	48.0	43.0	44.1	44.5
Mozambique	29.0	24.5	24.7	26.5	30.6	29.8	27.5	27.9	33.4	36.3	35.1
Namibia	38.5	42.6	41.7	41.4	42.0	43.7	44.3	42.9	37.2	37.7	38.8
Niger	17.6	20.3	22.2	20.9	21.9	22.6	21.0	18.5	17.2	16.5	17.2
Nigeria	28.4	19.6	22.4	24.7	21.4	19.3	14.8	10.1	9.5	11.6	10.8
Rwanda	11.3	11.1	10.8	14.1	13.9	15.4	16.4	18.4	19.0	20.3	20.6
São Tomé & Príncipe	11.2	10.4	12.3	12.6	13.1	17.8	25.4	28.3	28.7	27.8	27.3
Senegal	26.3	24.4	24.9	26.4	27.9	28.3	28.1	29.4	27.2	27.4	26.8
Seychelles	85.1	108.0	93.8	100.2	105.2	94.7	102.2	94.2	93.6	99.6	99.1
Sierra Leone	15.0	15.0	16.2	18.3	32.4	35.9	30.2	17.8	23.3	27.7	31.1
South Africa	29.6	27.9	28.6	30.5	29.7	30.9	31.2	30.4	30.3	28.0	27.0
South Sudan	...	...	...	72.4	9.3	28.0	34.0	21.0	56.8	60.7	56.7
Swaziland	58.4	51.5	45.9	45.3	45.6	48.1	51.0	50.8	49.1	48.3	48.5
Tanzania	18.2	18.9	20.6	22.4	20.9	19.4	18.4	20.0	20.0	19.7	19.6
Togo	37.3	37.8	40.9	44.9	44.7	46.5	39.4	36.0	35.2	34.2	33.3
Uganda	16.3	18.1	17.2	20.4	20.1	20.6	16.9	19.3	17.8	18.2	18.6
Zambia	35.1	32.0	39.7	40.1	41.2	41.4	40.8	38.7	35.2	33.4	35.9
Zimbabwe ²	26.7	21.7	34.7	40.1	30.3	27.0	24.3	24.3	24.8	24.1	22.6
Sub-Saharan Africa	32.6	27.9	30.5	33.6	31.1	29.6	26.8	22.8	22.2	22.9	22.1
Median	27.3	23.7	24.5	26.8	29.7	29.8	29.2	27.2	28.7	28.0	27.4
Excluding Nigeria and South Africa	38.0	33.0	37.4	41.6	38.4	36.2	33.6	28.2	26.1	26.4	26.1
Oil-exporting countries	39.4	29.8	33.1	37.3	32.6	29.4	24.1	16.7	15.9	18.3	16.9
Excluding Nigeria	63.5	50.8	57.7	61.6	56.3	51.3	46.0	33.9	31.3	31.5	29.8
Oil-importing countries	28.7	26.6	28.7	30.9	29.8	29.8	29.2	27.7	26.5	25.9	25.6
Excluding South Africa	27.9	25.4	28.7	31.3	29.9	29.1	27.9	26.1	24.4	24.6	24.9
Middle-income countries	34.8	29.9	31.9	34.6	32.8	30.9	27.8	23.5	22.9	23.6	22.3
Excluding Nigeria and South Africa	48.6	42.5	46.4	50.0	48.7	44.6	41.7	35.0	31.2	30.8	29.9
Low-income countries	21.8	19.2	23.5	28.9	23.3	24.1	22.7	20.1	19.9	20.8	21.3
Excluding low-income countries in fragile situations	17.1	16.0	18.6	20.9	19.3	18.9	17.4	16.8	15.8	15.9	16.2
Countries in fragile situations	36.4	33.1	38.4	43.8	35.8	35.7	34.1	28.9	28.6	30.2	31.3
CFA franc zone	41.6	38.1	42.4	44.6	43.6	40.0	37.2	32.4	28.7	29.4	28.8
CEMAC	52.4	45.4	51.8	54.4	53.5	48.7	44.8	36.1	31.5	34.2	33.9
WAEMU	30.5	30.9	32.5	33.3	32.6	31.0	29.6	29.4	26.7	26.0	25.4
COMESA (SSA members)	26.3	21.9	27.3	29.4	26.5	26.3	24.6	21.5	19.5	19.9	20.3
EAC-5	19.5	18.5	19.8	21.9	20.7	19.4	17.7	18.0	16.8	16.7	16.6
ECOWAS	28.3	22.3	24.5	27.0	24.6	22.3	18.5	15.2	15.5	17.4	16.6
SACU	31.0	29.0	29.6	31.6	31.0	32.6	33.1	32.0	31.8	29.5	28.7
SADC	35.4	32.3	34.6	37.1	36.4	36.7	35.3	31.4	30.5	29.3	28.7

See sources and footnotes on page 78.

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	29.4	27.0	25.2
Benin	24.9	27.0	29.2	26.1	25.2	28.3	31.0	28.8	28.2	30.9	30.3
Botswana	40.3	52.7	47.7	53.7	60.2	61.8	53.9	53.4	43.4	51.3	51.3
Burkina Faso	25.4	23.2	28.5	33.0	34.7	39.8	35.1	33.9	33.5	34.0	34.0
Burundi	34.3	28.2	43.4	43.5	46.7	41.5	37.3	32.9	24.9	23.1	22.0
Cabo Verde	64.5	63.4	66.8	73.8	68.1	62.8	66.4	59.1	63.7	63.8	63.9
Cameroon	28.4	26.9	27.5	30.9	30.8	29.9	30.2	27.4	23.9	24.0	23.2
Central African Rep.	22.1	23.2	26.5	24.4	23.9	25.0	37.6	34.6	29.6	31.7	30.1
Chad	44.3	46.8	48.6	48.1	48.0	43.1	43.9	42.9	39.4	42.4	42.3
Comoros	39.5	47.9	49.9	50.3	54.3	52.0	49.5	45.7	43.9	44.9	42.3
Congo, Dem. Rep. of	34.9	36.9	51.9	48.0	39.9	38.6	44.0	33.2	30.6	35.7	38.5
Congo, Rep. of	56.0	71.1	57.3	62.0	51.0	52.4	66.0	96.3	112.8	68.1	60.2
Côte d'Ivoire	41.2	39.8	43.2	36.8	44.7	38.6	34.4	34.6	29.2	29.6	28.3
Equatorial Guinea	35.9	47.9	58.9	43.4	41.3	41.9	42.1	48.0	36.3	33.3	25.0
Eritrea	41.6	23.4	23.3	23.2	22.8	22.1	21.8	19.5	19.2	20.2	19.4
Ethiopia ¹	36.3	27.9	33.1	36.5	32.8	28.8	28.2	30.2	26.9	23.2	22.3
Gabon	27.5	34.6	29.5	23.6	36.5	44.0	41.6	39.0	34.5	38.1	34.7
Gambia, The	45.5	41.9	43.0	41.1	44.3	41.1	48.5	50.4	41.9	43.7	46.5
Ghana	40.1	42.9	43.5	49.3	52.5	47.1	49.6	56.3	48.0	48.4	47.7
Guinea	24.2	21.1	25.4	43.2	44.4	31.6	33.0	30.7	60.7	59.1	55.2
Guinea-Bissau	28.7	35.2	35.2	30.9	25.7	25.8	31.4	32.4	30.9	31.8	32.2
Kenya	31.9	30.5	33.9	39.4	35.5	33.2	33.0	27.7	23.4	23.6	23.7
Lesotho	103.5	99.9	93.7	92.7	96.3	84.7	85.5	90.5	82.1	87.0	87.4
Liberia	191.2	135.9	134.7	132.1	119.8	108.4	122.4	120.6	101.9	94.7	87.8
Madagascar	43.4	46.0	37.5	38.0	38.7	38.7	37.2	35.5	35.6	40.7	40.5
Malawi	35.0	31.7	34.9	28.0	38.3	42.6	39.6	36.7	45.7	39.5	38.3
Mali	33.7	34.0	37.9	29.7	31.8	39.9	38.0	39.6	39.5	39.2	36.7
Mauritius	64.2	57.5	63.0	65.6	66.0	61.6	62.3	58.8	53.3	57.1	57.6
Mozambique	38.6	39.7	45.2	58.0	81.7	81.2	72.6	71.7	71.0	60.6	79.8
Namibia	41.8	55.8	52.1	50.6	55.7	59.3	66.7	68.1	57.5	52.6	52.3
Niger	31.2	46.7	49.0	47.8	39.4	39.1	38.9	40.9	37.0	39.4	39.5
Nigeria	17.7	16.6	19.2	21.9	17.5	14.9	15.1	14.9	11.6	12.3	12.0
Rwanda	26.1	28.7	28.6	34.2	34.0	32.0	33.2	35.6	37.0	33.1	34.3
São Tomé & Príncipe	55.6	54.7	61.0	63.1	54.0	58.9	66.0	58.9	54.0	58.3	56.6
Senegal	45.1	41.3	40.3	44.7	48.9	49.2	47.4	46.1	41.3	40.4	39.7
Seychelles	94.7	117.0	108.1	116.6	122.5	101.5	118.0	103.2	103.7	106.0	104.8
Sierra Leone	24.4	30.5	43.9	84.4	65.7	46.2	57.4	43.8	48.8	51.9	53.6
South Africa	30.6	27.5	27.4	29.7	31.2	33.3	32.9	31.5	30.2	27.2	26.8
South Sudan	...	...	...	30.4	34.1	29.9	31.6	28.9	61.7	68.6	77.5
Swaziland	67.4	64.5	58.3	57.8	56.3	55.0	56.7	52.0	53.8	54.1	53.6
Tanzania	26.8	28.4	29.5	34.2	33.0	30.2	28.3	27.3	24.3	24.2	25.1
Togo	54.7	53.4	57.6	66.4	58.6	66.3	57.3	58.0	55.1	52.3	50.3
Uganda	27.0	28.1	30.6	35.3	31.6	30.0	27.9	30.1	25.3	26.8	28.5
Zambia	30.4	26.7	27.6	32.2	36.3	39.3	37.7	41.7	37.7	36.3	38.1
Zimbabwe ²	35.8	45.3	59.5	72.2	55.7	52.6	47.7	42.9	37.1	35.1	30.3
Sub-Saharan Africa	30.4	30.3	30.6	33.0	32.0	30.8	30.5	29.5	27.2	26.8	26.1
<i>Median</i>	36.1	39.8	43.1	43.2	41.3	41.1	41.6	39.6	37.7	39.4	38.5
Excluding Nigeria and South Africa	38.2	40.4	40.8	42.4	42.2	40.7	40.7	38.8	34.8	33.8	33.3
Oil-exporting countries	24.9	27.1	26.3	28.1	24.6	22.5	22.9	21.5	18.3	18.5	17.2
Excluding Nigeria	40.6	48.7	42.6	40.1	39.4	39.2	41.4	38.8	34.3	30.6	28.4
Oil-importing countries	33.8	32.5	33.7	36.6	37.8	38.0	37.4	36.0	33.3	32.0	32.0
Excluding South Africa	37.3	36.8	40.1	43.5	43.5	41.4	40.3	38.8	35.0	34.8	35.0
Middle-income countries	29.7	29.6	29.1	31.3	30.2	29.1	28.8	27.9	25.3	24.9	23.9
Excluding Nigeria and South Africa	41.2	45.1	42.5	43.3	43.7	42.5	43.2	41.8	35.9	34.4	33.1
Low-income countries	33.7	33.5	38.2	41.0	40.0	38.1	37.3	35.3	33.5	33.0	33.6
Excluding low-income countries in fragile situations	30.1	29.7	32.8	37.4	37.5	35.7	33.5	33.6	29.9	28.2	29.7
Countries in fragile situations	40.2	41.7	46.2	45.2	44.2	41.6	42.6	39.9	40.2	39.2	38.0
CFA franc zone	36.1	39.0	40.8	38.5	39.8	40.4	39.9	40.3	36.7	35.1	33.2
CEMAC	35.0	40.9	41.8	39.2	39.4	40.1	41.7	43.0	39.5	35.2	32.1
WAEMU	37.3	37.1	39.8	37.7	40.3	40.8	38.0	38.0	34.7	35.0	33.9
COMESA (SSA members)	36.7	34.1	38.8	42.1	38.9	37.0	36.6	33.9	30.3	30.1	30.0
EAC-5	29.1	29.2	31.7	36.7	34.1	31.7	30.6	28.5	24.7	24.8	25.4
ECOWAS	23.7	22.7	24.7	27.4	24.3	21.6	21.1	21.5	19.9	21.1	20.1
SACU	32.1	30.0	29.5	31.8	33.6	35.7	35.6	34.2	32.3	29.8	29.4
SADC	34.4	35.2	33.6	35.9	37.2	38.4	38.7	36.1	32.9	31.1	31.1

See sources and footnotes on page 78.

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	13.9	13.8	12.3
Benin	-10.7	-9.9	-10.2	-9.9	-11.1	-10.1	-11.0	-8.4	-7.7	-8.0	-6.5
Botswana	9.5	-12.7	-7.3	-4.6	-13.5	-2.3	3.3	-5.7	2.0	-6.4	-6.2
Burkina Faso	-9.5	-5.8	-1.5	-0.0	-3.9	-5.6	-2.0	-2.2	-1.3	-1.9	-2.2
Burundi	-16.4	-14.5	-30.2	-29.0	-32.2	-29.1	-24.4	-21.7	-14.9	-14.3	-13.9
Cabo Verde	-39.0	-39.6	-40.9	-45.1	-36.6	-33.6	-32.5	-30.1	-33.1	-32.8	-33.1
Cameroon	1.9	-1.8	-0.9	-2.5	-1.0	-0.7	-1.4	-1.3	-0.8	-1.3	-1.5
Central African Rep.	-4.0	-7.8	-8.8	-5.7	-6.2	-7.3	-18.5	-16.4	-11.6	-13.8	-13.0
Chad	24.4	4.8	8.0	10.8	7.7	6.6	2.8	0.5	2.2	8.8	9.5
Comoros	-22.9	-28.9	-28.8	-28.6	-33.4	-31.8	-30.9	-28.8	-25.2	-27.1	-24.9
Congo, Dem. Rep. of	0.2	-3.2	2.1	2.3	0.2	6.6	-1.1	-0.8	-0.6	-0.3	2.0
Congo, Rep. of	51.6	26.8	41.9	46.7	43.1	34.5	23.9	-5.1	-18.2	23.8	44.9
Côte d'Ivoire	15.0	17.5	14.5	23.2	11.4	9.6	10.9	9.7	9.2	6.9	6.8
Equatorial Guinea	54.9	40.7	37.8	48.2	47.5	37.8	33.3	17.8	22.1	25.5	22.4
Eritrea	-33.9	-19.9	-19.6	-10.3	-4.6	-5.7	-4.2	-6.4	-3.3	-2.4	-3.0
Ethiopia ¹	-20.6	-15.8	-16.3	-16.6	-16.9	-17.6	-17.9	-20.8	-19.1	-15.6	-14.8
Gabon	41.7	29.8	38.7	46.3	42.1	32.0	27.9	15.4	13.3	15.4	16.2
Gambia, The	-21.3	-22.4	-22.8	-21.2	-22.0	-19.1	-25.4	-29.4	-22.8	-26.5	-27.4
Ghana	-14.9	-8.6	-9.2	-7.7	-10.0	-8.0	-3.6	-8.4	-4.1	-3.2	-1.0
Guinea	2.2	1.8	1.8	-9.3	-3.5	-0.4	-5.0	-7.2	-23.8	-15.6	-8.5
Guinea-Bissau	-6.0	-9.8	-8.2	-0.2	-5.1	-2.9	-4.6	4.4	4.4	3.8	2.9
Kenya	-12.2	-13.4	-15.6	-20.1	-18.5	-18.6	-17.4	-13.1	-11.2	-11.7	-12.5
Lesotho	-37.6	-43.6	-40.8	-37.9	-44.2	-38.5	-37.6	-34.4	-30.6	-34.7	-35.9
Liberia	-33.1	-30.8	-30.1	-33.3	-26.9	-25.2	-31.6	-44.9	-31.3	-29.3	-27.1
Madagascar	-13.4	-19.5	-12.3	-10.1	-11.2	-8.0	-5.1	-3.4	-2.6	-7.1	-7.7
Malawi	-12.8	-10.3	-10.7	-7.9	-11.0	-7.9	-7.4	-7.6	-10.9	-7.8	-7.0
Mali	-4.4	-6.0	-8.6	-2.6	0.9	-1.9	-3.5	-3.6	-4.6	-5.1	-4.6
Mauritius	-15.2	-17.5	-19.5	-20.9	-21.5	-19.0	-18.0	-16.0	-16.9	-19.7	-20.2
Mozambique	-5.5	-11.3	-11.3	-17.1	-26.7	-31.1	-27.7	-28.1	-12.5	-11.6	-29.1
Namibia	-4.0	-14.0	-9.9	-8.8	-16.4	-15.6	-21.5	-25.0	-19.7	-14.5	-12.8
Niger	-6.9	-14.7	-14.2	-14.4	-6.6	-5.6	-8.6	-12.3	-10.4	-12.9	-12.5
Nigeria	15.3	8.5	8.2	7.9	8.5	8.2	3.7	-1.3	-0.1	1.5	1.0
Rwanda	-10.3	-14.2	-13.6	-17.2	-18.8	-15.1	-15.8	-14.9	-15.5	-12.1	-12.9
São Tomé & Príncipe	-35.6	-39.7	-43.2	-44.9	-38.2	-38.2	-36.6	-33.9	-30.1	-32.9	-32.8
Senegal	-18.4	-15.9	-14.9	-17.4	-20.3	-20.1	-18.4	-15.9	-13.4	-12.2	-12.2
Seychelles	-29.5	-37.6	-39.3	-43.0	-38.5	-29.7	-40.3	-34.4	-36.0	-36.3	-36.2
Sierra Leone	-7.5	-14.3	-20.2	-56.9	-24.1	-0.6	-6.8	-18.0	-17.4	-14.8	-11.7
South Africa	-0.6	1.1	2.2	1.6	-1.1	-2.1	-1.7	-0.9	0.3	0.9	0.5
South Sudan	...	...	...	49.1	-19.6	1.9	9.5	-1.3	14.4	9.4	-2.4
Swaziland	-3.5	-3.3	-3.3	-0.9	1.6	4.6	4.9	8.7	5.2	3.9	5.9
Tanzania	-9.8	-10.0	-9.5	-12.2	-13.0	-12.2	-11.4	-9.4	-6.8	-7.1	-8.0
Togo	-14.2	-13.0	-14.3	-22.4	-14.2	-20.1	-19.3	-24.8	-22.3	-20.6	-19.5
Uganda	-8.9	-8.1	-10.9	-11.7	-10.0	-8.3	-8.5	-9.1	-5.4	-6.6	-7.8
Zambia	4.7	6.3	13.7	9.8	6.3	5.9	6.0	-0.3	-0.2	0.1	0.9
Zimbabwe ²	-7.2	-18.8	-18.7	-24.8	-19.3	-19.5	-17.3	-15.2	-9.5	-8.9	-5.8
Sub-Saharan Africa	6.0	2.6	4.5	5.7	3.5	3.0	0.7	-3.1	-2.0	-0.9	-1.2
Median	-8.2	-10.8	-10.5	-9.9	-11.1	-7.9	-7.4	-8.4	-9.5	-7.8	-7.7
Excluding Nigeria and South Africa	5.5	-0.1	3.7	6.8	2.8	1.8	-0.4	-5.4	-4.1	-3.0	-3.0
Oil-exporting countries	22.6	12.6	15.4	18.2	16.0	13.8	8.5	1.4	2.8	5.1	4.5
Excluding Nigeria	38.5	21.0	32.2	38.2	31.8	26.1	19.7	8.4	9.7	12.2	11.8
Oil-importing countries	-4.0	-4.3	-3.2	-3.8	-6.4	-6.4	-6.4	-6.8	-5.3	-4.8	-5.0
Excluding South Africa	-7.5	-9.1	-8.5	-9.3	-11.0	-9.6	-9.5	-10.5	-8.4	-8.1	-8.0
Middle-income countries	8.7	5.5	7.3	8.2	6.7	5.8	3.3	-0.9	0.2	1.3	1.0
Excluding Nigeria and South Africa	14.0	6.9	12.2	15.7	12.4	9.5	6.7	-0.4	0.5	1.4	1.5
Low-income countries	-7.5	-10.2	-9.5	-6.6	-11.3	-9.2	-9.8	-11.2	-9.5	-8.6	-8.8
Excluding low-income countries in fragile situations	-11.3	-11.5	-11.5	-12.9	-14.2	-14.1	-13.8	-14.7	-11.8	-10.7	-11.8
Countries in fragile situations	5.1	-0.1	1.9	8.1	-0.2	2.0	0.2	-3.6	-3.6	-1.6	0.3
CFA franc zone	13.4	7.8	10.4	15.0	12.4	8.4	6.3	0.6	0.4	2.1	2.8
CEMAC	28.3	17.0	21.9	27.4	25.8	19.8	15.0	4.4	3.4	9.1	10.8
WAEMU	-2.0	-1.2	-1.9	0.7	-2.5	-3.4	-2.4	-2.5	-1.9	-2.7	-2.4
COMESA (SSA members)	-9.8	-11.1	-10.0	-11.4	-11.7	-10.3	-11.1	-11.5	-10.2	-9.6	-9.3
EAC-5	-10.8	-11.4	-12.9	-15.9	-15.3	-14.5	-13.8	-11.5	-9.2	-9.6	-10.4
ECOWAS	9.2	5.1	4.9	4.8	5.0	5.0	2.0	-2.4	-1.5	-0.3	-0.3
SACU	-0.6	-0.1	1.2	0.8	-2.3	-2.7	-2.3	-2.0	-0.4	-0.1	-0.5
SADC	3.8	1.7	5.2	5.8	3.3	2.6	0.9	-1.5	0.4	0.8	0.3

See sources and footnotes on page 78.

Table SA20. External Current Account¹
(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	-5.1	-4.8	-4.5
Benin	-6.7	-8.3	-8.2	-7.3	-7.4	-7.4	-8.6	-8.4	-7.2	-8.7	-7.1
Botswana	10.7	-6.3	-2.6	3.1	0.3	8.9	15.4	7.8	11.7	4.5	2.8
Burkina Faso	-10.4	-4.7	-2.2	-1.5	-7.0	-11.3	-8.0	-8.0	-6.8	-7.2	-7.1
Burundi	-7.8	1.7	-12.2	-14.4	-18.6	-19.3	-18.5	-17.7	-13.1	-12.4	-11.8
Cabo Verde	-9.5	-14.6	-12.4	-16.3	-12.6	-4.9	-9.1	-5.0	-3.7	-6.1	-6.0
Cameroon	-1.0	-3.5	-2.8	-3.0	-3.6	-3.9	-4.3	-4.1	-3.6	-3.6	-3.5
Central African Rep.	-5.5	-9.1	-10.2	-7.6	-4.6	-3.0	-5.6	-9.0	-9.1	-9.7	-6.5
Chad	0.4	-8.2	-8.5	-5.8	-7.8	-9.1	-8.9	-12.3	-9.2	-2.0	-2.8
Comoros	-6.3	-6.9	-0.2	-4.9	-7.3	-8.3	-8.0	0.4	-10.1	-9.5	-11.3
Congo, Dem. Rep. of	-0.2	-6.1	-10.5	-5.2	-4.6	-5.2	-4.8	-3.9	-3.4	-4.6	-2.1
Congo, Rep. of	-6.7	-14.1	7.8	-3.2	17.7	1.7	-11.6	-42.9	-70.1	-15.9	2.5
Côte d'Ivoire	1.1	6.6	1.9	10.4	-1.2	-1.4	1.4	-0.6	-1.1	-2.9	-2.8
Equatorial Guinea	13.6	-9.7	-20.2	-5.7	-1.1	-2.5	-4.3	-17.7	-10.5	-8.0	-7.4
Eritrea	-3.1	-7.6	-5.6	0.6	2.3	-0.1	0.6	-2.2	-0.1	0.7	0.3
Ethiopia ²	-8.4	-6.7	-1.4	-2.5	-6.9	-5.9	-6.4	-11.6	-9.9	-8.3	-7.4
Gabon	17.3	4.4	14.9	21.0	17.6	7.0	7.3	-5.7	-10.2	-9.3	-6.7
Gambia, The	-8.5	-12.5	-0.7	-12.3	-7.9	-10.2	-10.8	-15.0	-8.9	-9.4	-12.0
Ghana	-8.1	-5.5	-8.6	-9.0	-11.7	-11.9	-9.5	-7.7	-6.7	-5.8	-5.4
Guinea	-3.9	-5.7	-6.4	-18.4	-20.0	-12.5	-13.4	-15.4	-31.9	-25.0	-21.4
Guinea-Bissau	-3.6	-5.8	-8.3	-1.3	-8.4	-5.0	0.6	2.0	0.9	0.1	-0.6
Kenya	-2.6	-4.4	-5.9	-9.2	-8.4	-8.8	-10.4	-6.8	-5.2	-6.1	-7.0
Lesotho	14.8	1.5	-8.4	-12.9	-8.2	-5.5	-5.2	-4.8	-7.7	-8.5	-9.4
Liberia	-14.0	-23.2	-32.0	-27.4	-21.5	-30.1	-26.9	-35.2	-24.7	-26.7	-31.3
Madagascar	-12.0	-21.1	-9.7	-6.9	-6.9	-5.9	-0.3	-1.9	0.8	-4.7	-5.3
Malawi	-12.9	-10.2	-8.6	-8.6	-9.3	-8.4	-8.4	-9.5	-13.5	-9.1	-8.1
Mali	-7.3	-10.8	-10.7	-5.1	-2.2	-2.9	-4.7	-5.3	-7.1	-7.0	-5.6
Mauritius	-6.3	-7.4	-10.3	-13.8	-7.3	-6.3	-5.7	-4.9	-4.4	-5.8	-6.2
Mozambique	-8.9	-10.9	-16.1	-25.3	-44.7	-42.9	-38.2	-40.3	-38.2	-25.6	-45.8
Namibia	6.7	-1.5	-3.5	-3.0	-5.7	-4.0	-10.8	-12.6	-14.0	-7.3	-6.6
Niger	-9.2	-24.4	-19.8	-22.3	-14.7	-15.0	-15.4	-18.0	-15.5	-18.6	-18.3
Nigeria	14.0	4.7	3.6	2.6	3.8	3.7	0.2	-3.2	0.7	1.9	1.0
Rwanda	-3.3	-7.0	-7.2	-7.4	-11.2	-8.7	-11.8	-13.4	-14.4	-10.2	-11.2
São Tomé & Príncipe	-27.3	-24.7	-22.9	-27.7	-21.9	-13.8	-21.9	-13.0	-6.2	-10.2	-9.9
Senegal	-9.6	-6.7	-4.4	-8.0	-10.9	-10.5	-9.0	-7.5	-5.3	-5.1	-5.2
Seychelles	-13.7	-14.8	-19.4	-23.0	-21.1	-11.9	-23.1	-18.6	-18.4	-15.6	-14.6
Sierra Leone	-6.9	-13.3	-22.7	-65.0	-31.8	-17.5	-18.2	-17.4	-19.7	-21.1	-18.5
South Africa	-4.3	-2.7	-1.5	-2.2	-5.1	-5.9	-5.3	-4.4	-3.3	-2.9	-3.3
South Sudan	...	...	...	18.2	-15.9	-3.9	-1.6	-7.2	4.7	1.7	-12.7
Swaziland	-3.1	-11.2	-8.6	-6.9	3.3	5.3	3.4	10.8	0.7	-1.1	0.2
Tanzania	-6.5	-7.6	-7.7	-10.8	-11.6	-10.6	-10.1	-8.5	-5.6	-5.6	-6.5
Togo	-8.8	-5.6	-6.3	-8.0	-7.5	-13.2	-9.9	-11.1	-9.7	-8.3	-7.3
Uganda	-2.8	-5.7	-8.0	-10.0	-6.8	-7.0	-8.5	-7.1	-4.3	-5.6	-7.2
Zambia	-1.1	6.0	7.5	4.7	5.4	-0.6	2.1	-3.9	-4.4	-3.6	-2.8
Zimbabwe ³	-7.5	-13.7	-12.5	-20.1	-12.9	-15.6	-15.1	-9.3	-4.1	-3.6	-0.8
Sub-Saharan Africa	2.0	-2.4	-0.8	-0.8	-1.8	-2.4	-3.9	-6.1	-4.2	-3.4	-3.6
<i>Median</i>	-6.3	-7.2	-8.1	-7.3	-7.4	-6.3	-8.4	-8.0	-6.8	-7.0	-6.6
Excluding Nigeria and South Africa	-0.4	-6.5	-3.3	-2.1	-3.6	-4.8	-6.3	-8.8	-7.3	-6.3	-6.3
Oil-exporting countries	12.5	0.6	3.6	4.4	4.8	3.4	-0.9	-5.3	-2.1	-0.5	-0.7
Excluding Nigeria	9.1	-7.9	3.6	7.9	7.0	2.7	-3.3	-10.7	-8.7	-5.3	-4.4
Oil-importing countries	-4.3	-4.5	-3.9	-4.7	-7.0	-7.3	-6.8	-6.7	-5.6	-5.3	-5.6
Excluding South Africa	-4.2	-6.0	-6.2	-7.2	-8.6	-8.4	-7.7	-8.1	-6.9	-6.7	-7.0
Middle-income countries	3.6	-1.0	0.7	0.7	0.3	-0.5	-2.5	-4.9	-2.8	-2.1	-2.3
Excluding Nigeria and South Africa	3.3	-5.0	0.0	1.8	1.6	-1.1	-3.8	-7.4	-6.0	-5.0	-4.6
Low-income countries	-6.1	-8.8	-8.4	-8.0	-11.1	-10.2	-9.7	-10.5	-8.9	-8.0	-8.5
Excluding low-income countries in fragile situations	-6.9	-8.0	-7.1	-9.5	-12.4	-11.8	-11.4	-12.5	-9.9	-8.7	-10.1
Countries in fragile situations	-4.0	-6.9	-6.1	-3.4	-5.8	-6.3	-6.1	-8.2	-8.9	-6.5	-4.8
CFA franc zone	-0.2	-4.8	-3.5	-0.7	-1.0	-4.0	-4.5	-8.7	-9.0	-6.3	-5.0
CEMAC	4.6	-5.6	-2.5	0.5	3.4	-1.5	-3.9	-12.2	-13.9	-6.5	-4.0
WAEMU	-5.2	-4.0	-4.6	-2.0	-5.8	-6.6	-5.0	-5.7	-5.3	-6.2	-5.7
COMESA (SSA members)	-4.5	-6.2	-5.6	-6.8	-6.0	-6.6	-6.9	-7.3	-6.1	-6.1	-5.8
EAC-5	-4.0	-5.7	-7.1	-9.9	-9.4	-9.2	-10.2	-8.0	-5.8	-6.2	-7.2
ECOWAS	8.2	2.0	1.1	0.3	0.7	0.7	-1.5	-4.2	-1.7	-1.0	-1.3
SACU	-3.3	-2.9	-1.7	-2.2	-4.9	-5.1	-4.5	-4.0	-2.9	-2.7	-3.1
SADC	-1.8	-4.9	-1.3	-1.4	-3.2	-4.4	-5.5	-6.4	-4.4	-4.1	-4.5

See sources and footnotes on page 78.

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	0.5
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	-3.7	-0.9	0.4
Burkina Faso	1.6	1.1	0.4	0.4	2.3	3.6	2.3	2.0	2.5	2.7	2.8
Burundi	0.1	0.0	0.0	0.2	0.0	2.6	2.4	1.5	1.2	1.1	1.1
Cabo Verde	9.4	7.0	6.7	5.6	3.8	3.5	6.8	7.0	6.7	6.5	6.4
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	2.6	3.6	3.2
Chad	3.5	2.7	2.0	1.5	3.4	2.8	-3.4	4.3	2.0	2.8	2.9
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	5.1	3.0	2.4	2.6	2.7
Congo, Rep. of	24.2	20.8	17.8	20.6	-2.1	18.0	18.8	31.8	32.7	12.8	8.6
Côte d'Ivoire	1.8	1.6	1.3	1.1	1.2	1.3	1.2	1.5	1.7	1.8	2.0
Equatorial Guinea	-9.3	-12.1	-20.4	-12.8	-15.7	-9.8	-5.3	-9.8	0.6	-0.9	-1.1
Eritrea	1.4	4.9	4.3	1.5	1.3	1.3	1.1	1.1	1.0	0.9	0.9
Ethiopia ¹	1.4	0.7	1.0	2.0	0.6	2.6	2.6	3.4	3.3	4.4	5.2
Gabon	4.2	5.2	3.5	4.1	3.8	5.1	6.0	6.9	8.8	10.0	9.9
Gambia, The	9.6	8.1	9.0	6.7	11.2	9.5	9.2	8.2	7.5	8.0	8.3
Ghana	2.9	11.3	7.9	8.1	7.9	6.7	8.7	8.1	8.1	6.5	6.0
Guinea	4.0	2.1	2.2	5.6	8.8	1.6	0.7	3.0	18.8	16.9	12.6
Guinea-Bissau	1.2	2.1	3.3	2.2	0.7	1.9	2.5	1.7	1.5	1.2	1.1
Kenya	0.5	0.2	0.4	3.3	2.3	1.7	2.1	1.9	2.2	2.2	2.4
Lesotho	2.2	3.5	0.8	2.1	2.0	1.9	4.4	4.8	3.2	3.3	3.3
Liberia	5.8	13.4	22.7	22.8	19.3	22.1	13.7	12.6	11.0	11.2	13.6
Madagascar	3.7	8.1	3.9	7.8	7.8	5.2	2.9	4.5	4.5	4.4	4.4
Malawi	1.8	0.9	2.3	0.8	1.4	1.7	0.8	1.8	3.1	3.0	2.5
Mali	1.8	7.3	3.7	4.2	3.1	2.3	1.0	1.5	1.4	1.4	1.2
Mauritius	1.6	2.5	127.6	-9.0	49.5	10.1	4.4	2.9	107.0	98.7	89.4
Mozambique	3.8	8.0	9.8	27.1	37.1	38.6	29.1	26.1	27.4	15.6	32.5
Namibia	6.3	5.7	7.0	7.0	8.6	6.5	4.7	8.1	3.3	3.7	3.7
Niger	2.3	13.4	17.5	16.5	12.1	8.1	8.9	6.9	6.5	9.5	10.5
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	2.9	3.3	4.2
São Tomé & Príncipe	16.8	8.1	25.6	13.5	8.6	1.5	6.6	8.1	5.9	14.1	3.8
Senegal	1.6	2.0	2.0	2.0	1.5	1.9	2.5	2.8	1.6	2.5	2.9
Seychelles	11.8	20.2	19.2	19.5	23.8	12.2	16.1	10.8	6.4	5.3	4.7
Sierra Leone	3.9	4.5	9.2	32.3	19.0	7.3	7.7	6.2	13.4	14.6	14.6
South Africa	1.1	2.1	1.0	1.1	0.4	0.5	-0.5	-1.3	-0.4	-0.4	-0.2
South Sudan	...	...	...	-0.4	-0.5	-3.8	-0.1	0.1	-1.5	0.4	14.0
Swaziland	1.8	1.6	2.9	2.1	2.0	0.7	0.6	1.1	0.8	0.7	0.7
Tanzania	3.5	3.7	4.0	4.5	4.4	4.5	3.8	3.4	3.0	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	3.7	2.1	2.1	3.0	4.0
Zambia	5.9	2.8	3.1	4.7	9.5	6.0	11.8	5.5	7.3	6.3	6.1
Zimbabwe ²	0.7	1.3	1.2	3.1	2.5	2.5	3.0	2.5	1.7	1.1	1.0
Sub-Saharan Africa	1.9	2.6	2.4	2.0	1.8	1.3	1.6	2.0	2.6	2.6	2.7
Median	2.2	2.5	2.9	3.1	3.1	2.9	2.9	2.8	2.5	3.0	3.2
Excluding Nigeria and South Africa	2.4	3.1	4.2	2.7	3.0	2.0	3.3	4.6	4.9	4.8	5.1
Oil-exporting countries	1.9	2.4	0.1	0.7	-0.9	-0.9	0.5	2.0	0.8	1.2	1.0
Excluding Nigeria	1.5	2.6	-2.9	-1.6	-5.3	-4.8	0.3	6.2	0.7	2.0	1.9
Oil-importing countries	1.9	2.8	4.1	3.0	3.9	3.2	2.6	2.0	3.9	3.5	3.9
Excluding South Africa	2.9	3.3	7.2	4.9	6.9	5.2	4.7	4.0	6.2	5.8	6.2
Middle-income countries	1.6	2.5	2.0	1.4	0.8	0.4	1.0	1.4	2.2	2.1	2.0
Excluding Nigeria and South Africa	2.0	3.1	4.0	1.2	0.9	-0.3	2.7	5.1	5.5	5.4	4.9
Low-income countries	3.0	3.1	4.5	5.0	6.1	5.4	4.2	4.0	4.2	4.2	5.3
Excluding low-income countries in fragile situations	2.9	3.4	3.6	6.0	6.6	7.1	5.9	5.0	4.4	4.5	6.2
Countries in fragile situations	4.7	3.9	5.9	5.0	4.0	3.9	3.1	3.9	4.6	3.8	3.6
CFA franc zone	2.5	2.7	1.5	2.0	0.0	2.7	2.5	3.3	3.9	3.3	3.2
CEMAC	3.1	2.2	0.1	1.9	-2.0	2.6	3.0	4.7	6.4	4.3	3.9
WAEMU	1.9	3.2	3.1	2.2	2.3	2.8	2.1	2.2	2.1	2.6	2.8
COMESA (SSA members)	2.6	1.7	9.8	3.1	6.6	3.8	4.0	2.9	7.2	6.9	6.8
EAC-5	2.3	2.2	2.0	3.7	3.4	3.2	3.1	2.5	2.5	2.6	3.1
ECOWAS	2.2	3.1	2.2	2.7	2.1	1.7	1.3	1.2	2.0	2.0	1.8
SACU	1.3	2.2	1.2	1.5	0.9	0.8	-0.2	-0.7	-0.4	-0.2	-0.0
SADC	1.5	2.5	3.1	1.4	2.0	0.6	1.5	2.4	2.8	2.8	3.1

See sources and footnotes on page 78.

Table SA22. Real Effective Exchange Rates¹
(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	293.2
Benin	119.3	123.1	115.1	114.3	112.3	114.0	112.7	100.5	100.6
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	110.5	105.2
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	97.4
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	125.5
Côte d'Ivoire	117.1	121.9	114.6	116.8	112.1	117.1	118.2	113.1	113.5
Equatorial Guinea	156.6	179.6	177.3	183.7	176.7	184.2	189.1	174.0	177.0
Eritrea	107.0	164.5	183.7	203.1	240.2	278.8	324.6	416.7	498.1
Ethiopia	100.1	115.0	98.4	103.3	122.6	124.1	127.1	145.6	148.7
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	50.0
Ghana	108.9	99.5	106.2	100.9	94.5	95.1	73.7	74.8	85.3
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	125.5	142.8	147.8	153.1	159.9	166.0
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	107.3
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	112.4	113.0	115.0	110.9	108.9
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	165.5
Rwanda	77.0	90.7	88.4	85.3	87.2	86.0	81.8	88.4	85.8
São Tomé & Príncipe	94.1	117.4	114.2	127.5	133.9	146.6	156.8	157.9	168.3
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	108.2	98.4
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	104.6
Uganda	89.5	92.9	86.5	82.9	93.2	94.3	96.1	91.3	89.0
Zambia	149.4	155.6	164.6	160.3	165.6	171.6	164.7	149.6	145.4
Zimbabwe	...	...	...	...	...	...	...	...	...
Sub-Saharan Africa	107.0	114.2	115.3	114.8	120.0	120.7	121.5	121.4	116.3
<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	102.4	118.9	106.6	106.4	112.2	114.8	114.5	115.2	114.9
Oil-exporting countries	129.0	140.8	147.3	148.1	161.6	171.5	181.7	179.8	168.5
Excluding Nigeria	137.7	167.6	158.5	160.5	166.8	174.6	180.0	176.8	176.0
Oil-importing countries	96.4	101.5	99.8	98.6	99.9	96.7	93.6	94.2	91.7
Excluding South Africa	94.0	107.5	94.6	94.1	99.7	101.2	99.9	101.3	101.1
Middle-income countries	114.5	117.6	126.2	125.4	129.6	129.9	130.2	129.1	123.1
Excluding Nigeria and South Africa	122.3	134.8	133.3	132.6	136.0	139.1	136.3	134.6	137.3
Low-income countries	81.4	101.0	80.1	80.3	87.7	89.6	91.4	94.0	91.4
Excluding low-income countries in fragile situations	87.9	94.5	86.1	86.0	96.4	99.0	100.7	101.7	99.1
Countries in fragile situations	85.1	119.6	84.0	84.9	86.5	88.5	90.4	93.2	91.4
CFA franc zone	115.3	123.2	116.1	116.4	113.9	117.2	119.1	113.4	114.0
CEMAC	117.7	128.3	121.7	121.1	119.2	123.0	126.0	121.2	123.3
WAEMU	113.2	118.7	111.2	112.4	109.3	112.2	113.2	106.9	106.4
COMESA (SSA members)	91.6	117.6	93.4	93.6	102.8	104.2	105.8	111.5	111.4
EAC-5	91.2	98.2	94.7	90.0	102.0	106.1	108.5	108.1	107.6
ECOWAS	119.6	124.0	130.8	130.8	140.4	148.2	153.1	151.4	143.5
SACU	99.7	94.3	108.4	106.3	101.2	90.4	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 78.

Table SA23. Nominal Effective Exchange Rates¹*(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	161.6
Burundi	57.0	52.2	52.6	50.5	46.2	44.4	45.8	50.9	49.6
Cabo Verde	105.1	105.8	103.3	104.4	102.3	106.2	107.8	106.1	107.5
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	115.1
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	59.6	62.1
Ethiopia	78.7	58.7	48.0	39.3	39.1	37.6	36.8	39.2	38.1
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	28.4
Ghana	45.2	29.4	29.1	26.4	23.4	21.6	14.9	13.0	12.9
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	84.8	84.5
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	119.3
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	119.0
Nigeria	67.4	57.9	56.9	53.5	54.5	55.0	55.7	51.8	42.3
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	44.5
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	123.6
Uganda	82.3	72.6	67.0	57.2	59.4	59.2	60.3	54.3	52.7
Zambia	65.7	54.8	55.0	52.2	52.1	52.0	47.7	40.6	34.0
Zimbabwe	...	...	...	...	...	...	...	...	...
Sub-Saharan Africa	68.2	59.0	58.5	55.3	54.4	52.6	50.8	48.4	42.9
<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	61.2	55.8	51.9	48.7	48.4	48.0	46.4	44.8	42.0
Oil-exporting countries	61.1	55.4	53.2	50.6	51.3	51.8	52.3	48.8	40.6
Excluding Nigeria	47.8	49.8	44.9	43.9	43.8	44.4	44.4	41.8	36.9
Oil-importing countries	72.9	61.1	62.0	58.3	56.2	52.5	49.1	47.5	44.1
Excluding South Africa	65.3	56.9	53.4	49.5	49.2	48.3	46.3	45.0	43.0
Middle-income countries	71.8	61.9	62.8	59.8	58.6	56.2	53.9	50.8	44.2
Excluding Nigeria and South Africa	65.9	61.9	59.0	56.4	55.9	55.3	52.2	49.2	45.9
Low-income countries	55.7	48.8	44.0	40.4	40.3	40.0	39.9	39.6	37.4
Excluding low-income countries in fragile situations	75.5	66.5	59.2	52.9	53.7	53.6	53.6	52.3	49.5
Countries in fragile situations	52.6	48.1	44.8	43.6	42.4	42.3	42.3	42.4	40.8
CFA franc zone	114.5	119.6	114.5	116.0	112.7	116.9	119.8	114.6	117.1
CEMAC	113.7	118.4	113.5	114.8	111.1	114.6	115.9	110.3	112.9
WAEMU	115.2	120.6	115.3	116.9	114.1	119.0	123.3	118.5	120.9
COMESA (SSA members)	54.5	46.1	42.8	38.5	39.0	38.1	37.4	37.5	35.7
EAC-5	75.7	69.9	66.2	58.4	61.3	61.7	61.6	59.2	57.2
ECOWAS	71.9	62.5	60.9	57.7	57.8	58.2	57.3	53.6	46.2
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 78.

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	44.7	35.4	32.8
Benin	20.2	15.0	17.0	15.8	15.7	17.3	18.4	20.9	21.4	24.8	25.4
Botswana	3.6	13.5	14.2	12.4	13.6	12.2	11.6	11.3	15.6	14.2	12.4
Burkina Faso	29.4	25.6	26.2	21.7	22.9	22.1	22.0	24.2	24.1	23.7	23.1
Burundi	120.2	21.2	22.4	24.0	22.6	21.0	18.9	18.2	16.7	27.4	37.4
Cabo Verde	46.0	45.5	51.2	53.2	70.0	81.4	82.6	95.1	92.9	95.3	91.7
Cameroon	19.6	5.5	6.2	7.0	9.0	12.5	16.2	21.1	21.8	25.7	27.6
Central African Rep.	61.0	9.0	9.0	8.0	9.9	15.0	21.4	20.1	17.9	17.1	15.3
Chad	23.4	27.4	24.5	20.6	20.5	21.8	27.0	24.5	25.8	28.6	27.8
Comoros	73.0	51.9	48.9	44.9	41.4	18.7	19.4	24.1	28.4	27.0	25.5
Congo, Dem. Rep. of	86.0	67.1	23.2	18.9	17.9	15.9	13.7	12.5	11.6	11.2	10.9
Congo, Rep. of	99.6	58.8	19.7	21.2	25.9	32.1	35.1	78.2	87.4	95.7	95.8
Côte d'Ivoire	67.6	52.9	47.0	48.1	29.1	27.2	24.5	29.2	27.3	32.1	32.7
Equatorial Guinea	2.0	4.5	7.9	5.5	7.5	6.4	4.8	8.5	10.1	15.4	22.1
Eritrea	60.0	49.1	45.8	35.8	29.1	25.2	22.1	21.5	19.2	19.3	19.7
Ethiopia ¹	37.2	14.7	18.8	24.4	20.6	23.5	25.2	34.9	34.0	34.2	33.1
Gabon	33.1	20.1	17.0	15.4	16.6	24.2	25.3	33.3	35.6	45.1	48.4
Gambia, The	83.7	41.0	39.7	43.0	41.3	43.8	53.9	55.9	52.3	49.8	50.4
Ghana	24.1	19.6	19.4	19.3	21.8	24.9	35.8	42.8	38.5	36.0	33.9
Guinea	61.9	47.7	45.9	53.3	17.9	18.8	20.8	21.4	22.8	24.2	31.4
Guinea-Bissau	161.6	128.7	36.4	24.5	27.3	25.7	22.7	23.3	21.5	20.4	20.2
Kenya	25.2	20.9	21.5	22.4	21.1	19.3	22.8	24.7	25.4	28.1	27.6
Lesotho	41.3	33.8	28.2	25.9	28.1	31.4	35.3	38.0	41.1	34.9	33.8
Liberia	511.9	148.0	10.7	10.7	10.3	11.7	17.9	25.9	32.3	38.3	42.7
Madagascar	46.0	26.0	23.5	21.6	22.8	22.5	22.7	26.0	25.6	28.9	31.6
Malawi	42.2	12.9	12.4	11.4	20.1	26.6	30.0	27.8	32.6	30.6	30.4
Mali	27.9	20.9	21.4	19.0	22.2	22.2	19.5	22.2	23.7	24.3	24.6
Mauritius	11.9	11.0	11.9	12.7	13.2	16.1	15.7	16.3	14.7	13.1	11.9
Mozambique	46.6	36.8	38.4	33.7	33.2	47.0	52.4	66.6	87.1	81.1	71.1
Namibia	4.7	4.9	4.3	6.4	7.8	7.9	7.6	13.0	17.5	16.5	17.2
Niger	31.2	19.6	16.9	15.5	17.1	18.2	20.5	27.2	30.4	33.1	33.9
Nigeria	11.4	3.5	3.2	3.5	3.8	2.6	2.6	3.1	4.0	6.1	5.4
Rwanda	36.3	13.7	13.5	15.2	14.5	20.4	22.8	26.9	34.4	37.0	38.9
São Tomé & Príncipe	207.5	72.4	79.5	78.0	81.0	71.1	69.6	86.0	79.6	74.2	71.7
Senegal	28.7	28.2	27.2	27.8	31.2	33.6	37.4	40.2	40.2	48.1	44.9
Seychelles	61.5	87.6	49.3	48.1	48.3	39.2	37.3	35.3	31.8	31.0	29.6
Sierra Leone	71.4	28.2	30.4	32.4	25.8	21.3	22.5	29.4	36.8	43.4	46.8
South Africa	7.2	7.6	9.5	10.0	14.1	14.4	15.3	12.9	19.0	18.0	18.3
South Sudan	...	...	...	...	...	...	...	...	...	...	...
Swaziland	12.2	9.8	7.9	7.2	7.1	7.7	7.6	9.4	9.3	11.4	13.6
Tanzania	26.7	17.4	19.3	21.1	21.7	22.8	23.6	27.2	28.0	28.0	28.6
Togo	74.5	52.6	18.0	12.9	13.3	14.3	17.1	21.1	19.7	20.8	22.6
Uganda	27.1	12.2	13.4	14.2	14.7	16.2	15.2	19.5	21.3	25.1	27.2
Zambia	41.6	9.0	7.3	8.0	13.7	13.6	19.4	33.9	38.0	33.8	35.9
Zimbabwe ²	55.1	64.8	58.4	47.3	42.9	41.2	39.6	40.6	42.1	39.8	37.1
Sub-Saharan Africa	19.9	14.0	12.5	12.5	13.5	14.0	14.9	17.3	20.9	21.8	21.2
Median	39.2	21.1	20.2	20.0	20.5	21.5	22.3	25.3	26.6	28.3	30.0
Excluding Nigeria and South Africa	35.9	24.3	20.9	20.3	19.8	21.9	24.0	29.5	31.3	31.3	31.0
Oil-exporting countries	16.9	8.6	7.4	7.6	7.8	8.1	8.7	10.9	14.1	15.9	14.7
Excluding Nigeria	29.1	19.1	17.1	16.1	16.7	20.9	23.9	32.7	38.7	35.7	34.8
Oil-importing countries	22.1	17.7	16.1	16.2	17.9	19.0	20.5	22.5	25.5	25.5	25.6
Excluding South Africa	38.6	26.5	22.6	22.3	21.2	22.3	24.0	28.4	29.0	29.8	29.8
Middle-income countries	14.8	10.7	10.3	10.5	11.8	12.0	12.8	14.6	18.5	19.5	18.8
Excluding Nigeria and South Africa	29.3	21.3	19.3	18.8	18.6	21.0	24.0	30.8	33.3	32.6	32.0
Low-income countries	45.9	28.6	23.6	22.8	21.7	23.2	23.8	27.9	28.9	29.6	29.8
Excluding low-income countries in fragile situations	31.4	18.0	19.9	21.2	20.6	23.6	24.9	31.5	32.7	33.3	32.9
Countries in fragile situations	66.9	46.8	31.3	28.7	24.5	24.3	23.9	26.9	27.0	28.9	29.6
CFA franc zone	37.8	26.6	21.7	20.1	19.0	20.8	21.9	28.1	28.8	33.0	33.7
CEMAC	30.8	17.7	13.2	12.2	14.0	17.3	19.6	28.3	30.3	35.6	37.6
WAEMU	45.0	35.5	30.8	29.1	24.6	24.5	24.2	27.9	27.6	31.2	31.1
COMESA (SSA members)	39.7	24.6	20.0	20.0	19.9	20.2	21.6	26.1	26.7	27.7	27.8
EAC-5	28.5	17.6	18.7	19.9	19.7	19.9	21.6	24.5	25.8	28.1	28.6
ECOWAS	21.5	11.7	9.4	9.5	8.5	7.9	8.0	9.7	11.7	14.3	13.4
SACU	7.3	7.9	9.7	10.0	13.9	14.1	15.0	13.0	18.8	17.9	18.0
SADC	16.0	14.6	13.6	13.6	16.5	18.1	19.8	21.0	26.1	24.0	23.7

See sources and footnotes on page 78.

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	144.9	189.7	186.8	170.8	100.0	84.9	104.4	103.6
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	103.6	103.4	102.3
Burkina Faso	63.4	56.0	39.9	47.2	43.1	35.5	40.7	44.1	43.9	44.0
Burundi	116.1	111.2	168.7	121.9	110.2	138.2	79.3	101.5	101.2	102.5
Cabo Verde	143.0	123.4	143.7	153.6	137.2	128.2	96.5	98.7	98.8	98.0
Cameroon	115.6	91.3	101.9	112.6	111.0	102.9	88.7	70.5	68.6	66.8
Central African Rep.	60.1	64.8	64.3	64.8	77.3	84.2	110.4	137.2	121.5	121.6
Chad	178.1	184.2	235.1	288.7	316.1	300.9	157.4	146.6	182.9	179.7
Comoros	107.8	90.5	98.8	140.3	115.0	97.7	100.7	155.0	153.4	169.6
Congo, Dem. Rep. of	635.0	582.2	686.1	573.4	544.8	594.1	597.4	601.2	624.1	633.0
Congo, Rep. of	125.9	87.1	132.7	122.3	140.4	136.7	81.6	72.3	100.8	106.7
Côte d'Ivoire	87.5	115.3	134.3	122.9	125.2	135.8	146.3	181.7	160.2	155.1
Equatorial Guinea	187.9	230.5	275.4	270.1	248.3	203.9	110.3	98.6	104.3	85.2
Eritrea	39.7	25.0	25.2	25.4	25.5	25.5	25.5	25.5	25.5	25.5
Ethiopia ¹	57.7	70.4	91.8	117.0	97.5	103.3	103.7	104.6	108.7	105.5
Gabon	134.2	121.2	148.5	180.9	179.0	162.5	89.6	80.4	92.1	90.4
Gambia, The	102.8	76.2	65.0	76.8	89.1	78.0	62.6	72.7	60.6	63.8
Ghana	148.5	204.6	249.0	291.6	272.9	253.1	212.6	215.0	199.9	185.8
Guinea	79.9	73.2	82.3	97.9	105.6	110.6	123.6	130.8	126.5	133.9
Guinea-Bissau	62.6	46.4	53.4	54.4	53.2	59.6	121.7	101.2	124.3	124.1
Kenya	82.3	95.7	94.9	75.0	75.4	76.8	93.5	91.5	91.2	91.6
Lesotho	154.3	119.9	119.9	117.5	119.2	118.7	129.8	124.7	115.4	110.4
Liberia	141.7	137.4	194.6	149.1	164.6	148.1	109.7	126.3	141.9	121.0
Madagascar	125.1	109.3	141.7	175.0	216.3	244.4	226.5	279.1	264.8	256.3
Malawi	78.5	89.1	94.2	80.6	77.9	79.7	81.7	82.0	74.9	77.6
Mali	157.7	190.0	207.4	300.6	253.1	268.5	306.7	357.0	338.6	330.3
Mauritius	105.8	111.6	107.2	103.2	104.2	102.9	119.9	122.9	124.8	122.8
Mozambique	107.7	104.4	117.9	110.1	110.2	108.6	106.7	108.7	111.1	109.2
Namibia	102.9	120.1	131.6	136.1	153.7	157.8	150.5	126.7	126.7	126.7
Niger	120.6	164.6	189.9	179.0	173.4	140.3	129.3	141.1	136.7	140.1
Nigeria	136.6	129.8	142.9	161.2	162.8	157.9	116.0	108.8	115.1	114.2
Rwanda	94.4	108.5	127.7	131.5	150.5	145.9	166.5	147.1	164.1	156.1
São Tomé & Príncipe	119.3	75.0	82.5	116.0	87.7	95.2	79.8	105.7	99.0	108.8
Senegal	103.7	124.2	124.0	117.8	108.6	110.8	119.7	116.4	123.0	123.1
Seychelles	98.8	94.8	95.2	96.1	96.2	96.4	94.7	92.2	92.6	92.3
Sierra Leone	103.7	98.2	104.9	100.7	97.3	81.7	63.5	69.2	69.8	67.1
South Africa	118.2	132.5	139.9	143.1	142.0	140.0	144.8	146.9	149.1	146.8
South Sudan	...	...	...	...	...	...	...	...	...	...
Swaziland	102.8	116.1	102.8	112.1	118.9	123.9	122.9	134.8	123.4	126.2
Tanzania	59.8	83.3	89.0	92.0	89.5	86.6	86.6	87.9	85.4	84.8
Togo	95.2	95.3	98.6	99.4	91.5	101.2	84.6	84.9	82.8	82.1
Uganda	83.5	98.4	81.8	87.2	89.3	96.3	103.1	122.1	110.2	107.8
Zambia	184.1	171.0	233.4	214.0	201.1	195.9	189.7	188.0	199.6	206.7
Zimbabwe ²	85.2	126.4	133.4	135.6	133.4	130.8	131.7	137.9	143.8	148.4
Sub-Saharan Africa	129.7	134.1	149.9	161.2	160.6	156.6	136.3	136.9	140.2	137.3
<i>Median</i>	106.8	110.3	121.9	119.9	117.0	121.3	110.0	112.6	115.3	112.3
Excluding Nigeria and South Africa	133.8	137.6	161.8	171.9	168.5	163.2	146.9	148.7	149.0	145.8
Oil-exporting countries	137.3	129.7	147.2	169.9	170.0	161.2	112.0	102.2	110.7	109.6
Excluding Nigeria	138.6	129.4	157.3	189.3	186.8	169.6	100.7	86.0	101.7	99.8
Oil-importing countries	124.6	137.1	151.8	154.4	152.7	152.4	156.0	160.6	159.0	155.9
Excluding South Africa	131.3	141.1	163.7	164.0	160.5	160.5	162.8	168.0	164.7	161.1
Middle-income countries	125.7	130.1	144.3	157.6	157.6	151.0	125.3	122.7	127.4	125.1
Excluding Nigeria and South Africa	123.1	127.9	151.0	167.8	164.6	150.9	120.9	118.8	121.4	119.2
Low-income countries	150.2	151.7	178.4	178.0	174.5	180.6	178.9	185.2	184.7	180.3
Excluding low-income countries in fragile situations	80.4	99.6	110.4	112.0	104.8	103.8	104.7	107.1	106.6	104.1
Countries in fragile situations	194.1	191.2	228.9	231.4	233.8	248.5	249.5	267.6	265.5	260.7
CFA franc zone	124.9	138.2	161.7	171.5	164.3	156.0	130.5	137.5	136.2	133.0
CEMAC	142.4	136.6	167.8	185.9	185.1	166.6	101.9	88.6	97.6	93.8
WAEMU	106.1	139.7	155.3	155.5	142.6	145.3	154.4	173.9	163.0	158.6
COMESA (SSA members)	162.5	154.2	181.5	170.8	169.4	177.3	182.4	183.3	183.7	180.9
EAC-5	76.7	93.4	93.8	87.0	87.5	88.6	96.9	98.6	96.4	95.5
ECOWAS	130.7	135.0	150.7	168.1	166.4	160.0	126.7	128.3	130.9	127.8
SACU	116.8	130.3	137.3	140.8	140.7	138.8	143.1	143.9	145.9	143.7
SADC	135.0	142.0	156.3	164.5	166.4	166.5	160.6	162.3	164.1	161.9

See sources and footnotes on page 78.

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	10.4	8.8	6.2	5.2
Benin	0.1	0.1	0.5	0.5	0.4	0.3	0.4	3.6	2.9	0.9	0.1
Botswana	20.7	15.9	11.5	10.9	10.0	10.6	12.9	13.4	11.4	12.1	13.0
Burkina Faso	4.9	6.0	3.6	3.2	2.5	1.7	0.9	0.8	0.8	0.7	0.8
Burundi	3.6	4.4	4.1	3.3	3.5	3.5	3.9	2.1	1.7	2.8	3.1
Cabo Verde	3.2	4.1	3.4	3.7	4.0	4.5	7.1	5.8	6.5	6.6	6.9
Cameroon	3.6	6.9	5.3	4.7	4.5	4.2	4.9	6.0	3.7	3.9	3.9
Central African Rep.	4.2	4.6	4.1	4.3	5.4	3.7	6.1	4.5	4.2	5.7	5.6
Chad	2.1	1.4	1.3	1.9	2.5	2.3	2.7	1.1	0.0	-0.1	0.3
Comoros	6.3	6.4	5.7	6.3	6.7	5.9	8.4	9.1	7.0	6.7	6.6
Congo, Dem. Rep. of	0.3	1.1	1.1	1.3	1.5	1.4	1.6	1.2	0.5	0.5	1.4
Congo, Rep. of	3.7	6.3	5.8	10.5	8.9	6.6	8.0	3.2	2.0	2.2	2.6
Côte d'Ivoire	2.6	3.6	4.6	4.3	3.9	4.2	3.3	3.5	2.7	3.0	3.6
Equatorial Guinea	6.3	4.1	3.1	4.0	5.7	6.1	6.0	3.9	0.2	0.0	0.2
Eritrea	1.0	2.2	2.4	2.8	4.1	4.0	4.7	3.5	3.5	4.3	5.2
Ethiopia ¹	2.3	1.9	2.0	2.6	2.0	1.8	1.5	2.0	2.2	1.9	2.1
Gabon	4.5	5.4	4.8	4.5	3.6	4.6	5.9	5.6	1.8	2.6	3.1
Gambia, The	3.7	5.2	5.1	5.1	6.0	4.8	3.0	2.3	1.6	2.0	2.4
Ghana	2.7	2.7	2.9	2.9	2.9	2.9	2.5	2.6	2.6	3.0	3.1
Guinea	0.5	2.4	1.2	3.2	2.9	2.9	3.3	1.1	1.3	1.6	2.2
Guinea-Bissau	5.2	7.1	5.6	10.5	7.3	6.7	10.2	11.2	9.4	10.2	10.9
Kenya	2.9	3.4	2.9	2.8	3.7	3.9	5.3	5.5	4.9	5.3	4.8
Lesotho	4.9	5.8	4.7	4.2	5.4	5.7	6.0	5.9	4.5	4.4	4.7
Liberia	0.4	2.2	2.3	2.3	2.2	1.9	2.0	2.5	2.7	2.9	3.2
Madagascar	2.5	3.6	2.6	3.6	3.1	2.3	2.7	2.8	3.2	3.2	3.1
Malawi	1.4	0.6	1.5	1.0	1.1	2.0	3.0	3.2	2.9	3.1	3.3
Mali	4.2	4.7	4.2	4.2	3.0	2.9	2.3	1.7	0.6	0.1	0.1
Mauritius	3.8	4.5	4.2	4.4	5.0	5.3	6.9	7.8	8.5	8.6	8.3
Mozambique	4.2	5.0	3.4	2.3	2.6	3.1	3.5	3.7	3.2	2.7	2.0
Namibia	2.0	3.9	3.0	2.9	2.8	2.1	1.8	2.9	2.4	2.6	2.6
Niger	3.2	2.8	3.0	2.2	3.1	3.3	4.6	3.3	3.2	2.8	3.0
Nigeria	10.7	7.2	4.3	4.8	6.9	6.0	5.6	7.2	6.6	6.2	5.9
Rwanda	3.5	6.5	5.2	6.5	5.6	4.8	3.9	3.6	4.1	3.9	3.7
São Tomé & Príncipe	4.6	6.6	3.9	4.6	3.5	3.3	4.1	4.6	3.5	3.7	3.7
Senegal	3.5	4.9	3.8	3.4	3.4	3.7	3.9	4.2	4.1	4.0	3.9
Seychelles	0.8	2.2	2.6	2.6	2.7	3.2	3.9	4.3	4.0	3.7	3.7
Sierra Leone	3.8	3.4	1.6	1.8	2.2	2.0	3.5	3.8	3.0	2.7	2.9
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	0.2	0.4
Swaziland	2.5	4.0	2.9	2.3	3.3	3.8	4.1	3.2	3.1	2.6	2.9
Tanzania	4.8	4.6	4.1	3.5	3.6	4.0	4.3	4.2	4.0	4.0	4.1
Togo	3.2	4.6	3.4	4.4	1.8	2.2	2.8	2.9	2.2	2.4	2.6
Uganda	5.6	4.9	3.9	3.7	4.5	4.8	5.1	5.4	5.1	4.8	4.4
Zambia	1.7	3.8	3.0	2.8	2.7	2.6	3.4	3.4	2.5	2.0	2.3
Zimbabwe ²	0.2	0.9	0.6	0.6	0.6	0.5	0.5	0.7	0.6	0.5	0.4
Sub-Saharan Africa	5.1	5.1	4.1	4.6	5.2	4.9	5.2	5.8	5.1	4.8	4.7
<i>Median</i>	3.5	4.4	3.5	3.6	3.5	3.7	3.9	3.6	3.1	3.0	3.1
Excluding Nigeria and South Africa	3.6	4.1	3.8	4.3	4.2	4.1	4.6	4.7	3.9	3.7	3.6
Oil-exporting countries	7.3	6.4	4.4	5.3	6.7	6.0	6.0	7.3	6.4	5.7	5.4
Excluding Nigeria	3.7	4.8	4.7	6.2	6.4	5.9	6.9	7.5	5.8	4.7	4.3
Oil-importing countries	3.5	4.2	3.8	4.0	4.1	4.1	4.5	4.6	4.3	4.2	4.2
Excluding South Africa	3.6	3.8	3.4	3.3	3.2	3.3	3.6	3.6	3.3	3.3	3.4
Middle-income countries	5.5	5.5	4.3	4.9	5.8	5.5	5.8	6.7	5.9	5.6	5.3
Excluding Nigeria and South Africa	4.1	4.7	4.4	5.1	5.3	5.1	6.1	6.4	5.1	4.7	4.5
Low-income countries	2.9	3.2	2.7	3.0	2.7	2.6	2.7	2.6	2.4	2.3	2.4
Excluding low-income countries in fragile situations	3.8	3.8	3.2	3.1	3.0	3.1	3.1	3.3	3.1	2.8	2.8
Countries in fragile situations	2.1	3.0	2.9	3.9	3.2	2.8	2.9	2.1	1.6	1.8	2.3
CFA franc zone	3.6	4.6	4.0	4.3	4.1	4.0	4.1	3.7	2.3	2.4	2.6
CEMAC	4.1	5.2	4.3	5.0	5.0	4.8	5.4	4.5	2.2	2.5	2.7
WAEMU	3.1	4.0	3.7	3.5	3.0	3.1	2.8	3.1	2.5	2.3	2.5
COMESA (SSA members)	2.4	3.0	2.6	2.7	2.9	2.9	3.4	3.4	3.2	3.2	3.2
EAC-5	4.1	4.3	3.7	3.4	4.0	4.1	4.8	4.9	4.6	4.7	4.5
ECOWAS	7.5	6.2	4.0	4.5	5.9	5.3	5.0	6.2	5.5	5.1	5.0
SACU	4.0	5.0	4.5	4.9	5.1	5.2	6.0	6.3	6.1	6.0	5.8
SADC	3.7	4.5	4.2	4.8	5.0	5.0	5.8	6.2	5.6	5.2	4.9

See sources and footnotes on page 78.

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	68.9
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	55.6
Burkina Faso	26.5	31.7	35.5	37.8	39.6	45.2	52.3	56.5	61.4
Burundi	28.8	31.5	36.1	36.1	35.1	33.7	34.7	34.9	35.2
Cabo Verde	90.0	98.5	103.0	111.2	120.6	134.5	137.0	141.1	148.8
Cameroon	22.7	26.1	28.7	29.7	28.3	29.9	30.1	31.1	32.5
Central African Rep.	12.6	15.8	17.3	19.1	19.2	25.7	25.4	24.6	24.1
Chad	7.3	9.4	10.0	10.3	11.0	11.7	14.6	17.0	21.3
Comoros	25.1	34.4	37.6	41.5	44.5	42.5	43.1	47.7	53.6
Congo, Dem. Rep. of	6.7	12.3	11.4	12.2	14.0	14.0	14.3	14.9	15.3
Congo, Rep. of	12.2	17.0	18.4	23.1	28.0	29.6	34.2	44.8	47.1
Côte d'Ivoire	22.3	27.0	29.5	35.0	33.9	35.1	38.1	42.5	44.8
Equatorial Guinea	9.0	14.2	16.1	14.1	18.0	20.2	21.8	29.6	32.1
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	33.2	34.6
Gambia, The	48.3	61.7	66.8	70.5	70.6	73.6	81.1	...	...
Ghana	29.7	40.1	39.5	38.1	37.3	39.6	46.4	47.6	50.2
Guinea	12.5	13.0	19.9	24.1	19.4	19.8	21.7	24.6	23.5
Guinea-Bissau	10.8	19.2	24.3	27.6	27.0	28.4	30.2	31.6	32.4
Kenya	57.4	54.1	56.0	57.6	58.1	60.7	63.6	63.3	59.0
Lesotho	36.6	42.9	43.2	39.8	39.0	45.9	45.1	47.1	40.8
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	51.9
Mauritius ¹	284.6	316.8	369.9	377.9	377.4	365.1	352.7	349.7	326.8
Mozambique	33.2	46.5	52.7	53.7	61.0	63.7	71.7	80.0	78.1
Namibia	66.3	95.3	93.3	93.6	88.1	85.2	82.1	88.3	88.5
Niger	13.2	20.0	22.7	23.1	24.4	26.0	28.7	29.6	31.2
Nigeria	27.5	39.0	31.2	30.4	29.2	30.1	30.5	29.7	31.2
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	77.2	74.7	85.6	81.4	78.4	80.5	73.5
Senegal	36.6	44.5	47.3	49.9	49.8	55.6	60.7	66.6	71.5
Seychelles	118.8	100.0	109.3	113.0	102.2	117.5	116.5	93.0	93.7
Sierra Leone	16.2	25.9	24.9	24.5	23.0	21.3	23.1	26.5	28.3
South Africa	116.4	120.9	116.3	115.4	115.1	111.4	113.0	122.4	115.1
South Sudan	...	...	...	6.7	14.7	13.4	19.3	68.7	75.2
Swaziland	27.3	34.3	34.2	34.9	33.2	35.2	34.1	35.9	38.4
Tanzania	24.2	27.7	30.0	28.8	29.0	28.8	29.4	31.3	28.4
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	27.1	28.0	29.1	28.9	30.5
Zambia	24.9	25.9	25.5	25.8	27.6	29.2	31.8	38.1	32.9
Zimbabwe	...	...	...	...	...	...	...	...	...
Sub-Saharan Africa	42.5	49.2	51.9	52.1	52.8	54.7	56.0	58.1	59.0
Median	26.6	32.3	34.9	34.9	33.9	35.2	38.0	43.6	44.8
Excluding Nigeria and South Africa	40.9	47.7	50.8	51.0	51.8	53.9	55.2	57.2	58.2
Oil-exporting countries	18.6	27.2	26.5	24.6	26.8	28.1	30.1	40.8	42.9
Excluding Nigeria	17.1	25.3	25.7	23.8	26.5	27.8	30.1	42.4	44.5
Oil-importing countries	47.4	53.8	57.2	58.5	58.9	61.0	62.1	62.5	63.2
Excluding South Africa	45.3	51.7	55.4	56.8	57.2	59.4	60.5	60.5	61.4
Middle-income countries	57.4	66.3	68.8	70.0	70.7	72.6	72.9	75.9	74.3
Excluding Nigeria and South Africa	55.8	64.8	68.3	69.7	70.5	72.8	73.1	75.9	74.4
Low-income countries	28.2	33.0	35.9	35.8	36.5	38.5	40.6	40.4	42.9
Excluding low-income countries in fragile situations	25.2	30.7	34.3	36.0	37.7	40.4	44.2	47.5	48.2
Countries in fragile situations	30.2	35.4	37.6	37.1	38.2	39.5	40.7	40.2	42.9

See sources and footnotes on page 78.

Table SA28. Banking Sector: Loan-to-Deposit Ratio¹
(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	74.7	76.0	72.6	74.8	73.2	72.5	72.2	63.4	61.0
Botswana	55.8	55.4	55.4	67.5	74.0	79.1	82.5	76.4	76.9
Burkina Faso	84.8	78.1	73.3	74.3	79.2	85.6	90.4	87.2	79.9
Burundi	67.7	59.3	66.1	81.8	81.4	75.6	75.7	73.9	72.1
Cabo Verde	54.8	72.5	74.2	80.2	73.9	64.7	59.2	57.2	53.6
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	80.4
Congo, Rep. of	36.4	38.7	39.5	38.3	49.8	59.6	55.3	72.8	82.0
Côte d'Ivoire	89.3	84.7	77.3	66.9	71.1	76.1	75.0	79.4	81.7
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	65.8
Guinea	...	...	...	...	...	...	...	...	...
Guinea-Bissau	42.8	93.5	66.0	65.9	92.0	83.3	72.0	84.2	82.8
Kenya	76.6	72.5	72.6	77.8	76.9	80.5	83.7	87.0	88.6
Lesotho	26.4	34.9	36.6	37.2	50.9	45.3	47.9	45.7	50.8
Liberia	...	...	...	...	...	...	...	...	...
Madagascar	72.2	72.2	73.8	69.1	64.0	68.9	72.7	77.0	68.8
Malawi	...	...	...	...	...	...	...	...	...
Mali	78.7	71.9	71.3	75.7	76.3	80.3	78.9	79.3	84.2
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	95.4
Niger	77.1	90.2	78.3	93.8	89.9	98.7	89.9	96.1	101.3
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	108.1	110.0	84.0	78.2	58.9	76.0	72.3
Senegal	80.8	78.8	77.8	83.8	84.4	87.6	84.9	78.8	81.6
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	34.4	31.9	30.6
South Africa	122.8	120.1	120.7	113.2	119.0	118.7	117.3	118.1	117.5
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	87.3
Togo	72.7	63.1	67.8	73.4	77.5	85.9	75.0	78.2	71.6
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	...	...	...	...	...	...	...	...	...
Sub-Saharan Africa	65.2	67.8	67.5	68.6	69.7	70.8	70.1	73.2	74.1
<i>Median</i>	66.1	71.4	69.4	71.8	73.9	75.9	74.8	75.7	77.4
Excluding Nigeria and South Africa	63.3	66.0	66.2	67.7	68.8	69.9	69.0	72.1	72.8
Oil-exporting countries	59.0	63.4	62.9	57.3	58.3	63.2	63.2	66.9	72.3
Excluding Nigeria	56.1	60.8	62.8	57.4	58.8	64.0	62.9	66.7	71.5
Oil-importing countries	66.5	68.7	68.5	71.4	72.5	72.7	71.8	74.8	74.6
Excluding South Africa	64.7	67.1	66.9	70.1	71.0	71.2	70.4	73.3	73.1
Middle-income countries	66.5	66.9	68.0	70.1	70.5	71.8	72.0	73.8	75.2
Excluding Nigeria and South Africa	62.8	63.2	65.3	68.4	68.6	69.9	69.9	71.6	72.7
Low-income countries	63.7	68.7	67.0	67.1	68.8	69.8	68.2	72.5	72.9
Excluding low-income countries in fragile situations	68.4	76.3	74.4	79.8	79.7	81.0	80.3	78.1	79.6
Countries in fragile situations	61.6	64.6	65.2	62.4	64.0	65.2	61.9	70.5	70.8

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