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Regional Economic Outlook

Sub-Saharan Africa

Dealing with the Gathering Clouds

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Abbreviations

ASEAN	Southeast Asian Nations
CEMAC	Economic and Monetary Community of Central Africa
CFA	currency zone of CEMAC and WAEMU
CGER	Consultative Group on Exhange Rate Issues
CIS	Commonwealth of Independent States
CPI	consumer price index
EAC	East African Community
EBA	External Balance Assessment
FDI	foreign direct investment
GII	the United Nation's gender inequality index
GDP	gross domestic product
GVC	global value chain
ICP	International Comparison Program
IDB	Inter-American Development Bank
IMF	International Monetary Fund
INS	Information Notice System
LICs	low-income countries
LAC	Latin America and Carribean region
MENA	Middle East and North Africa region
MICs	middle-income countries
NPLs	nonperforming loans
PWT	Penn World Tables
Q^M	The Import Average Relative Price
Q^X	The Export Average Relative Price
REER	real effective exchange rate
REO	*Regional Economic Outlook*
ROA	return on asset
SDGs	Sustainable Development Goals
SSA	Sub-Saharan Africa
SWIID	The Standardized World Income Inequality Database
VAT	value-added tax
WAEMU	West African Economic and Monetary Union
WBL	World Bank's Women, Business and the Law database
WEF	World Economic Forum
WEO	*World Economic Outlook*

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The following conventions are used in this publication:

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

Executive Summary

DEALING WITH THE GATHERING CLOUDS

Growth in Sub-Saharan Africa has weakened markedly, and is now expected at 3¾ percent this year and 4¼ percent in 2016, from 5 percent in 2014. Of the three factors that have underpinned the region's solid performance of the last decade or so—a much improved business and macroeconomic environment, high commodity prices, and highly accommodative global financial conditions—the latter two have become far less supportive. As a result, while activity remains more solid than in many other developing and emerging regions of the world, the strong growth momentum evident in the region in recent years has dissipated. And with the possibility that the external environment might turn even less favorable, risks to this outlook remain on the downside, especially because a number of countries are entering this new period with more limited external and fiscal buffers than they did at the time of the global financial crisis.

This overall difficult picture, however, masks, considerable variations across the region.

- In most of the region's low-income countries, growth is holding up, supported by ongoing infrastructure investment and solid private consumption. But even within this group, quite a few countries are being negatively affected by the sharp decline in the prices of their main commodity exports, even as lower oil prices ease their energy import bill.
- Even more hard hit are the region's eight oil exporters—which together account for about half of the region's GDP and include the largest producers, Nigeria and Angola—as falling export incomes and resulting sharp fiscal adjustments are taking their toll on activity.
- Several middle-income countries, such as Ghana, South Africa, and Zambia, are also facing unfavorable conditions, including weak commodity prices, difficult financing conditions in the context of large domestic imbalances, and electricity shortages.

Policies need to adjust to this new environment.

- On the fiscal policy front, for the vast majority of the countries in the region, there is only limited fiscal space to counter the drag on growth. Among oil exporters, the sharp and seemingly durable decline in oil prices makes adjustment unavoidable, and while some had space to draw on buffers or borrow to smooth the adjustment, that space is becoming increasingly limited. For most other countries, fiscal policies need to continue to be guided by medium-term spending frameworks, striking an appropriate balance between debt sustainability considerations, on the one hand, and addressing development needs, on the other.
- On the monetary policy front, wherever the terms-of-trade declines have been significant and the exchange rate is not pegged, it is important to allow for the exchange rate depreciation to absorb the shock. Even in those countries that are not heavily reliant on commodity exports and have seen their currency come under pressure, given the strong global forces behind these pressures, resisting them risks losing scarce reserves. Accordingly, interventions should be limited to disorderly movements of the exchange rate. Monetary policy should only respond to second-round effects, if any, of exchange rate pass-through and other upward shocks to inflation.
- Finally, risks to the financial sector from the commodity price declines, especially in oil-exporting countries, and from exchange rate depreciation require careful monitoring.

COMPETITIVENESS IN SUB-SAHARAN AFRICA: MARKING TIME OR MOVING AHEAD?

The second chapter of this report assesses how competitiveness in sub-Saharan Africa has evolved and how well placed the region is to diversify its export base and sustain growth. The region's recent period of high growth has benefited from a set of unique circumstances, and while it has been accompanied by substantial trade integration, it has also been accompanied by widening trade imbalances. With some of the forces driving recent growth having dissipated, to sustain growth, the region will need to be competitive to increase export sophistication and integrate into global value chains.

Most indicators point to deteriorating competitiveness in recent years, especially among commodity exporters. The region has experienced fewer episodes of sustained growth than other regions; about half of these growth spells occurred in the context of booming commodity exports and despite weak competitiveness. Conversely, in the other half, strong competitiveness supported sustained growth—a model that will have to prevail in the future.

Policy actions need to be geared toward nurturing new sources of growth. While specific recommendations depend on country circumstances, some broad principles for policy action are to pursue sound macroeconomic policies, including not resisting near-term depreciation pressures in the face of terms-of-trade shocks, undertaking productivity-enhancing infrastructure investments while maintaining debt sustainability, eliminating remaining trade barriers, and improving institutions to enhance the business climate.

INEQUALITY AND ECONOMIC OUTCOMES IN SUB-SAHARAN AFRICA

The third chapter considers the implications for sub-Saharan Africa of persistently high income and gender inequality. Sub-Saharan Africa has among the highest levels of inequality—both income and gender—in the world, even after accounting for the level of development. With growing international evidence that income and gender inequality can impede macroeconomic stability and growth, this chapter considers factors behind those high levels and how they differ from the experience in other parts of the world, and discusses policy options for reducing inequality and raising sustainable growth.

Reducing inequality could deliver significant growth payoffs for the region. Income inequality appears to be markedly higher at all levels of income in the region than elsewhere, with gender inequality being just one of the factors driving that result. Findings also suggest that progress toward reducing income and gender inequality could generate significant growth dividends, by close to one percentage point annually if inequality was reduced to levels observed in fast-growing Asian emerging countries. While the drag on growth from infrastructure and educational attainment gaps—on which polices should focus—remain stronger among low-income countries and fragile states, the evidence suggests that there could be a growth dividend among middle-income countries for policies directly aimed at reducing inequalities. While the high levels of inequality in the region appear to be partly driven by structural features, such as the dependence of some countries on oil exports, policies that influence the access of low-income households and women to opportunities such as education and health care are shown to matter too. In that context, carefully designed fiscal and financial sector policies and the removal of gender-based legal restrictions could reduce inequality.

1. Dealing with the Gathering Clouds

Economic activity in sub-Saharan Africa has weakened markedly. To be sure, growth—at 3¾ percent this year and 4¼ percent in 2016—still remains higher than in many other emerging and developing regions of the world. Still, the strong growth momentum evident in the region in recent years has dissipated in quite a few cases.

To understand the slowdown, it helps to consider three key factors that have supported the high growth in the region over the past decade. Perhaps the most dominant of these factors has been the vastly improved business and macroeconomic environment that policymakers have put in place, supporting higher investment. Another important factor has been high commodity prices, which played a particularly central role in the region's eight oil exporters (notably, Nigeria and Angola) but also in several hard metals exporters (for example, Guinea, Sierra Leone, South Africa, and Zambia). The third factor has been the highly accommodative global financial conditions, which have boosted capital flows to many countries in the region, facilitating higher private and public investment.

Of late, though, two of the three factors have become much less supportive—commodity prices have fallen sharply and financing conditions have become more difficult. The upshot is a deceleration in economic growth in the region. Within this overall difficult picture, however, there is considerable variation across the region.

- In most low-income countries, growth is holding up, as ongoing infrastructure investment efforts continue and private consumption remains strong. The likes of Côte d'Ivoire, the Democratic Republic of the Congo, Ethiopia, Mozambique, and Tanzania are projected to register growth of 7 percent or more this year and next. But even within this group, some countries are feeling the pinch from lower prices for their main export commodities, even as lower oil prices ease their energy import bill. On average, activity for this group is now projected to expand by 6 percent in 2015, some three-quarters of a percentage point lower than foreseen a year ago.
- The region's eight oil-exporting countries, conversely, are being hit hard by the continued weakness in oil prices. Falling export incomes and resulting sharp fiscal adjustments are taking their toll on activity, now expected to expand by 3½ percent this year, down from the 7 percent expected before oil prices started falling. Headwinds are particularly strong in Angola and Nigeria, but also among oil exporters in the Central African Economic and Monetary Community (CEMAC).
- Several middle-income countries are also facing unfavorable conditions. A combination of supply shocks (for example, curtailed electricity production in Ghana, South Africa, and Zambia), more difficult financing conditions in a context of large domestic imbalances (Ghana and Zambia), and weaker commodity prices (Botswana, South Africa, Zambia) are set to lower growth.

Moreover, there is a risk of still lower growth if the external environment continues to weaken. Existing vulnerabilities, especially on the fiscal front, could also come to a head if the external environment were to turn even less favorable, via further declines in commodity prices, stronger growth deceleration in China, or a disorderly global asset reallocation. In that context, some countries would be forced into a sharp adjustment of policies, further adding to the growth slowdown currently at play. Finally, security-related challenges still prevail in a number of countries.

This chapter was prepared by a team led by Céline Allard, comprising of Jorge Iván Canales Kriljenko, Joannes Mongardini, Marco Pani, Francisco Roch, and Juan Treviño. Research assistance was provided by Emily Forrest.

The policy implications are threefold.

- On the fiscal front, for the vast majority of the countries in the region, there is only limited scope to counter the drag on growth. For oil exporters, the sharp, and seemingly enduring, decline in oil prices makes fiscal adjustment unavoidable; and while a few can draw on buffers or borrow to smooth the adjustment, such room for maneuver is increasingly becoming very slim. For most other countries, including both those that are slowing down and those that are still growing at a fast clip, policies need to continue to be guided by medium-term spending frameworks, paying heed to debt sustainability considerations, on the one hand, and to addressing development needs, on the other. As such, there is very limited case for deviating from these polices to support near-term growth. Only among countries where public debt is low and the initial fiscal position comfortable, perhaps in the case of Botswana and the Seychelles, does there seem to be room for countercyclical policies if growth were to slow down markedly.
- On the monetary front, wherever the terms-of-trade decline has been large and the exchange rate is not pegged, it is appropriate to allow for exchange rate depreciation to absorb the shocks. Resisting downward pressures on the currency not only risks depleting reserves, but also means that the adjustment to the shock would instead have to be borne via import compression and lower growth. But even countries that are not heavily reliant on commodity exports have seen their currency come under pressure of late. Here too, given the strong global forces behind them, resisting these pressures risks losing scarce reserves. Accordingly, interventions should be limited to disorderly movements of the exchange rate. Monetary policy should only respond to second-round effects, if any, of exchange rate pass-through and other upward shocks to inflation.
- Risks to the financial sector from the commodity price declines, especially in oil-exporting countries, and from exchange rate depreciation require careful monitoring. Supervision should be stepped up to contain balance sheet effects from these shocks and mitigate potential risks from currency mismatches.

In the rest of Chapter 1, we first elaborate on how recent global developments are creating powerful headwinds for sub-Saharan Africa. Second, we look at the domestic environment in which the countries in the region are entering this period of external headwinds and how these macroeconomic conditions, most notably large fiscal deficits, create additional vulnerabilities. Against this backdrop, a third section presents the near-term outlook and the risks associated with the forecasts, and a final section explores options to create fiscal space by improving domestic revenue mobilization.

In subsequent chapters, we turn to two other aspects essential for longer-term growth in the region:

- Chapter 2 asks whether sub-Saharan Africa is sufficiently competitive to sustain its recent robust growth pattern as external tailwinds fade. A range of indicators suggest that competitiveness has deteriorated for the region as a whole, but with heterogeneity across countries. The chapter also finds a strong connection between competitiveness and the ability of countries to sustain growth, and highlights policies to boost competitiveness in the long term.
- Chapter 3 documents the extent to which high levels of income and gender inequality in the region weigh on macroeconomic performance. While these high levels of inequality might partly reflect an earlier stage of development compared with other regions, the chapter shows that reducing inequality to levels observed in some fast-growing Asian emerging market economies could yield significant growth payoffs. It highlights targeted fiscal and financial policies, as well as the removal of gender-based legal restrictions, as tools to facilitate access to opportunities for low-income households and women.

STRONG HEADWINDS FROM THE EXTERNAL ENVIRONMENT

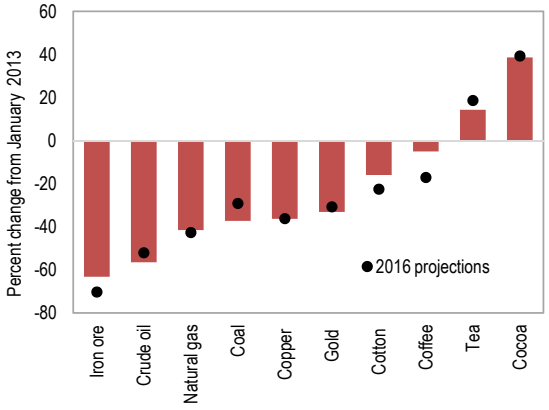
Global growth is expected to decline from 3.4 percent in 2014 to 3.1 percent in 2015, before picking up to 3.6 percent in 2016. Yet, even this modest overall recovery masks a generally difficult external environment for many sub-Saharan African economies.

Commodity Prices Set to Remain Weak

After a steady rise in prices since the early 2000s, the decade-long commodity cycle seems to have come to an end. This represents a formidable shock for many of the sub-Saharan African countries that are still substantial commodity exporters, as it cuts into export values and fiscal revenues.[1] As was described in the April 2015 issue of this report, oil exporters are particularly affected, as their fiscal and external positions tend to be the most dependent on extractive activities. But even among oil importers, which are benefiting from cheaper energy imports, a wide range of countries have seen the price of their main commodities plummet over the last two years by some 40 to 60 percent (Figure 1.1). Moreover, most commodity prices are projected to remain low, if not decline further, throughout 2016. Such prospects have already triggered a scaling down of existing activities in some countries (Botswana, Democratic Republic of Congo, Guinea, Sierra Leone, South Africa, Zambia) or of new projects in others (Côte d'Ivoire).

The decline in commodity prices has been underpinned by the rapid and likely persistent decrease in global demand for raw materials, in some cases combined with higher supply (such as for oil or copper). As explained in the October 2015 *World Economic Outlook*, emerging market economies—which have over the last few years been a significant source of demand for commodities—are experiencing their fifth consecutive year of moderation in activity in 2015 (IMF 2015f). Most importantly,

Figure 1.1. Selected Commodity Prices, January 2013–August 2015



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

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

China, the largest single trade partner of sub-Saharan Africa, is rebalancing its growth away from manufacturing, construction, and exports—where production inputs are highly skewed toward raw materials—toward the services sector and consumption.[2] For countries where exports to China account for a very significant share of total exports, such as Angola, the Democratic Republic of Congo, the Republic of Congo, Sierra Leone, South Africa, and Zambia, this represents a particularly strong shock (Figure 1.2).

Financing Environment Turning Less Favorable

Adding to these adverse trends for those countries relying on international sources of financing, global financial conditions are gradually tightening. The expected monetary policy normalization in the United States and the reassessment of global risks since mid-summer have already altered the environment of abundant liquidity and low borrowing costs experienced by emerging and frontier market economies over the last few years. Even though

[1] Beyond the eight oil-exporting countries, the region also has 15 countries where nonrenewable resource exports represent more than 25 percent of goods exports—and in nine of those, that share exceeds 50 percent. For an extensive discussion of the channels through which such terms-of-trade shocks are transmitted to the economy, see Chapter 2 of the October 2015 *World Economic Outlook* (IMF 2015f).

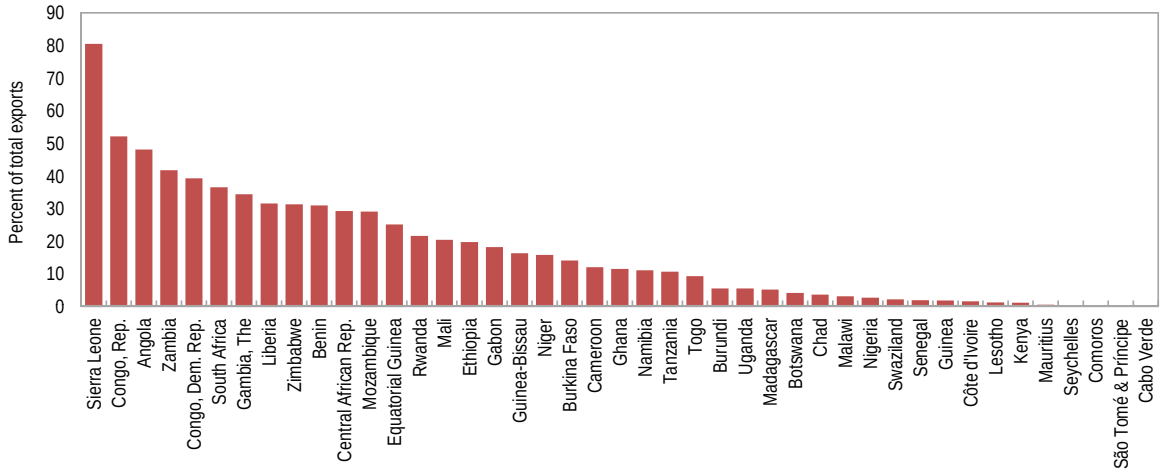
[2] While China's slowdown and rebalancing has unequivocal negative spillovers in the short term, as they feed into weaker demand for commodities, their medium- to long-term effect is less clear-cut. In particular, the region could benefit from China's rebalancing over time, if it were to be accompanied by a relocation of low-end manufacturing activities to sub-Saharan Africa (Anderson and others, forthcoming).

sub-Saharan Africa remains relatively less financially integrated than other parts of the world, this trend is also visible in the region. After two years of record Eurobond issuances in 2013–14, fewer sovereigns have tapped the international markets so far this year; when they did, it was at higher yields than in previous issuances (Figure 1.3). More broadly, sovereign spreads in the region's frontier market economies have increased across the board since October 2014—often surpassing the general risk retrenchment in emerging markets (Figures 1.4 and 1.5).

MORE DIFFICULT DOMESTIC CONDITIONS

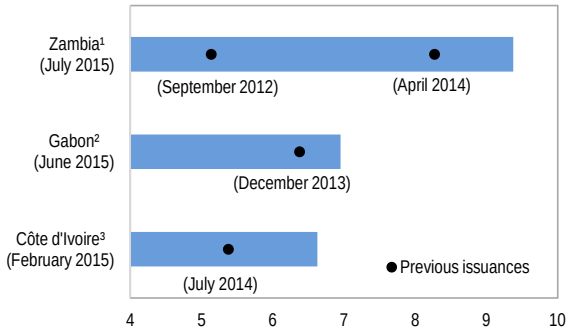
This adverse external backdrop is compounded by the generally limited buffers that countries have to offset the drag on activity. In many cases, savings from the recent period of rapid growth have been small, and the borrowing room is rapidly decreasing. Moreover, countries in the region are mostly entering this period with larger fiscal and external deficits than at the onset of the 2008–09 global financial crisis—the last time the external environment turned unsupportive for the region.

Figure 1.2. Sub-Saharan Africa: Exports to China, 2014



Source: IMF, Direction of Trade Statistics.

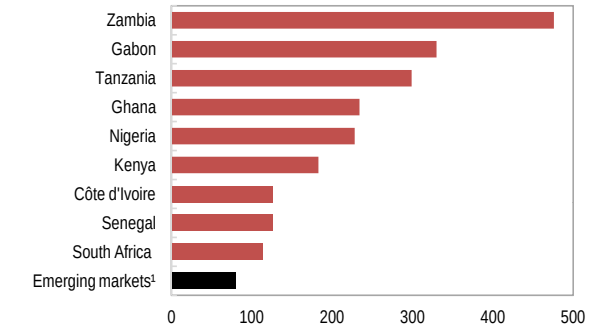
Figure 1.3. Sub-Saharan Africa: Recent Eurobond Issuances
(Yield-to-maturity at issuance and comparison with previous issuances)



Sources: Country authorities; and IMF staff estimates.

[1] Zambia issued bonds with an average maturity of 11 years in 2015, and 10-year bonds in 2014 and 2012.
[2] Gabon issued a 10-year bond in 2015, and an 11-year bond in 2013.
[3] Côte d'Ivoire issued a 13-year bond in 2015, and a 10-year bond in 2014.

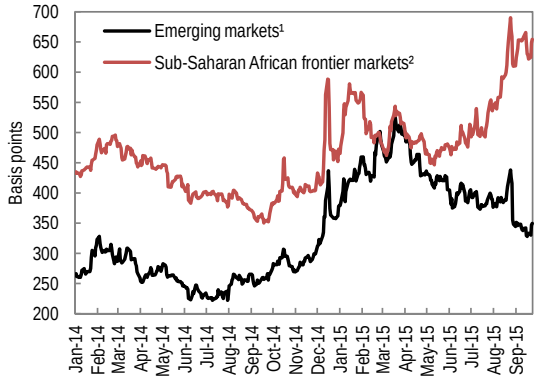
Figure 1.4. Sub-Saharan African Emerging and Frontier Market Economies: Sovereign Bond Spreads
(EMBIG spreads, basis point change since October 2014)



Source: Bloomberg L.P.

Note: Data as of September 23, 2015.
[1] The emerging market average includes the Emerging Market Bond Index Global (EMBIG) spreads of Argentina, Brazil, Bulgaria, Chile, Colombia, Hungary, Malaysia, Mexico, Peru, Philippines, Poland, Russia, South Africa, Turkey, and Ukraine.

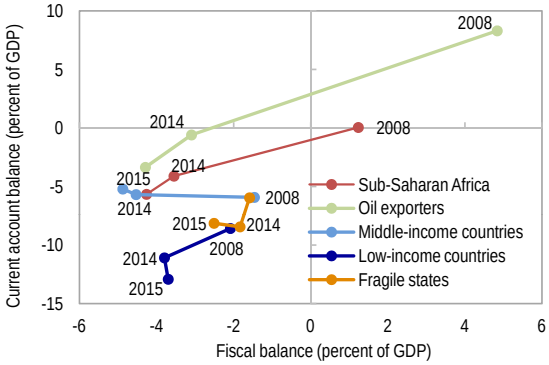
Figure 1.5. Emerging Market Spreads, 2014–15



Source: Bloomberg L.P.

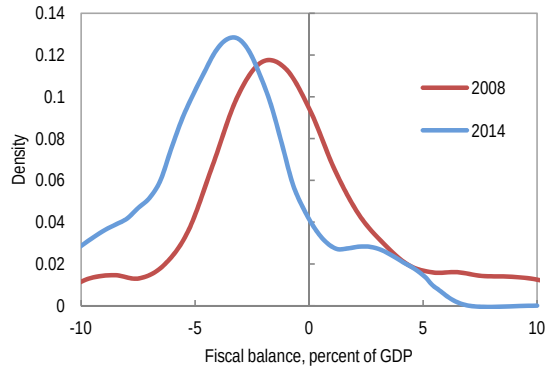
Note: Data as of September 23, 2015.
[1] The emerging market average includes the Emerging Market Bond Index Global spreads of Argentina, Brazil, Bulgaria, Chile, Colombia, Hungary, Malaysia, Mexico, Peru, Philippines, Poland, Russia, South Africa, Turkey, and Ukraine.
[2] The frontier markets spread includes the spreads of Côte d'Ivoire, Ghana, Kenya, Nigeria, Rwanda, Senegal, Tanzania, and Zambia.

Figure 1.6. Sub-Saharan Africa: Current Account Balance and Fiscal Balance, 2008–15



Source: IMF, World Economic Outlook database.

Figure 1.7. Sub-Saharan Africa: Distribution of Countries' Fiscal Balances, 2008 and 2014



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

Deteriorating External and Fiscal Positions

External and, even more so, fiscal positions are significantly weaker than in 2008, especially for oil exporters and frontier markets (Figure 1.6). More specifically, in 34 of the 45 countries in the region, the fiscal balance was weaker at the end of 2014 than it was in 2008, despite robust growth in the last few years; and in 21 of them, the external balance was also weaker (Figure 1.7).[3]

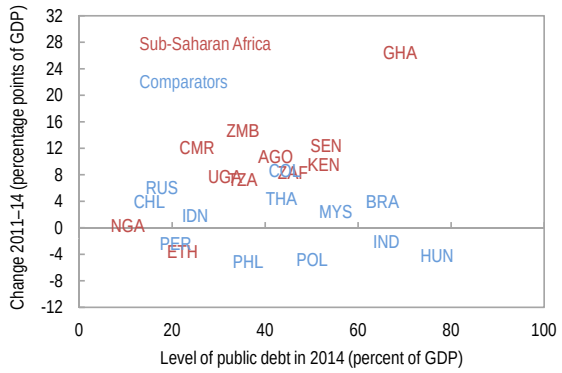
- To some extent, and especially for low-income countries, this reflects welcome efforts to upgrade infrastructure capital in recent years. The concern now, though, is that, with gross external financing needs in excess of 10 percent of GDP in many of the larger economies (Ethiopia, Ghana, Kenya, Senegal, South Africa, Tanzania), it might at best become increasingly difficult and expensive to cover these needs, and at worst, impossible to do so, forcing an abrupt adjustment.
- In others countries, especially oil-exporting countries, financing needs are rapidly increasing in the wake of the commodity price shock, as the fiscal adjustment to lower revenue flows is being smoothed over time (Nigeria, Angola).
- Where fiscal deficits are particularly large and external costs have already risen substantially, recourse to domestic markets is also becoming increasingly difficult, as in Ghana and Zambia. This has pushed domestic borrowing costs up—crowding out the private sector in the process and restraining the emergence of new, more diverse, domestic sources of growth.

With lower growth and higher interest rates, the positive dynamics that had so far put a relative lid on public debt increases could rapidly reverse in some countries.[4] Where, as in the frontier market economies, debt levels are now increasingly at

[3] Similarly, the median fiscal position shifted from –1 percent of GDP in 2008 to –3.6 percent in 2014, and the median current account position from –7.7 percent in 2008 to –8.8 percent in 2014.

[4] The October 2014 *Regional Economic Outlook: Sub-Saharan Africa* showed that strong economic activity had been instrumental in supporting the relatively stable debt-to-GDP ratios during 2010–13, masking already weakening fiscal positions and gradually less favorable borrowing conditions.

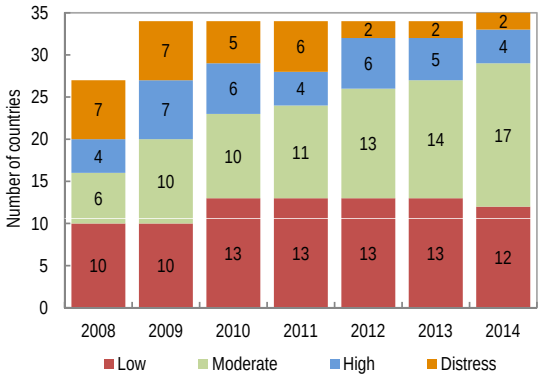
Figure 1.8. Emerging and Frontier Market Countries and Comparators: Total Public Debt Ratio



Source: IMF, World Economic Outlook database.

Notes: Comparators are the following emerging market economies: Brazil, Chile, Colombia, Hungary, India, Indonesia, Malaysia, Peru, Philippines, Poland, Russia, and Thailand. See page 78 for country acronyms.

Figure 1.9. Sub-Saharan Africa: Debt Risk Status for Low-Income Countries, 2008–14



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

Notes: Excludes Angola as it is no longer classified as a low-income country. Debt risk ratings for Burundi, Chad, The Gambia, Lesotho, Rwanda, São Tomé and Príncipe, and Zimbabwe begin in 2009, and for Cabo Verde in 2014.

par with those of emerging market economies, debt headroom to finance necessary development needs will soon have disappeared (Figure 1.8). The increase in yields of recent Eurobond issuances and widening spreads on secondary markets also indicate, in part, that investors are repricing bonds to account for these growing vulnerabilities.

It should be noted, though, that in others, especially low-income countries, debt vulnerabilities are far less prevalent, with the risk of debt distress still relatively moderate (Figure 1.9). In addition, because a large share of the existing stock of debt remains at concessional terms, these countries are less exposed to sharp increases in risk premiums at the global level.

Pressures on Currencies

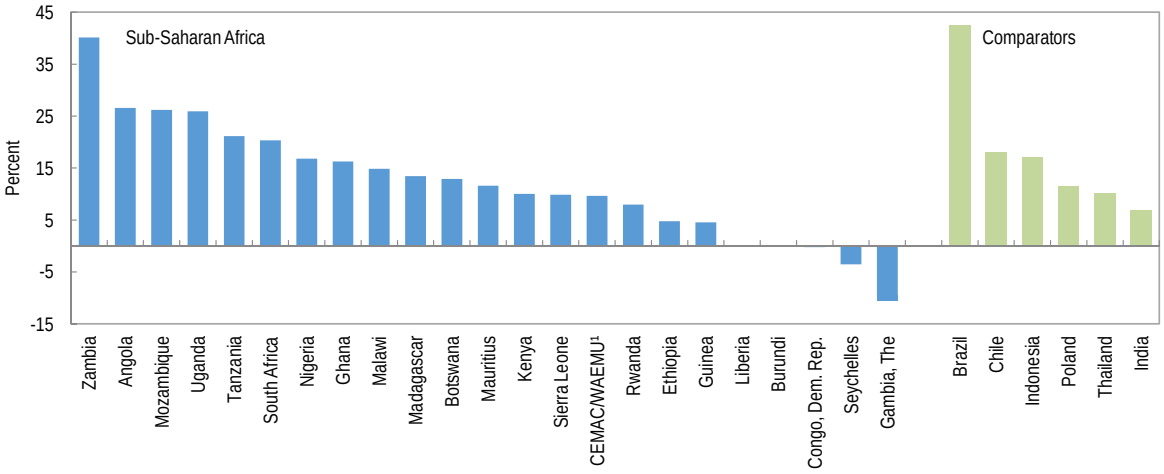
In the face of the large terms-of-trade shocks and strong appreciation pressures on the dollar, most countries have allowed the exchange rate to adjust. This has been most notable among oil exporters whose currencies are not pegged to the euro, with the Angolan kwanza and Nigerian naira having declined by 26 and 17 percent, respectively, against the U.S. dollar since October 2014.[5] But large exchange rate movements have not been limited to commodity-reliant countries. The large majority of frontier market economies' currencies have experienced depreciations of similar or higher magnitude, including in Ghana, South Africa, Tanzania, Uganda, and Zambia—reflecting existing or rising domestic vulnerabilities in some cases (Ghana, South Africa, Zambia), but also increasing overall risk aversion, as in many other frontier and emerging market economies around the world (Figure 1.10). In some other countries in the region, severe pressures on the exchange rates have also been triggered by growing macroeconomic imbalances, compounded by lower tourism receipts (The Gambia) or a poor harvest (Malawi).

Partly as a result of the exchange rate pass-through, inflation has risen somewhat in some of the largest economies of the region, triggering monetary policy responses.

- Unlike in other regions of the world where lower commodity prices and large output gaps have kept inflation rates at record-low levels, inflation is now inching up in some of the largest sub-Saharan African economies, in contrast with the trend of recent years. Average inflation in the region is expected to reach 7 percent this year and 7¼ percent next year. In some countries, specific factors such as electricity tariff hikes (South Africa), the elimination of fuel subsidies (Angola), and rising food prices

[5] As measured as the change in the value of one unit of domestic currency in U.S. dollars.

Figure 1.10. Selected Countries: Depreciation of National Currency Against U.S. Dollar Since October 2014
(+ indicates depreciation)



Source: Bloomberg L.P.

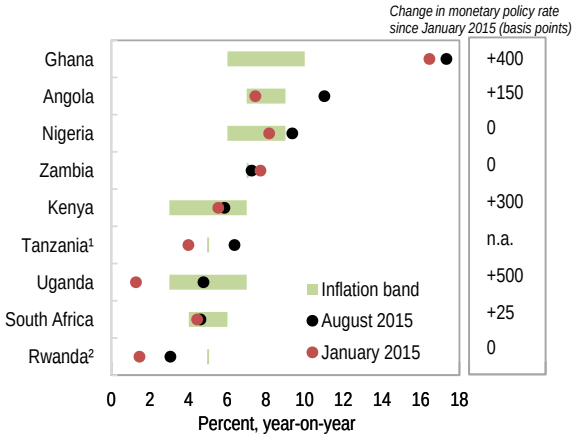
Note: Data as of September 23, 2015.
[1] The CFA franc is pegged to the euro. Other countries with fixed exchange rates (Cabo Verde, Comoros, Eritrea, Lesotho, Namibia, São Tomé and Príncipe, South Sudan, Swaziland) are omitted. CEMAC = Central African Economic and Monetary Community; WAEMU = West African Economic and Monetary Union.

(Ethiopia, Tanzania) have also pushed inflation up. However, inflation in most other countries remains contained, particularly in the CFA franc zones, where it ranges from 1 to 3 percent.

- Central banks in a growing number of countries have started tightening monetary policies, concerned that these developments may affect inflation expectations where inflation rates are near or even surpass the highest point of established bands (Figure 1.11). Except where inflation has been far above the target for an extended period, most notably in Ghana, these concerns may be premature, as inflation remains near historic lows in most countries and there are no signs that these one-off shocks are giving rise to second-round effects.

Meanwhile, some central banks have intervened in the market to contain exchange rate volatility, and others, most notably oil exporters, have drawn on their external buffers to smooth the adjustment to lower commodity prices (Figure 1.12). Some countries, including Angola and Nigeria, have also introduced administrative measures to stem the demand for foreign currency, significantly hampering the conduct of private sector activities in the process.

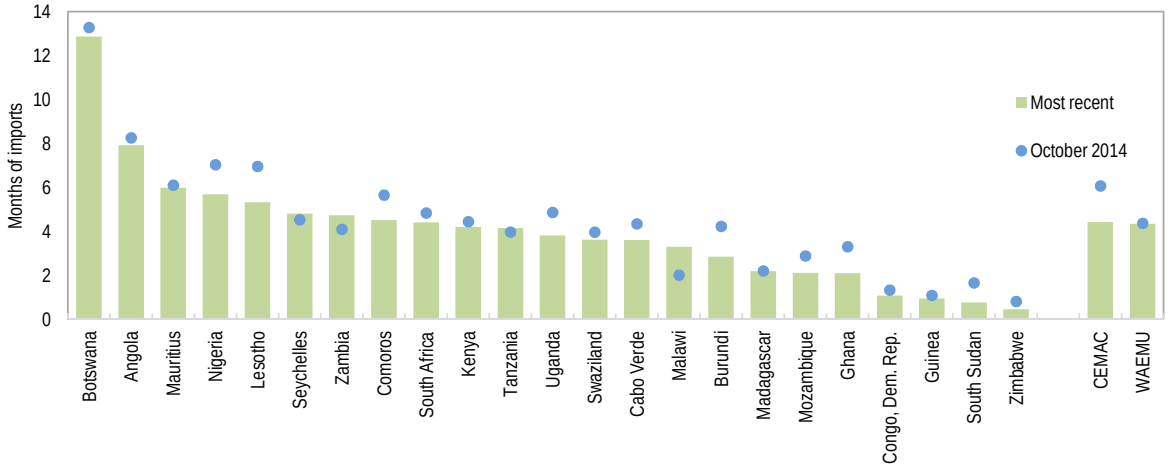
Figure 1.11. Inflation, Inflation Bands, and Monetary Policy Changes



Sources: Country authorities; and Haver Analytics.

Note: n.a.= not available.
[1] Although the Central Bank of Tanzania did not raise policy rates, it nonetheless tightened its policy through foreign exchange sales and increases in the required reserves ratio.
[2] Reflects urban Consumer Price Index inflation, which is the inflation that the National Bank of Rwanda targets.

Figure 1.12. Sub-Saharan Africa: Reserves



Sources: Country authorities; and IMF, World Economic Outlook and International Financial Statistics databases.

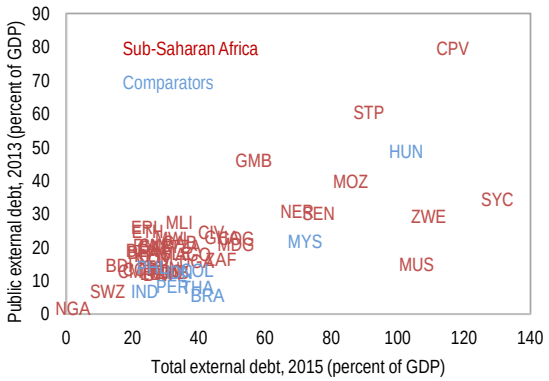
Note: Countries for which no data more recent than February 2015 are available were omitted. CEMAC = Central African Economic and Monetary Community; WAEMU = West African Economic and Monetary Union.

Financial Stability Implications

Given the strong headwinds to activity in commodity-exporting countries, banks could well see a worsening of the quality of their assets. Recent analysis suggests that financial stability indicators in natural-resource-rich countries, such as bank profitability or nonperforming loans, tend to deteriorate and the probability of systemic banking crises tends to increase in the wake of negative commodity price shocks (see Box 1.1). Such spillovers to the financial sector are likely to weigh on credit supply and the process of financial deepening witnessed over the last few years, especially in oil-exporting countries, where credit growth had been particularly strong—with detrimental effects on both growth and economic diversification (see Box 1.2).[6]

In a few highly dollarized economies, the recent exchange rate depreciation could also increase financial sector vulnerabilities. There, the recent depreciation will increase the value in local currency of dollar-denominated liabilities, and hence the debt service burden for unhedged borrowers, potentially exposing banks to losses—even though banks themselves generally have only limited currency mismatches.[7] Relatively high external debt stock—at least by emerging market standards—would compound these negative effects for some countries, including where mining and energy firms have been contracting debt in external currencies (Figure 1.13).

Figure 1.13. Sub-Saharan Africa and Comparators: External Debt



Sources: IMF, World Economic Outlook database; and World Bank, World Development Indicators.

Note: Comparators are the following emerging market economies: Brazil, Chile, Colombia, Hungary, India, Indonesia, Malaysia, Peru, Philippines, Poland, Russia, and Thailand. See page 78 for country acronyms.

[6] Event studies of long commodity price cycles prior to 2000 also show that factors supportive of domestic demand, such as credit to the private sector, tend to expand more strongly during upswings than during downswing (see Chapter 2, *World Economic Outlook*, October 2015 (IMF 2015f)).

[7] Dollarization remains high in Angola, the Democratic Republic of the Congo, Liberia, São Tomé and Príncipe, and to a lesser extent in Tanzania, Uganda, and Zambia (Mecagni and others 2015). In dollarized economies, private agents typically hold both assets and liabilities in foreign currencies. But the hedge from foreign-currency income flows may not be complete, especially in commodity exporters where firms will see their dollar revenue drop.

Infrastructure Bottlenecks

Despite substantial investment efforts throughout the region, infrastructure bottlenecks have long been an impediment to attracting new activities and fostering trade integration.[8] These bottlenecks have come to the forefront even more acutely recently for a wide range of countries. Load shedding and electricity shortages, triggered by delays in upgrading aging power plants and filling the power generation gaps, have become a regular occurrence in Ghana and South Africa, with particularly acute effects in the manufacturing sector. Worsening conditions in electricity supply have also been severely hampering activity in a few other countries (Comoros, Madagascar, Nigeria, and Zambia).

These difficulties are in stark contrast with encouraging progress made elsewhere in the region, as past investment is now bearing fruit. In Kenya, the doubling of geothermal generation capacity in the second half of 2014 led to a 20 percent increase in overall capacity and a 25 percent decline of electricity cost (IMF 2015b). The coming onstream of new hydropower plants in Ethiopia is contributing to a further increase in electricity availability for the entire east African region, and will do so even more in the next few years—supporting the emergence of new activities. In west Africa, a new dam put in service in Guinea in the summer of 2015 will also allow electricity exports to neighboring countries.

LOWER GROWTH AMID PERSISTENT RISKS

Outlook

Against the backdrop of these global and domestic headwinds, the outlook for the region is clearly much less favorable than in the recent past. Activity in sub-Saharan Africa is projected to decelerate from 5 percent in 2013–14 to 3¾ percent in 2015, before strengthening somewhat to 4¼ percent in 2016 on the back of the gradual pickup in global activity (Table 1.1). The growth performance this year will be lower than in 2009, when the region was reeling from the aftermath of the global financial crisis—and will hardly be enough to create much-needed jobs to absorb the growing young population and make significant progress on poverty and inclusion.

As noted previously, however, this aggregate picture masks considerable heterogeneity across the region. While oil-exporting countries are facing the strongest headwinds, many low-income countries will continue to grow at a fast clip, supported by continuous investment efforts—facilitated in most cases by still substantial capital inflows—and growth in the services sector. It is nonetheless revealing that a majority of countries, both oil exporters and importers, have seen their 2015 growth forecasts revised down since external conditions started turning less supportive in October 2014 (Figure 1.14).

- Growth among oil-exporting countries—which represent about half of sub-Saharan Africa's GDP—is expected to decelerate sharply, from 6 percent in 2014 to 3½–4¼ percent in 2015–16, under the combined effects of lower export income and sharp fiscal adjustment. In Nigeria, activity slowed markedly in the first half of the year as uncertainties surrounding the elections and subsequent political transition, fuel and power shortages, increases in import costs, and fiscal consolidation weighed on non-oil sectors. Growth in 2015 is now forecast at 4 percent, some 2¼ percentage points lower than in 2014. Similarly, in Angola, the sharp retrenchment in public sector investment projects is having a substantial impact on the economy, causing growth to further decelerate to 3½ percent.
- Meanwhile, despite lower oil prices, prospects continue to be mixed for middle-income countries. In South Africa, regular electricity load shedding, job cuts in the steel and potentially in the mining sectors, and broader implications of low commodity prices, along with a tighter policy mix, continue to keep a lid on growth, projected to remain below

[8] For an illustration of how infrastructure gaps are holding back sub-Saharan Africa's regional and international trade integration, see Chapter 3, *Regional Economic Outlook: Sub-Saharan Africa*, April 2015.

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

	2004–08	2009	2010	2011	2012	2013	2014	2015	2016
Sub-Saharan Africa	6.8	4.1	6.7	5.0	4.3	5.2	5.0	3.8	4.3
Of which:									
Oil-exporting countries	9.2	7.0	8.5	4.6	3.8	5.7	5.9	3.6	4.2
Of which: Nigeria	8.6	9.0	10.0	4.9	4.3	5.4	6.3	4.0	4.3
Middle-income countries[1]	5.0	0.2	4.6	4.7	3.5	3.7	2.7	2.6	2.9
Of which: South Africa	4.8	-1.5	3.0	3.2	2.2	2.2	1.5	1.4	1.3
Low-income countries[1]	8.0	6.6	7.8	8.1	6.6	7.5	7.4	6.2	6.8
Fragile states	2.8	2.6	4.4	2.9	6.9	5.6	5.8	5.2	5.9
Memorandum item:									
World economic growth	4.9	0.0	5.4	4.2	3.4	3.3	3.4	3.1	3.6
Sub-Saharan Africa resource-intensive countries[2]	6.9	3.9	6.7	4.7	3.8	4.9	4.5	3.0	3.6
Sub-Saharan Africa frontier and emerging market economies[3]	6.7	4.8	7.1	5.1	4.3	4.9	5.0	4.0	4.3

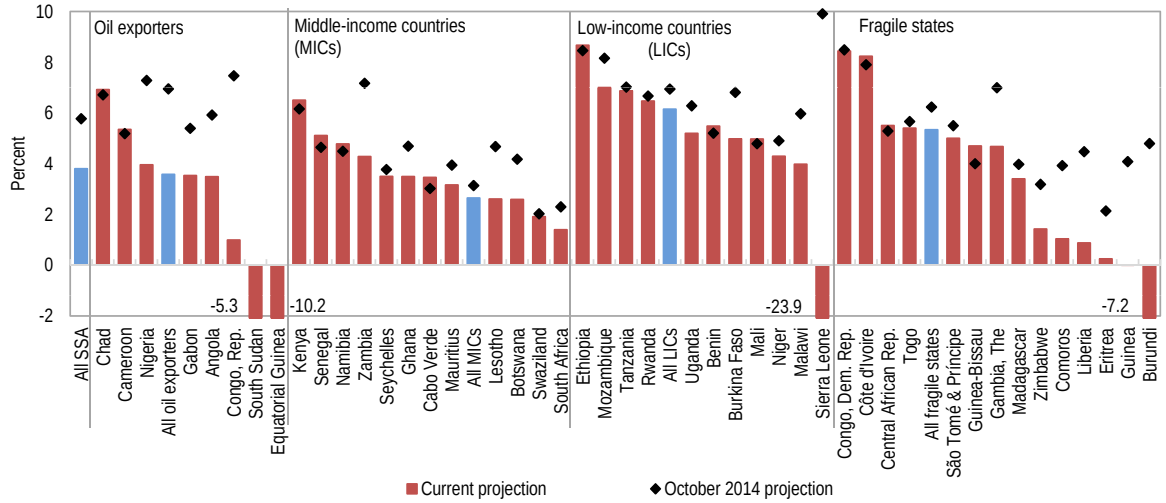
Source: IMF, World Economic Outlook database.

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

1½ percent in 2015–16. Fiscal retrenchment, high inflation, reduced electricity supply, and a disappointing cocoa harvest are also weighing on Ghana's growth, while Zambia's economic activity is being held back by depressed copper prices, high interest rates, and severe electricity shortages. Conversely, growth is forecast to accelerate in Kenya, supported by public investment in transport and power generation, and in Senegal, supported by dynamic private sector activities.

- A majority of low-income countries and fragile states will continue to experience solid growth, as infrastructure investment efforts continue, especially in the energy and transport sectors, and as private consumption remains strong, with continued large foreign direct investment (FDI) inflows in many of them. Countries such as Côte d'Ivoire, the Democratic Republic of the Congo, Ethiopia, Mozambique, and Tanzania are still expected to register growth of 7 percent or more this year and next.

Figure 1.14. Sub-Saharan Africa: Real GDP Growth Projections, 2015, Current Projections versus October 2014 Projections



Source: IMF, World Economic Outlook database.
Note: SSA = sub-Saharan Africa.

Table 1.2. Sub-Saharan Africa: Other Macroeconomic Indicators

	2004–08	2009	2010	2011	2012	2013	2014	2015	2016
					(Percent change)				
Inflation, average	8.8	9.8	8.2	9.5	9.4	6.6	6.4	6.9	7.3
					(Percent of GDP)				
Fiscal balance	1.7	-4.6	-3.4	-1.1	-1.8	-3.1	-3.5	-4.3	-3.6
Of which: Excluding oil exporters	-0.6	-4.1	-4.3	-3.7	-3.7	-3.9	-4.0	-4.2	-3.9
Current account balance	2.1	-2.8	-0.9	-0.7	-1.9	-2.4	-4.1	-5.7	-5.5
Of which: Excluding oil exporters	-4.3	-4.9	-3.9	-4.8	-7.1	-7.5	-7.3	-7.5	-7.8
					(Months of imports)				
Reserves coverage	5.1	5.2	4.2	4.7	5.2	5.0	5.4	4.8	4.2

Source: IMF, World Economic Outlook database.

But even as lower oil prices ease their energy import bill, other low-income countries, including Burkina Faso and Sierra Leone, are feeling the pinch from lower prices for their main export commodities. In Sierra Leone, the economy is expected to contract by more than 20 percent as the closure of the two main iron ore operators exacerbated the impact of the Ebola outbreak. However, as the acute toll of the disease fades, the economies of Guinea, Liberia, and Sierra Leone are expected to resume growth in the coming years. Floods and erratic weather in southern Africa are also reducing agricultural output in many countries, most notably in Malawi and Zimbabwe.

In that context, the region is expected to witness a further worsening of its fiscal position (Table 1.2). The overall fiscal balance (including grants) is projected to widen to –4.3 percent of GDP from –3.5 percent in 2014—the largest deficit in the region since 2009. Oil-exporting countries will drive most of that deterioration, as planned fiscal retrenchments, however severe, will not totally offset the substantial shortfall in oil-activities-related fiscal revenue, allowing for some smoothing of the adjustment. Elsewhere, the fiscal deficit is expected to remain particularly large, and above 7 percent in some countries, on the back of large investment projects (Kenya), high subsidies and arrears clearance (Zambia), or increased security spending (Niger). Ghana, conversely, is embarking on a multiyear fiscal consolidation, and its double-digit deficit in 2014 is projected to be cut to 5.9 percent.

Likewise, with sharply lower proceeds from commodity exports, the external position is forecast to deteriorate further, especially among oil exporters. The current account deficit is expected to widen from 4.1 percent in 2014 to 5.7 percent in 2015, the largest current account deficit since the early 1980s, increasing the urgency to improve competitiveness and jumpstart new export streams, as discussed in Chapter 2. While the lower energy bill will help oil importers and softer growth will keep a lid on consumption imports, these effects will often be offset by lower prices for exported commodities and the continuation of substantial investment projects with high import content.

Downside Risks

Notwithstanding the realization of several adverse external factors embedded in the forecasts, risks to the outlook remain tilted to the downside.

Some domestic risk factors…

Security-related issues still prevail in a number of countries. The civil war continues to take a heavy toll on South Sudan, while the violence sparked by the general elections in Burundi and the recent developments in Burkina Faso are reminders that political cycles can still cause turmoil. Acts of violence by Boko Haram and other insurgency groups have increased in a region spanning Cameroon, Chad, Niger, and Nigeria, but also in Kenya and Mali. Beyond the tragic loss of human lives and widespread suffering, these acts of violence weigh on economic activity, strain fiscal budgets, and diminish the prospects for FDI. The negative impact on economic growth and the potential for regional political instability would be exacerbated if they were to persist or escalate.

The negative impact on domestic economies of the commodity price slump could also prove more pronounced than anticipated, especially among oil exporters. On the one hand, the planned spending cuts are sharp, and the impact on activity will reach widely across sectors—not only extractive activities but also sectors that had so far benefited from the commodity income windfall, such as the construction and services sectors. On the other hand, if the enacted fiscal adjustment were to fail to materialize, the macroeconomic deterioration would be even more tangible, with risks of arrears accumulation, crowding out of private activities by domestic borrowing, and intensifying pressures on the external position. Policy missteps could also further rattle investors' confidence.

… could potentially be exacerbated if external headwinds intensify

Commodity prices have fallen sharply over recent months, but they could still fall further in a context of subpar global growth and if rebalancing from existing overcapacity were to prove weaker than currently forecast. Slower-than-expected global growth would also weigh further on the region. In particular, a more rapid slowdown in China as it transitions to its new growth model—or even potentially a hard landing—would intensify the strains on the region, in particular as they would put additional downward pressures on commodity prices. Finally, further risk retrenchment from emerging markets or a sharp reallocation of financial assets around the globe could lead to rapid capital outflows from sub-Saharan African emerging and frontier market economies and exacerbate current exchange rate pressures.

In that context, existing domestic vulnerabilities in some countries would come even more to the forefront, as financing would either rapidly become very expensive or totally unavailable—forcing a highly procyclical fiscal policy adjustment, and a much more rapid deceleration of growth. Concomitant exchange rate pressures, to the extent that they would feed into higher inflation, could also trigger a tighter monetary policy stance, adding headwinds to growth. More broadly across the region, countries that have been running large current account deficits, including the fastest-growing ones, would be particularly vulnerable to external financial shocks, even as reliance on FDI—a more stable source of financing—could provide some cushion in the short run.

SPECIAL FOCUS: CREATING FISCAL SPACE VIA BETTER DOMESTIC REVENUE MOBILIZATION

In this difficult macroeconomic context, preserving fiscal soundness in the short term and boosting fiscal buffers over the next few years take on renewed importance. Borrowing costs are on the rise for a number of countries, as overall financial conditions tighten, but also because, down the road, many countries in the region will graduate from concessional sources of financing—a welcome development by itself. All these factors converge to turn the spotlight more squarely on improving domestic revenue mobilization as a medium-term objective.[9] With domestic revenue mobilization the most durable way to create fiscal space, finance much-needed infrastructure and other development needs, and reduce reliance on public debt, this final section reviews advances since 2000 and offers options for the future.

While not the focus here, strengthening public financial management is of course also critical. Efforts to improve revenue mobilization need to be made in combination with measures to further optimize public spending, in particular by prioritizing investment projects with the highest economic return and streamlining expensive and not well-targeted energy subsidies—as some countries (Angola, Cameroon, Ghana) have started doing. By working on improving the quality of spending, the authorities will also demonstrate that they are making the most efficient use of fiscal revenues, helping to increase taxpayers' acceptance.

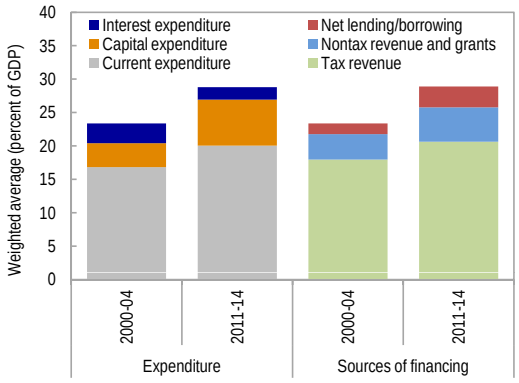
[9] The topic of better domestic revenue mobilization was also at the center of the discussions during the July 2015 Addis Ababa UN conference on Financing for Development. See "Financing for Development: Revisiting the Monterey Consensus" (IMF 2015c).

The Big Picture: Good Progress to Date

With the notable exception of Nigeria, the amount of resources devoted to public spending in sub-Saharan Africa has expanded strongly over the last 15 years, by some 5 percentage points of GDP on average (Figure 1.15).

- Public spending remains overwhelmingly financed via domestic tax revenue, which increased from 18 to 21 percent of GDP for sub-Saharan Africa excluding Nigeria between 2000–04 and 2011–14—with the improvement witnessed not only in oil exporters (on the back of strong oil prices), but also among low-income countries and fragile states. Space for additional spending was also created in part by the decline in the interest bill associated with debt relief granted in the second half of the 2000s, and increased recourse to borrowing.
- Excluding Nigeria, more than half of the increase in the spending envelope (some 3¼ percentage points of GDP) was accounted for by capital expenditure, evidence of the authorities' effort to fill the large infrastructure gaps across the region. Capital expenditure now represents a quarter of the spending envelope (and some 7 percent of GDP), up from about a sixth in the early 2000s. The civil service wage bill—which also includes human capital spending in the form of teachers' and health care workers' compensation—expanded by some 1½ percentage points of GDP.

Figure 1.15. Sub-Saharan Africa Excluding Nigeria: Public Expenditure and Sources of Financing



Source: IMF, World Economic Outlook database.

Note: Nigeria is excluded, as unlike the rest of the region its tax- and spending-to-GDP ratios declined substantially over the period.

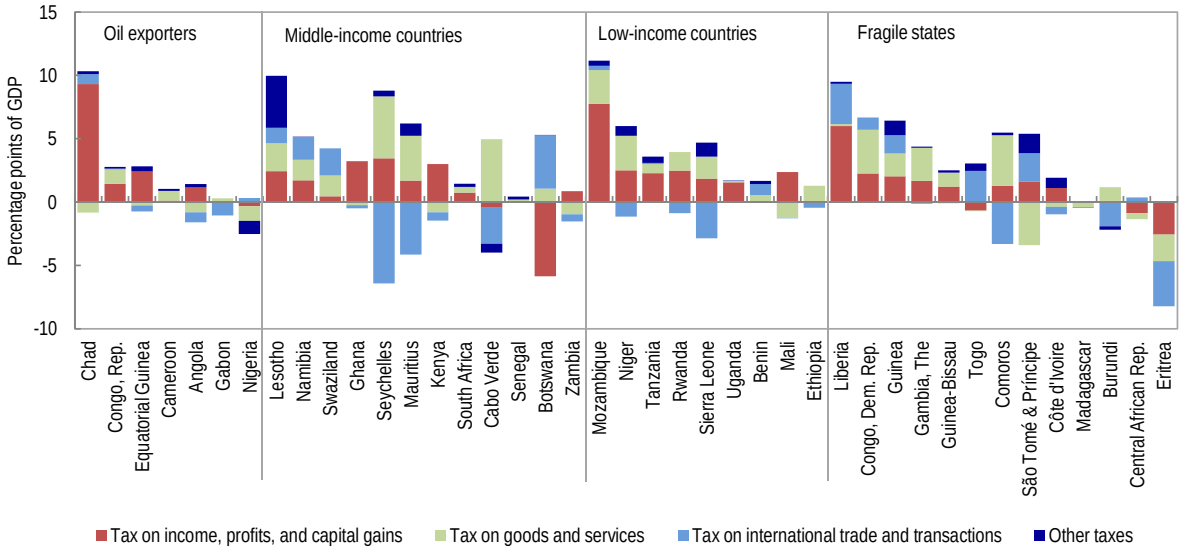
Zeroing in on Tax Revenues

The increase in tax revenue in the region has been broad-based (Figure 1.16). With a few exceptions (Botswana, Nigeria, Zambia, and a few fragile states), all sub-Saharan African countries managed to lift their tax-to-GDP ratio, notwithstanding downward pressures on trade tax revenue as countries engaged in trade liberalization to support regional and international integration (Keen and Mansour 2009). Both direct and indirect tax ratios generally improved, although progress on the latter was not always as strong, underscoring outstanding challenges in keeping up with the taxation of new sectors, especially those where the informal economy plays a large role.

Putting these results into perspective, international comparisons show that the region experienced the largest increase in tax revenue across the globe since the turn of the century (Figure 1.17). The median country in sub-Saharan Africa managed to boost its tax ratio by some 5 percentage points of GDP since the mid-1990s, over a period when elsewhere in the world, the same ratio was flat or only marginally increasing (the Commonwealth of Independent States, Latin America, emerging Asia), if not declining (emerging Europe, the Middle East).

- In part, this reflects the fact that the starting point was relatively lower in sub-Saharan Africa, signaling more potential for progress than in other regions where revenue mobilization efforts had already been implemented. There is, however, more than a catch-up process in the region's progress: the median low-income sub-Saharan African country entered the century with a higher tax-to-GDP ratio and also saw a larger improvement in revenue mobilization than the median low-income country elsewhere in the world.

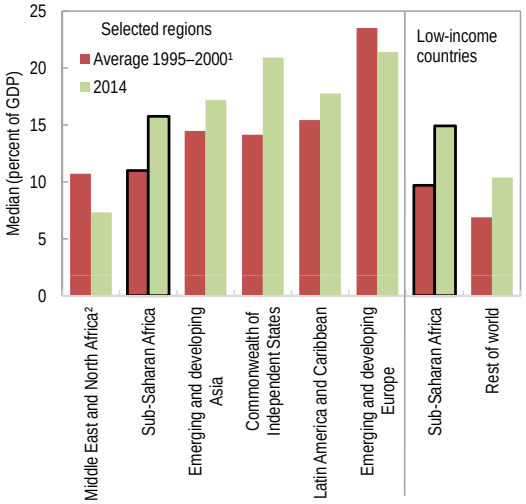
Figure 1.16. Sub-Saharan Africa: Change in Tax Revenue, Average for 2000–04 and 2011–14



Source: IMF, World Economic Outlook database.

- In addition, while many sub-Saharan African countries have increasingly relied on commodity exports over that period, this does not account by itself for the entire extent of the increase in tax revenue: the increase in the tax ratio since the mid-1990s for the median commodity-rich country in the region was 6 percentage points of GDP, versus 3¾ percentage points of GDP for the median in the rest of the region, and for both, the tax-to-GDP ratio is now around 15 percent of GDP. In fact, most resource-related fiscal revenues accrue through non-tax revenue, such as royalties and fees. However, to the extent that commodity activity also boosts tax receipts from corporate income and profit in the extractive sector, and indirectly tax revenue from stronger activity in nonextractive sectors, part of the increase in the tax ratio can indeed have been driven by commodity-related activities.

Figure 1.17. Selected Regions: Total Tax Revenue, 1995–2000 and 2014



Source: IMF, World Economic Outlook database.

[1] The period 1995–2000 is chosen to smooth the cyclical decline in the tax revenue ratio around 2000 in many regions of the world.
[2] Includes Pakistan and Afghanistan.

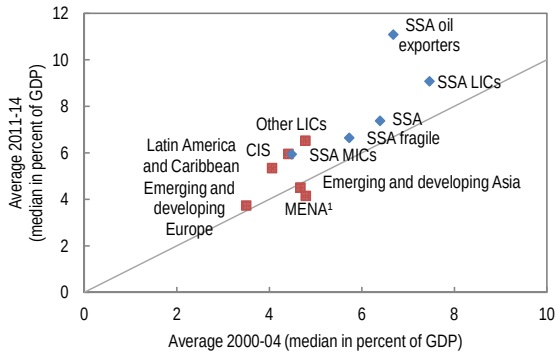
Challenges and Prospects

These results—good progress in domestic revenue mobilization but from a low starting point—raise the question as to how much more improvement can be achieved in the foreseeable future. This is of particular relevance not only given the current urgency in some countries to rebuild fiscal buffers and contain public debt, but also if the warranted and substantial efforts to upgrade infrastructure and human capital currently under way in the region—with one of the highest capital spending ratios in the world over the last 15 years (Figure 1.18)—are to be sustained without jeopardizing public debt sustainability. Finally, robust revenue mobilization

will also be necessary to finance the ambitious Sustainable Development Goals just launched at the UN Summit in New York in September 2015 (Box 1.3).

Cross-country observations can be used to estimate a global "tax frontier," representing the upper level of tax revenue ratios that can be raised for a given level of economic and institutional development (Fenochietto and Pessino 2013). The distance to that tax frontier for any given country reflects in part tax policy preferences—countries closer to the tax frontier would tend to have a higher preference for the delivery of public services, and hence accept a higher tax burden to finance them—but also tax administration capabilities.

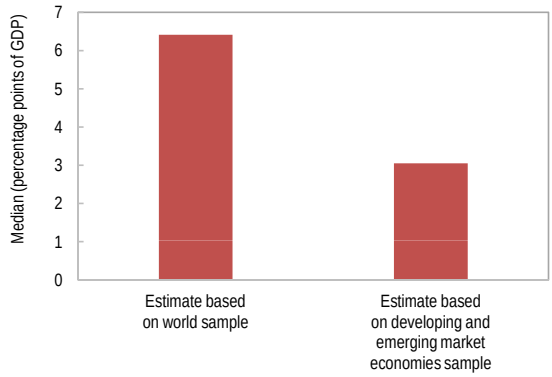
Figure 1.18. General Government Capital Expenditure, 2000–04 and 2011–14



Sources: IMF, World Economic Outlook and International Financial Statistics databases.

Note: CIS = Commonwealth of Independent States; LICs = low-income countries; MENA = Middle East and North Africa; MICs = middle-income countries; SSA = sub-Saharan Africa.
[1] Includes Pakistan and Afghanistan.

Figure 1.19. Sub-Saharan Africa: Tax Revenue Potential Estimates



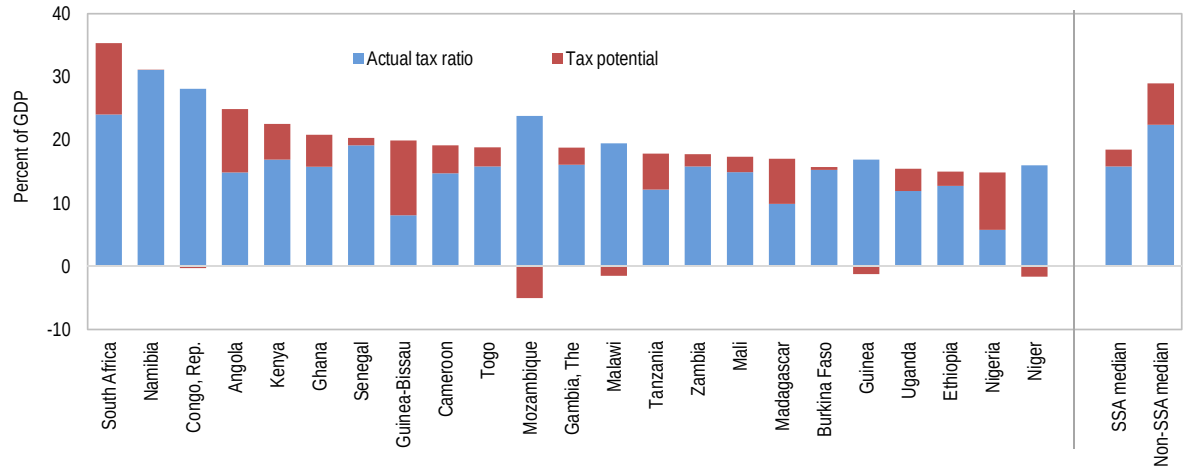
Source: IMF staff estimates based on Fenochietto and Pessino (2013).

Note: See Annex 1.1 for details on the countries included in each sample.

- This methodology allows for assessing the potential for further tax revenue mobilization in sub-Saharan Africa, defined as this distance to the tax frontier (see Annex 1.1 for more details). The analysis suggests that the median country in sub-Saharan Africa might have a potential for another 3 to 6½ percentage points increase in tax revenue (Figure 1.19).[10] Among the largest countries, the unexploited tax potential appears particularly sizable in countries such as Angola, Ghana, Kenya, Nigeria, South Africa, and Tanzania (Figure 1.20). For oil-exporting countries, the need to increase tax revenue mobilization from non-oil sectors will be particularly urgent, as oil-activities-related (tax and non-tax) revenue fall sharply.
- Moreover, a country's position vis-à-vis the tax frontier is not static. As a country grows, the ability of its government to collect higher revenues and citizens' acceptance for higher taxes typically rises—and the tax frontier that applies to that country moves up as GDP per capita increases. This means that, over time, as more sub-Saharan African countries reach middle-income status, their potential for higher tax revenue can be expected to expand as well. As an order of magnitude, we estimate that if the region's GDP per capita were to grow by 2 percent annually over the next 10 years—it grew on average by 3½ percent over the last 10 years—the tax frontier for the median country, and hence the potential for higher tax revenue ratio, would increase by another 6 to 7½ percentage points of GDP in a decade.

[10] Arguably, including advanced economies in the sample, in particular European ones where the tax ratio can reach as much as 35 percent of GDP, can potentially overestimate the tax potential for countries where tax administration capacity remain more modest. However, this order of magnitude—of 3 to 6½ percentage points of GDP of additional potential tax revenue—is robust to restricting the sample to developing and emerging market economies.

Figure 1.20. Selected Countries: Tax Ratio and Potential, 2014



Source: IMF staff estimates.

Note: The estimates are based on the developing and emerging market economies sample. The actual tax ratio corresponds to the 2014 tax-to-GDP ratio for oil importers, and to the non-oil-tax-revenue-to-non-oil-GDP ratio for oil-exporting countries (Angola, Cameroon, the Republic of Congo, and Nigeria). A negative tax potential does not necessarily indicate that there is no room for revenue mobilization in a given country. It reflects that the most recent observation exceeds the time-invariant estimate of the tax frontier, which takes into account the average tax-to-GDP ratio over the entire period. In some countries, this result stems from rapidly rising tax-to-GDP ratios over recent years. See Annex 1.1 for more details.
SSA = sub-Saharan Africa.

How can governments tap into this tax potential? In considering different options, country authorities could follow some key general principles.[11]

- The tax system should be designed to minimize distortions and inefficiencies, but policy decisions should also take into account the constraints arising from limited tax administration capacity, especially in low-income countries and fragile states.[12] In addition, while protection of the poorest is an overarching concern, the fairness of a tax system cannot meaningfully be assessed in isolation of the spending it finances. For instance, in some cases, a regressive tax may be the only way to finance strongly progressive spending; and more generally, the progressivity of specific tax measures should be assessed taking into account the distribution of the benefits of the additional expenditure they finance, as discussed in Chapter 3.
- In that respect, in the shorter term, implementing a broad-based value-added tax (VAT) with a fairly high threshold (not to overburden small businesses), and a single or limited number of rates (to preserve simplicity and limit opportunities for rent-seeking) still has more revenue potential than other tax instruments in many sub-Saharan African countries, in particular as it helps reduce tax leakages compared with sales taxes, which are only collected at the end of the distribution chain—an important consideration in a region with large informal sectors. Meanwhile, establishing a broad-based corporate income tax remains a longer-haul objective for many countries in the region. Those steps should go hand-in-hand with continuous efforts to improve public finance management and tax administration capacity.
- Efforts to expand both the tax base and tax compliance should also be explored, as it would allow for raising higher revenues without burdening any existing single taxpayer group, therefore reducing distortions, improving economic efficiency, and supporting income and job creation. Doing so would involve (i) limiting exemptions that jeopardize revenue

[11] For a more detailed discussion, see also "Revenue Mobilization in Developing Countries" (IMF 2011) and "Current Challenges in Revenue Mobilization—Improving Tax Compliance" (IMF 2015a).

[12] On the effects of distortions and inefficiencies, and more broadly the role of growth-friendly fiscal reforms, see also "Fiscal Policy and Long-Term Growth" (IMF 2015d).

and good governance, and are hard to reverse, (ii) better mobilizing information from the increasing number of transactions done via financial institutions and mobile banking to improve compliance, and (iii) making greater efforts to ensure tax compliance from high-income individuals and companies, as they account for a large share of the taxable income. In many countries, setting up a dedicated large taxpayers' office has proved an effective measure to achieve that objective. Strengthening real estate taxes—minimal in many countries in the region—also offers some potential.

- Finally, fiscal regimes for extractive industries deserve specific attention. There is significant scope in the region, especially for new producers, to improve the yield and stability of the revenue base from extractive industries (IMF 2012). Although country circumstances differ, combining a modest ad valorem royalty, a corporate income tax, and a separate resource rent tax has considerable appeal for low-income countries. Moreover, special attention needs to be paid to international tax treaties to avoid base erosion and profit shifting, which have a detrimental impact on producer countries (IMF 2014b).

The progress achieved in mobilizing domestic revenue over the last 15 years is certainly encouraging. But as external sources of financing become less forthcoming, authorities in the region will need, more than ever, to tap into the additional revenue potential if they want to maintain their development efforts in a sustainable way. Beyond a stable macroeconomic environment, this will critically define the region's ability not only to weather the strong current headwinds but also to preserve the path of strong growth in the medium term.

Box 1.1. Commodity Price Shocks and Financial Sector Fragility

The recent sharp declines in commodity prices are not unprecedented and their frequent occurrence has led to a large number of studies analyzing the impact of lower commodity prices on economic growth (Deaton and Miller 1995; Dehn 2000), debt (Arezki and Ismail 2013), and conflict (Brückner and Ciccone 2010). However, the literature lacks a systematic empirical analysis of the impact of commodity price shocks on the financial sector of commodity exporters.

The analysis presented here attempts to fill this gap by investigating the impact of commodity price declines on financial sector fragility. In the recent past, countries such as Ecuador, Malaysia, Nigeria, and Russia suffered considerable financial sector dislocation following sharp commodity price declines. Financial fragility can be defined as the increased likelihood of a systemic failure in the financial system, for which the most obvious indicator would be a systemic banking crisis. A less dramatic definition would capture the sensitivity of the financial system to relatively small shocks. The study is based on a panel study of 71 commodity exporters among emerging market and developing economies over 1997–2013, including 22 sub-Saharan Africa countries.[1]

Commodity price shocks can contribute to financial fragility through various channels. First, a decline in commodity prices in commodity-dependent countries results in reduced export income and fiscal retrenchment to deal with lower revenue, all of which can adversely impact economic activity and agents' (including governments') ability to meet their debt obligations, thereby potentially weakening banks' balance sheets. Second, a surge in bank withdrawals following a drop in commodity prices may significantly reduce banks' liquidity and potentially give rise to a liquidity crisis. Third, if the authorities fail to curtail public spending in the face of declining revenues, payment arrears might start to accumulate, putting suppliers in a difficult financial situation and potentially at risk of defaulting on their bank loans. Fourth, if large enough, commodity price shocks can also put downward pressure on the domestic currency. The currency depreciation can then lead to bank losses in the presence of net open foreign exchange positions in their balance sheets, or if unhedged borrowers are unable to service their loans.

Periods of declining commodity prices tend, indeed, to be associated with more deteriorated financial sector conditions, including higher nonperforming loans (NPLs) and a greater number of banking crises. This result holds for both the full sample and for sub-Saharan African countries (Figure 1.1.1).[2] The empirical investigation therefore focuses on periods of commodity price declines and relies on two econometric models.

- The financial fragility analysis is based on the following equation:

$$FSI_{i,t} = \alpha + \beta PriceShocks_{i,t} + \sum_{m=1}^{M} \gamma_m X_{mit} + \omega_{it} \qquad (1)$$

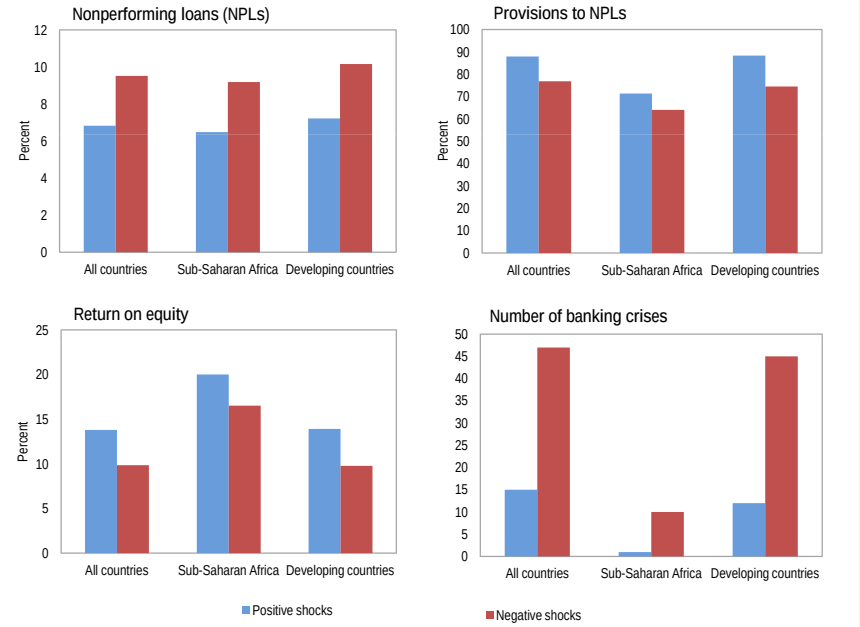
  where $FSI_{i,t}$ is one of seven financial soundness indicators: (1) share of bank NPLs, (2) provisions to NPLs, (3) return on assets, (4) return on equity, (5) cost-to-income ratio, (6) liquid assets to deposits and short-term funding, and (7) regulatory capital to risk-weighted assets. We also develop a synthetic index of the various indicators—computed as the mean of the seven indicators, each normalized to take a value between 0 and 1 (with higher values corresponding to more stability of the financial sector).

This box was prepared by Tidiane Kinda, Montfort Mlachila, and Rasmané Ouedraogo and draws on Kinda and others (forthcoming).

[1] Countries included in the sample are net exporters of a nonrenewable commodity, where that commodity represents at least 10 percent of the country's total exports in 2005, the base year, and for which sufficient financial sector data are available. Sub-Saharan African countries are Angola, Burundi, Botswana, Côte d'Ivoire, Cameroon, Ethiopia, Gabon, Ghana, Guinea, Equatorial Guinea, Mali, Mozambique, Namibia, Niger, Nigeria, Sudan, Togo, Tanzania, Uganda, South Africa, Zambia, and Zimbabwe.

[2] The mean comparison test (t-test) shows that the differences are statistically significant for NPLs, provisions to NPLs, return on equity, and banking crises.

Figure 1.1.1. Commodity Price Shocks and Selected Indicators of Financial Sector Fragility



Source: Authors' estimates.

PriceShocks$_{i,t}$ represents commodity price shocks, computed as the residual of an econometric model that regresses the logarithm of commodity prices on its lagged values (up to three) and a quadratic time trend. This measure removes the predictable elements from our shock measure, ensuring that we only capture unforeseen price movements. The variable is rescaled to be 0 in case of positive shocks, and range from 0 to 1 in case of negative shocks—as a consequence, the variable only represents negative shocks, and a positive (negative) sign in the regressions presented thereafter means that negative commodity price shocks tend to increase (decrease) the indicator under study.

X_{mit} denotes control variables such as inflation, credit growth, and income per capita; and ω_{it} stands for the error term including a country-specific fixed effect and an idiosyncratic term. Equation (1) is estimated using the panel fixed effects estimator.

- The banking crisis analysis is based on the following equation:

$$Bcrisis_{i,t}^{est} = \beta PriceShocks_{i,t} + \sum_{m=1}^{M} \gamma_m X_{mit} + \omega_{it}, \qquad (2)$$

$$Bcrisis_{i,t} = 1 \; if \; Bcrisis_{i,t}^{est} > 0, \text{ and, } Bcrisis_{i,t} = 0 \; if \; Bcrisis_{i,t}^{est} \leq 0 \qquad (3)$$

where $Bcrisis_{i,t}$ is the banking crisis dummy from Laeven and Valencia (2013), and $Bcrisis_{i,t}^{est}$ is the estimated value from the regression. As above, X_{mit} denotes the control variables and ω_{it} the error term. Equation (2) is estimated using the conditional logit fixed effects estimator.

The results show evidence that declines in commodity prices are indeed associated with higher financial sector fragility, as measured by a wide range of indicators (Table 1.1.1). Drops in commodity prices are associated with higher NPLs and bank costs, while they reduce bank profitability (return on assets and return on equity), liquidity, and provisions to NPLs. As a result of this fragility, commodity price downturns tend to increase the likelihood of banking crises. While these results are found across regions, sub-Saharan African countries seem to be more affected, both via a higher impact on NPLs and a higher likelihood of banking crises following price declines. For instance, a 50 percent decline in commodity prices (similar to the order of magnitude experienced over the last 12 months,

(continued)

Box 1.1. *(continued)*

and equivalent to a 3.6 standard deviation) results in an increase in NPLs of 3.5 percentage points for the whole sample and 4.5 percentage points in sub-Saharan Africa. In addition, the results are robust to a battery of robustness checks, including: (1) an alternative measure of commodity price shocks; (2) a differentiation between hydrocarbon and other nonrenewable commodities; (3) a focus on shocks lasting more than one year; and (4) a focus on large shocks.[3]

The recognition that declines in commodity prices are an important source of financial fragility raises questions about the appropriate framework to ensure financial stability in face of these shocks. While there is not much that macroeconomic policy can do to prevent commodity price shocks, the analysis shows that the impact of these shocks on the banking system depends on the economic, financial, and institutional conditions in place when the shocks occur. Indeed, the adverse effects of commodity price shocks on financial fragility tend to occur more severely in countries with poor quality of governance, in those with weak fiscal space, as well as in those that do not have a sovereign wealth fund, do not implement macroprudential policies, and do not have a diversified export base. In addition, stronger public finance management capacity can help prevent the occurrence of domestic arrears in the wake of negative commodity price shocks. Addressing these weaknesses could reduce financial sector fragility and the probability of banking crises.

Table 1.1.1. Impact of Declines in Commodity Prices and Financial Sector Fragility

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	NPLs	Provisions to NPLs	ROA	ROE	Cost	Reg. Capital	Liq. Assets	Index	Crisis
Price shocks	2.2840***	-16.0300***	-0.5810***	-6.5350***	1.5370*	-0.3440	-1.9730**	-0.0083***	1.8750**
	(0.52)	(3.69)	(0.13)	(1.58)	(0.90)	(0.37)	(0.93)	(0.002)	(0.78)
Exchange rate, t-1	4.7850***	-16.6900	-1.1000	-22.0800	4.9110	-2.7760	-0.6880	-0.0133	-0.6720
	(1.34)	(12.09)	(1.35)	(26.51)	(11.71)	(3.54)	(3.74)	(0.01)	(1.12)
Real interest, t-1	0.1160**	-0.8220***	-0.0223	-0.2310	0.1380*	0.0009	-0.0502	-0.0005**	0.0977***
	(0.05)	(0.24)	(0.01)	(0.18)	(0.07)	(0.02)	(0.05)	(0.0002)	(0.04)
M2/reserve, t-1	0.0500	-0.7010	0.0099	0.1010	0.0828	-0.0013	-0.0980	0.0002	0.3730**
	(0.19)	(2.23)	(0.01)	(0.29)	(0.34)	(0.10)	(0.48)	(0.00)	(0.15)
Inflation, t-1	0.0001	0.0523	0.0051	0.1510	0.0058	0.0388	0.0300	0.0001	0.0855**
	(0.04)	(0.28)	(0.02)	(0.40)	(0.16)	(0.04)	(0.09)	(0.00)	(0.04)
Credit growth, t-1	-5.0090	14.0000	-0.2430	-5.8580	-0.3940	-5.3770***	-6.7660	-0.0140**	0.0444
	(3.19)	(17.88)	(0.30)	(3.85)	(3.12)	(1.55)	(4.17)	(0.01)	(2.98)
Log(GDPPC), t-1	-1.5950	-3.6980	-0.1660	0.0153	-2.0160	-0.1780	-6.4890**	-0.0132**	-3.4290**
	(1.50)	(6.45)	(0.24)	(2.55)	(1.76)	(0.68)	(2.73)	(0.00)	(1.55)
Debt, t-1	0.1070**	0.0298	-0.0053*	0.0100	0.0696***	0.0218	0.0026	-0.00004	-0.0225*
	(0.04)	(0.17)	(0.00)	(0.05)	(0.02)	(0.03)	(0.05)	(0.00)	(0.01)
Constant	40.9800	185.1000	6.0470	15.6500	99.5600**	20.9800	195.5000***	0.8470***	
	(37.96)	(159.60)	(5.92)	(63.20)	(42.68)	(17.50)	(65.68)	(0.16)	
Observations	457	426	691	691	693	454	697	697	191
Countries	45	45	58	58	58	45	58	58	15
R-squared	0.3470	0.1290	0.0580	0.0460	0.1230	0.1290	0.0920	0.0520	

Note: Fixed effects are included. Robust standard errors in parentheses. ***denotes significance at the 1 percent confidence level; **significance at the 5 percent confidence level; and *significance at the 10 percent confidence level. NPLs = nonperforming loans; ROA = return on assets; ROE = return on equity.

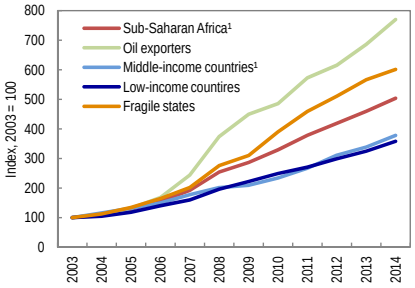
[3] The alternative measure of commodity price shocks follows Arezki and Brückner (2012) and Brückner and Ciccone (2010), and measures commodity price shocks by changes in prices.

Box 1.2. Rapid Credit Growth in Sub-Saharan Africa: What Does It Portend?

Real credit to the private sector has risen fivefold on average in sub-Saharan African countries over the last 12 years. The ensuing increased financial deepening and inclusion are certainly welcome, but authorities should be mindful of the increased financial risks associated with potentially excessive credit growth where it has been particularly buoyant.

Most sub-Saharan African countries have experienced a decade-long rapid increase in private credit. Real credit to the private sector grew fivefold over the period 2003–14—an average annual progression of 16 percent over 10 years, leading to a doubling of the credit-to-GDP ratio for the region as a whole (Figure 1.2.1). Progression was particularly strong in oil-exporting economies and fragile states, albeit starting from a low base—credit-to-GDP ratios now hover around 15 percent in each of these groups (Figure 1.2.2). Middle-income countries (excluding South Africa) provide larger credit support to the private sector, at 36 percent of GDP, although this remains slightly below the average 40 percent observed in non–sub-Saharan African emerging market and developing economies.

Figure 1.2.1. Sub-Saharan Africa: Real Credit to the Private Sector, 2003–14

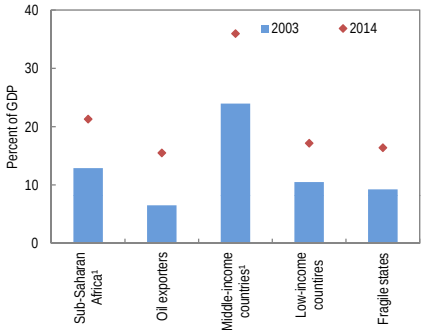


Sources: IMF African Department database; and IMF, World Economic Outlook database.

Note: Deflated by the consumer price index.
¹Excludes South Africa.

International experience shows that episodes of unusually high credit growth tend to be associated with increased financial risk. The literature identifies rapid credit growth as a key precursor of financial crises, although macroeconomic variables affecting the debt dynamics, such as low real growth and high real interest rates, also play a role (Demirgüç-Kunt and Detragiache 1998; Beck and others 2005). To some extent, rising credit-to-GDP ratios reflect financial deepening and the typical procyclicality of credit associated with terms-of-trade gains, but increases going well beyond those stylized trends have also been identified as an important early warning indicator of banking crises over longer horizons (Drehmann and Juselius 2013). Various credit-to-GDP gap measures have been developed to separate the long-term financial component associated with financial deepening from excessive credit expansion and to identify countries with a higher probability of a banking crisis (Dell'Ariccia and others 2012; Ortiz Vidal-Abarca and Ugarte Ruiz 2015).

Figure 1.2.2. Sub-Saharan Africa: Credit to the Private Sector, 2003 and 2014



Source: IMF, World Economic Outlook database.
¹ Excludes South Africa.

However, some factors accompanying the rapid expansion in credit in sub-Saharan Africa are in fact reassuring:

- Increased banking intermediation has been underpinned by a growing deposit base, as per capita incomes and the share of the urbanized population have risen. Banks have been more inclined to lend, with the loan-to-deposit ratio rising steadily since 2009 from 63 to 66 percent (Figure 1.2.3). Finally, the expansion of mobile banking has also played a positve role in fostering financial deepening, especially in east Africa, by reducing transaction costs, notably in rural areas. Banking penetration, defined as total banking assets to GDP, has increased by roughly 50 percent over the last 12 years, and now stands at close to 60 percent of GDP.

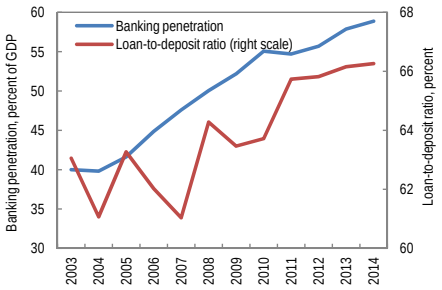
(continued)

Box 1.2. *(continued)*

- More broadly, financial soundness indicators (FSI), where available, indicate that sub-Saharan African banks are on average healthy and profitable. A total of 20 out of 45 countries in the region regularly publish FSI indicators, although in some cases with a lag. For these countries, returns on equity are generally high, nonperforming loan ratios are low, and capital and liquidity buffers are strong (Table 1.2.1, Statistical Appendix Tables 27 and 28). Nonperforming loans are, however, sizable in Burundi, Cameroon, Ghana, and Sierra Leone. At the same time, capital adequacy ratios are relatively high in all countries except Cameroon. Sierra Leone experienced a significant increase in nonperforming loans in 2014 (33 percent), partly related to the Ebola epidemic; however, capital buffers there still remain relatively strong at 20 percent.
- Credit expansion for the region as a whole has not been unusually strong by international comparison. Sub-Saharan African low-income countries still have lower credit-to-GDP ratios than do their peers in other regions and the increase in their credit-to-GDP ratios has been slightly lower than that in other regions (Figure 1.2.4). Moreover, the region still has one of the lowest credit-to-GDP ratios in the world, suggesting some potential for further financial deepening. And while its percentage point increase has been substantial, it is well below that seen in emerging and developing Europe and Commonwealth of Independent States (CIS) countries (Figure 1.2.5).

Nevertheless, in a few countries, credit expansion may have gone beyond what is warranted by financial deepening—we highlight seven of them. Disentagling the degree of financial deepening from excessive credit growth is not straightforward.[1] A proper assessment requires being able to determine the right level of credit warranted by country-specific circumstances, something beyond the scope of this box. Instead, we identify a number of countries in the region in which credit has grown much faster than GDP over the last decade, relying on the threshold of a 20 percentage point increase in credit-to-GDP ratio in a single year used by Dell'Ariccia and others (2012) combined with whether countries experienced an increase in credit that was far above the region's average. Based on these criteria,

Figure 1.2.3. Sub-Saharan Africa: Banking Penetration and Loan-to-Deposit Ratio, 2003 and 2014



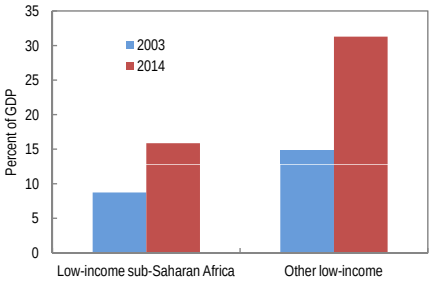
Source: IMF, International Financial Statistics.
Note: Excludes South Africa. Banking penetration data excludes Ethiopia, Guinea, Liberia, Rwanda, and Zimbabwe due to data availability. Data on credit-to-deposit ratio additionally exclude Madagascar and Malawi.

Table 1.2.1. Sub-Saharan Africa: Bank Soundness Indicators, 2013

	2013
Capital to risk-weighted assets	18.5
Nonperforming loans to total loans	7.2
Liquid assets to total assets (liquid asset ratio)	26.2
Bank returns on assets	2.7
Bank returns on equity	23.1

Source: IMF, Financial Soundness Indicators database.
Note:Simple average across 20 sub-Saharan African countries with available data.

Figure 1.2.4. Credit to the Private Sector, 2003, 2014
(Median across countries, balanced sample)

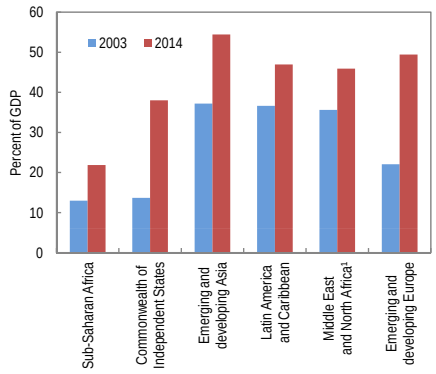


Sources: IMF, International Financial Statistics; and IMF staff calculations.

[1] Marchettini and Maino (2015), in particular, highlight that, when the level of financial depth is low, traditional leading indicators of banking crises have a lower predictive power. In addition, financial deepening often goes beyond bank credit (Sahay and others 2015).

seven countries stand out: Angola, the Democratic Republic of the Congo, Guinea, Guinea-Bissau, Ghana, Lesotho, and the Republic of Congo (Figure 1.2.6, Table 1.2.2). These countries therefore warrant close financial surveillance, especially oil-exporting countries, where lower export receipts can trigger a tightening of financial conditions, and as evidence shows that financial stability indicators tend to deteriorate when commodity exporters experience sharp negative terms-of-trade shocks (see Box 1.1).

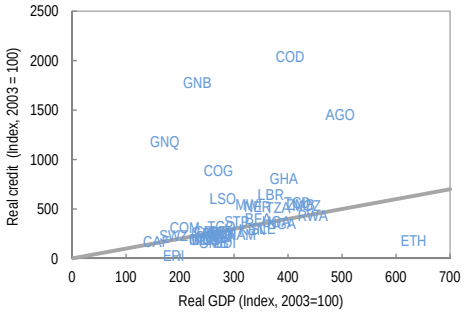
Figure 1.2.5. Credit to the Private Sector, 2003 and 2014
(Simple average across countries, balanced sample)



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

[1]Includes Pakistan and Afghanistan.

Figure 1.2.6. Selected Countries: Real Private Credit and Real GDP Indices, 2014



Sources: IMF, African Department; and IMF, World Economic Outlook databases.

Note: The gray line indicates the same credit and GDP index, or cumulative growth. See page 78 for country acronmyms.

Table 1.2.2. Credit Booms in Sub-Saharan Africa

Past Credit Booms		Start	End	Ongoing Credit Booms		Start
Angola	*	2006	2009	Chad		2008
Central African Republic		2010	2013	Comoros		2009
Congo, Democratic Republic of the	*	2006	2009	Congo, Republic of	*	2008
Gabon		2012	2013	Equatorial Guinea	*	2013
Ghana	*	2005	2008	Guinea		2013
Lesotho	*	2005	2012	Guinea-Bissau	*	2005
Liberia		2008	2011	Mozambique		2008
Malawi		2008	2012	South Sudan		2011
Niger		2006	2012	Togo		2011
Nigeria		2007	2008			
Rwanda		2008	2008			
São Tomé and Príncipe		2009	2010			
Seychelles		2010	2010			
Sierra Leone		2007	2009			
Zambia		2012	2012			

Note: Credit booms are defined here as an episode of a 20 percentage point increase in one year in the credit-to-GDP ratio, followed by continuous increase in the ratio, as in Dell'Arriccia and others (2012). * Denotes countries where the increase in credit was far above the region's average.

Box 1.3. Putting the Sustainable Development Goals into Macroeconomic Perspective[1]

The development agenda in sub-Saharan Africa for the next 15 years is set to be shaped by the Sustainable Development Goals (SDGs) launched at the New York UN summit this September. Centered around 17 goals, the SDGs are broader in scope than the Millennium Development Goals endorsed at the turn of the century, and aspire to improve economic and social well being on a sustainable basis. More equitably distributed growth would improve living conditions not only in terms of material goods and services but also in terms of social cohesion. To sustain growth over time, economies must reduce their vulnerability to external shocks and domestic conflicts, encourage the rational use of nonrenewable resources, and minimize social and environmental externalities. While these efforts will specifically target the least-developed countries, they will require collaboration on many fronts among developing and higher-income countries.

Macroeconomic and financial policies have a crucial role to play in achieving these goals. The specific form these take would depend greatly on each country's specificities, including its economic structure, level of economic and human capital development, and institutional capacity. Nevertheless, there are common elements, which are detailed in the remainder of this box.

Macroeconomic stability. One of the main contributions policymakers can make to meet the development goals is to deliver a stable macroeconomic and financial environment that provides the necessary backdrop for individuals to build their skills and invest to make society more productive.

Quality of public spending. Within the overall budgetary envelope, the choice of public spending components can make a significant difference in encouraging economic growth and promoting opportunities and equity. In particular, properly designed and prioritized public spending on infrastructure, public health, and education can contribute to develop human and physical capital and unleash potential for new activities. Spending on these items can also play a redistributive role that reduces inequality and social tensions while increasing basic aspects of human capital in the underprivileged population, who typically do not have the same access to opportunities as do other groups.

- Public investment can contribute to sustainable development by connecting citizens and firms to economic opportunities, serving as a catalyst for private investment. In a context of limited financing resources, efforts at increasing the efficiency of public spending and the quality of public service delivery become even more crucial.
- Public spending on education helps provide the future workforce, including young female adults, with the basic skills needed by more productive and higher technology sectors, hence sowing the seeds for economic diversification and resilience.
- Untargeted subsidies are traditionally expensive and often fail to reach the intended population. The overarching objective should be to replace them with well-targeted schemes that avoid the waste of public resources. Because the public sector in many developing economies is a nontrivial employer, it can also serve as a role model in adopting hiring policies that avoid gender and other types of labor market discrimination, which at the macroeconomic level tend to perpetuate inequality.

Tax policy. The tax structure can play a substantial role in distributing fairly across the population the burden of financing public spending, creating incentives that promote development, and minimizing to the extent possible distortions. Tax systems could be modernized with a view to increasing their progressivity and widening their base (including by reducing exceptions that favor politically influential interest groups), allowing for a lower and more equitable burden on each individual taxpayer. Fairer tax systems can also help improve the investment climate and hence promote economic activity and jobs.

[1] For more details, see Fabrizio and others (2015).

Financial sector development. The first objective of financial policies should be to encourage behaviors that maintain financial sector stability through appropriate supervision and regulation of the financial sector. Macroprudential policies that manage incentives for risk-taking throughout the business and financial cycles can play a crucial role in maintaining stability; so does an institutional setting that properly factors in the interaction between monetary and financial policies. Within that framework, policymakers should also strive to encourage financial deepening and financial inclusion, that is, access to financial services to the largest possible share of the population.

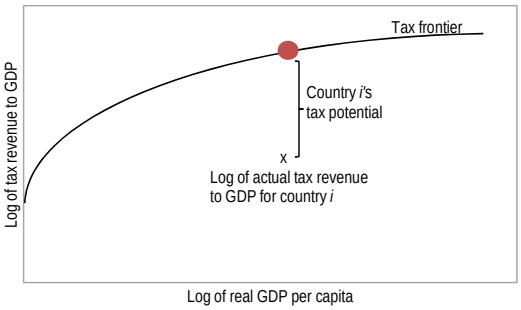
Economic transformation and inclusiveness. Structural reforms, ranging from trade policies to labor markets and the regulatory framework, can go a long way toward promoting economic transformation and inclusiveness. They can help shift resources to the most productive uses and diversify production and exports. They can also play a role in promoting gender inclusion, which tends to deliver significant payoffs in terms of long-term demographic dynamics and private investment in human capital. Well-designed regulations can help strengthen the governance of key institutions and enhance the business climate, promote market competition and innovation, reduce barriers to entry for new products, and enlarge trade networks. In combination with the operation or supervision of public utilities and policies on fiscal subsidies, appropriate regulation can foster the proper pricing policies on energy and water resources, which are critical to achieve environmentally sustainable economic outcomes.

Annex 1.1. Estimating the Tax Frontier[1]

Concepts and Definitions

Fenochietto and Pessino (2010, 2013) define the tax frontier—also known as tax capacity—as the maximum tax revenue (usually measured in proportion of GDP) a country can achieve given its economic, institutional, and demographic characteristics (level of development, trade openness, sectoral structure, education, income distribution, and institutional, factors). The "distance" between the tax frontier and the actual tax collection is defined as the country's tax potential (Annex Figure 1.1.1). This distance partially reflects potential gains in tax revenue that can be achieved through increased collection efficiency as well as a relative acceptance for taxation in exchange for public goods and services. As a result, a positive tax potential does not necessarily imply the need to mobilize additional revenue, but may also reflect certain tax policy choices and a preference for low taxation (even if that means fewer public services provided).

Annex Figure 1.1.1. Tax Frontier



Source: IMF staff based on Fenochietto and Pessino (2010).

Regression Estimation

Following Fenochietto and Pessino (2010, 2013), a model is estimated to determine the tax frontier for a group of 113 countries between 2000 and 2013 (Annex Table 1.1.1). The tax frontier is estimated using Mundlak's (1978) random effects model, which allows for identifying inefficiency from unobserved heterogeneity across countries—that is, the random effect is correlated with the explanatory variables. The estimated model is as follows:

$$y_{it} = \alpha_i + \beta' x_{it} + v_{it} - u_{it}$$
$$\alpha_i = \gamma \bar{x}_{it} + \delta_i$$
$$\bar{x}_{it} = \frac{1}{T}\sum_{i=1}^{T} x_i \text{ and } \delta_i \sim iid(0, \sigma_\delta^2)$$

where y_{it} is the log of total tax revenue (the sum of tax and social security contributions) in percent of GDP for country i in period t for oil importers and the log of non-oil tax revenue in percent of non-oil GDP for oil exporters;[2] x_{it} is a vector of variables that affect tax revenue for country i in period t as described below; α_i is a country-specific effect correlated with (the average of) the explanatory variables and δ_i a country-specific random disturbance; v_{it} is a zero-mean normally distributed error term for country i at time t; and u_{it} is an exponentially distributed (nonnegative) random variable independent of v_{it}. Hence, in this setup, $\beta' x_i$ corresponds to country i's (deterministic) tax frontier, v_{it} is the noise, and u_{it} represents the tax potential, that is, the extent to which country i is away from its maximum level of tax collection.

Annex Table 1.1.1. Country List

Albania*	Estonia*	Latvia*	Portugal
Algeria*	Ethiopia*	Lebanon*	Romania*
Angola*	Finland	Libya*	Russia*
Armenia*	France	Lithuania*	Saudi Arabia
Australia	Gambia, The*	Luxembourg	Senegal*
Austria	Germany	Madagascar*	Serbia and Montenegro*
Bahrain	Ghana*	Malawi*	Singapore
Bangladesh*	Greece	Mali*	Slovak Rep.*
Belarus*	Guatemala*	Mexico*	Slovenia
Belgium	Guinea*	Moldova*	South Africa*
Bolivia*	Guinea-Bissau*	Mongolia*	Spain
Brazil*	Guyana*	Morocco*	Sri Lanka*
Bulgaria*	Honduras*	Mozambique*	Suriname*
Burkina Faso*	Hungary*	Namibia*	Sweden
Cameroon*	Iceland	Netherlands	Switzerland
Canada	India*	New Zealand	Tanzania*
Chile*	Indonesia*	Nicaragua*	Thailand*
China, People's Rep. of*	Iran, Islamic Rep. of*	Niger*	Togo*
Colombia*	Ireland	Nigeria*	Trinidad and Tobago*
Congo, Rep. of*	Israel	Norway	Tunisia*
Costa Rica*	Italy	Oman	Turkey*
Croatia*	Jamaica*	Pakistan*	Uganda*
Cyprus	Japan	Panama*	Ukraine*
Czech Republic*	Jordan*	Papua New Guinea*	United Kingdom
Denmark	Kenya*	Paraguay*	United States
Dominican Rep.*	Korea	Peru*	Uruguay*
Egypt*	Kuwait	Philippines*	Vietnam*
El Salvador*	Kyrgyz Rep.*	Poland*	Zambia*

Note: * Denotes countries with an income below $20,000.

[1] We are grateful to Ricardo Fenochietto for sharing his database and code and for assisting us in our estimations.
[2] This differentiated treatment of oil exporters is meant to estimate the potential for revenue mobilization that is not related to oil activities, as these fluctuate substantially with the (externally driven) price of oil.

The vector of exogenous variables x_{it} includes the following, taken from the World Bank, World Development Indicators, IMF statistics, and Transparency International:

lgd: log of real GDP per capita (purchasing power parity constant 2005);

lgd2: square of *lgd*, to account for the nonlinear concave relationship between GDP per capita and tax revenue (the increase in tax revenue as GDP per capita increases becomes marginally smaller).

tr: trade openness, as measured by the sum of imports plus exports in percent of GDP;

ava: value added of agriculture in percent of GDP;

gini: distribution of income, as measured by the GINI coefficient;

gov: dummy variable to control for the fact that central government revenue is used in place of general government revenue in some countries due to data restrictions;

pe: total public expenditure in education in percent of GDP; and

oil: dummy variable for revenue-dependent oil-exporting countries

Two regressions are estimated, the first one with the full sample of countries, and the second one excluding countries with real GDP per capita above $20,000, to capture only developing and emerging market economies in the subsample (Annex Table 1.1.1). The results, presented in Annex Tables 1.1.2 and 1.1.3, are generally consistent with Fenochietto and Pessino (2010, 2013).

Annex Table 1.1.2. Mundlack Estimation: Full Sample

Variable	Coefficient	Standard Error
constant	-3.7456	1.57
lgd	1.5483 ***	0.19
lgd2	-0.0781 ***	0.01
tr	0.0013 ***	0.00
ava	-0.0039 **	0.00
gini	-0.0030	0.00
gov	0.1927 ***	0.05
pe	0.0091 **	0.00
oil	-0.0873	0.06
Inefficiency		
sigma_u	0.6912 ***	0.05
sigma_v	0.0898 ***	0.00
lambda	7.6945 ***	0.05

Source: IMF staff calculations.
Note: ***, **, * denote significance at the 1, 5, and 10 percent levels.

Annex Table 1.1.3. Mundlack Estimation: Developing and Emerging Market Economies Sample

Variable	Coefficient	Standard Error
constant	2.3564	1.82
lgd	1.6820 ***	0.22
lgd2	-0.0877 ***	0.01
tr	0.0020 ***	0.00
ava	-0.0032 **	0.00
gini	-0.0042 **	0.00
gov	0.1844 ***	0.04
pe	0.0167 ***	0.01
oil	0.0993 **	0.04
Inefficiency		
sigma_u	0.4800 ***	0.04
sigma_v	0.0927 ***	0.00
lambda	5.1788 ***	0.04

Source: IMF staff calculations.
Note: ***, **, * denote significance at the 1, 5, and 10 percent levels.

Calculating the Tax Potential

The estimation procedure yields a time-invariant tax effort for country *i* as $\exp(-u_i)$, which takes values between zero and one. This corresponds to the average ratio for the estimation period (2000–13) of that country's actual tax revenue (in percent of GDP) to the corresponding estimated frontier tax revenue. From that ratio, we derive the average tax potential for country *i*, that is, the difference in percentage points between the potential tax-to-GDP ratio and the actual tax ratio over 2000–13. We then calculate the remaining tax potential compared to the tax ratio observed in 2014, as presented in Figure 1.20 in the text. A negative tax potential does not necessarily indicate that there is no room for revenue mobilization in a given country. Rather, it reflects that the most recent observation exceeds the time-invariant estimate of the tax frontier, which takes into account the average tax-to-GDP ratio over the entire period, and reflects revenue mobilization progress over the most recent years.

Based on the estimation results, the tax potential for the median sub-Saharan African country is estimated at 6.1 percentage points of GDP using the full set of countries, and at 3.1 percentage points of GDP for the developing and emerging market economies subsample (as shown in Figure 1.19 in the text).

Similarly, using the estimated coefficients for *lgd* and *lgd2*, and assuming that real GDP per capita grows at an average of 2 percent during the next 10 years, while holding all other variables unchanged, we estimate that the tax frontier would shift up by 6.7 percentage points for the median sub-Saharan African country with the full set of countries estimates (Annex Table 1.1.2), and by 7.4 percentage points with the developing and emerging economies subsample estimates (Annex Table 1.1.3).

2. Competitiveness in Sub-Saharan Africa: Marking Time or Moving Ahead?

In recent years the sub-Saharan African region has experienced strong real GDP growth and substantial trade integration. However, growth in sub-Saharan Africa's trade volumes has not kept up with growth in the volume of global trade during this period and its trade imbalances have begun to rise in recent years. Meanwhile, the drivers of growth since the mid-1990s—improved policies, increased aid, debt relief, abundant global liquidity, and high global commodity prices—have started to dissipate. Moving forward, to sustain rapid growth the region will need to diversify away from commodities, increase export sophistication, and integrate into global value chains. This chapter assesses how competitiveness indicators in sub-Saharan Africa have evolved, and on this basis asks if the region is well placed to diversify its export base and sustain growth. It also discusses policy options to improve competitiveness.

The main findings of the chapter are:

- Strong average growth in the last decade in sub-Saharan Africa has benefited from a set of unique circumstances. At the same time, a broad range of indicators point to weak and deteriorating competitiveness in the region, especially in commodity exporters.[1]
- The region has experienced fewer episodes of sustained growth necessary to produce a durable increase in incomes than has other regions, but the frequency of such spells has increased in the last 15 years. When growth spells have occurred in the region, three factors primarily explain them: high commodity prices; emergence from a period of civil conflict; and competitive real exchange rates. Overall, the empirical analysis provides strong evidence for the importance of competitive real exchange rates for sustaining growth spells.[2]
- While specific recommendations depend on country circumstances, some broad principles for policy action are pursuing sound macroeconomic policies, including not resisting near-term depreciation pressures in the face of terms-of-trade shocks; undertaking productivity-enhancing infrastructure investments while maintaining debt sustainability; eliminating remaining trade barriers; and improving institutions to enhance the business climate.

SETTING THE STAGE

Developments in Growth

After several decades of lackluster growth, the pace of economic activity in the region picked up in the mid-1990s. Particularly, since the global financial crisis, growth in sub-Saharan Africa has outpaced that in other regions with the exception of emerging and developing Asia.

While the rapid growth in the region's many commodity exporters has been supported by rising commodity prices, as has been observed previously,

This chapter was prepared by a team led by Bhaswar Mukhopadhyay, comprising of Rahul Anand, Wenjie Chen, Jesus Gonzalez-Garcia, Naresh Kumar, and Magnus Saxegaard. Research assistance was provided by Cleary Haines, Shane Radick, George Rooney, Fan Yang, and Mustafa Yenice.

[1] A substantial literature suggests the tradable sector is "special" from the standpoint of growth because of learning externalities and technological spillovers that result from being exposed to international competition (Rodrik 2008), complementarities between activities that can spur integration into global value chains (Eichengreen 2007), and economies of scale (Feder 1983). Thus, institutional weaknesses and market failures that are thought to disproportionately affect the tradable sector result in an underallocation of resources to the tradable sector and low growth. Maintaining a competitive real exchange rate can correct some of the misallocation of resources and spur growth in the short to medium term.

[2] A competitive real exchange rate in this sense is different from the exchange rate assessment under the External Balance Assessment (EBA) methodology, which relates the exchange rate to external stability (see Phillips and others 2013).

growth in the region has not only been driven by commodities.[3] Many countries in the region that are not reliant on commodities were also able to achieve rapid growth by creating a virtuous circle of good macroeconomic policies and important structural reforms that attracted higher aid flows. Thus, eight of the 12 fastest growing countries in the region over 1995–2010 were nonresource-dependent economies. Growth across the region has also benefited from increased private capital flows. The period since the mid-1990s saw a spurt of financial innovations that, together with the improved policy environment and debt relief, allowed such flows to the region to increase very significantly.

While some of these growth drivers will continue to yield dividends, others have run their course. As noted in Chapter 1, commodity prices have retreated, the ongoing shift in China's growth model is likely to reduce demand for the region's raw materials, and the period of abundant global liquidity is tapering down. At the same time, the convergence growth dividend resulting from the poor initial conditions in many countries in the region is slowly dissipating. This suggests that in order for countries in the region to maintain growth moving forward, they will increasingly have to rely on more traditional growth drivers such as competitiveness, which has been a key determinant of sustained growth elsewhere in the world, including in Asia most recently.

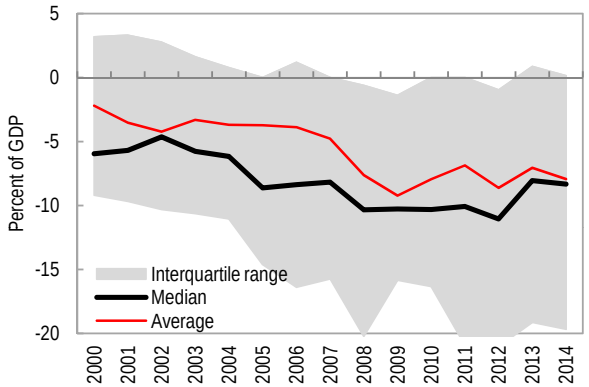
Evolution of Trade Balances

Against this background, the deterioration in sub-Saharan Africa's trade balances since the mid-2000s raises questions about the region's competitiveness (Figure 2.1).

- The increase of import volumes has been the driving force behind the deterioration of trade balances in the region (Figure 2.2). This is largely explained by capital goods imports, as the region has sought to overcome its infrastructure deficit (Figure 2.3). This represents a positive development as it enhances the prospects for future growth.

[3] See Chapter 2 of *Regional Economic Outlook: Sub-Saharan Africa*, October 2008, and Chapter 2, *Regional Economic Outlook: Sub-Saharan Africa*, October 2013.

Figure 2.1. Sub-Saharan Africa: Goods Trade Balance as a Share of GDP, 2000–14



Source: IMF, World Economic Outlook database.

- However, a concern is that export volume growth has been largely concentrated in non-oil commodity exporters, driven by strong external demand and high prices. Elsewhere, export volume growth has been weak.

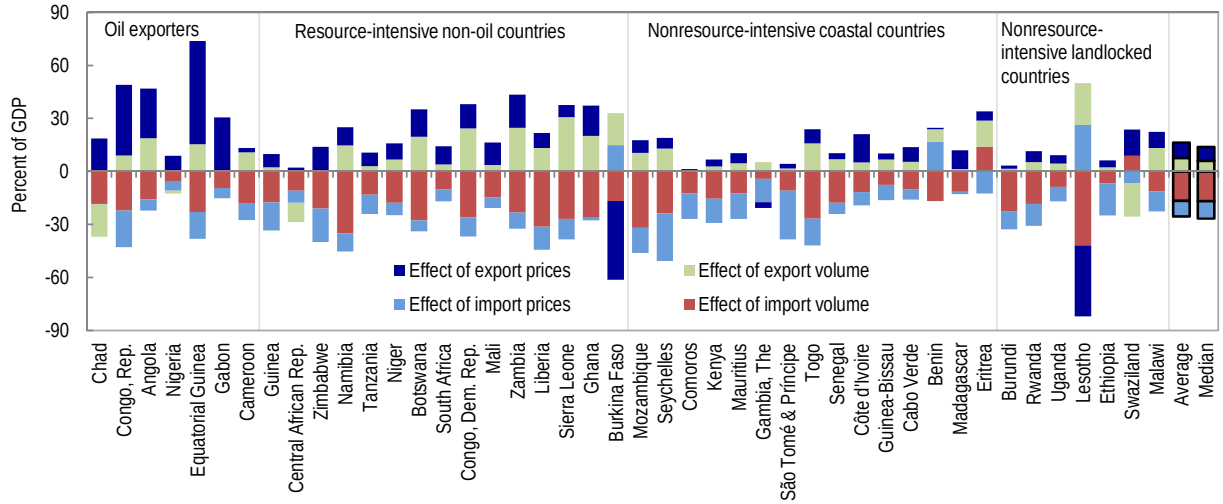
Global Export Shares

These concerns are borne out by changes in the region's share of global exports, and its domestic value added exported as a share of global domestic value added exported (that is, its global value-added income).[4] Figure 2.4, which reports data for countries with GDP per capita below $20,000 in 2014, indicates that, with the exception of commodity exporters, the penetration of sub-Saharan African countries in global trade in terms of gross exports has barely changed since 1995.[5] This is in marked contrast with countries in other regions, many of which have experienced significant increases in their market share.

[4] Trade in value-added terms has become more prominent in the last decade due to the increased fragmentation of production. As firms in many countries have integrated into global value-chains, it is important to assess trade in value-added terms rather than gross exports. For sub-Saharan African countries, however, the integration into global value chains has been only a nascent development as discussed in Chapter 3, *Regional Economic Outlook: Sub-Saharan Africa*, April 2015.

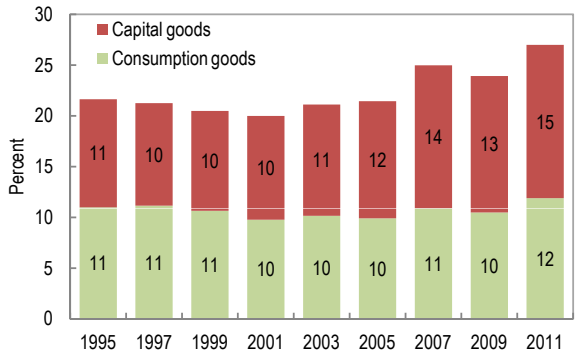
[5] A similar pattern emerges when using the domestic value-added exported as a share of global domestic value added exported.

Figure 2.2. Sub-Saharan Africa: Effects of Prices and Volume Variations on the Change in the Trade-Balance-to-GDP Ratio between 2004 and 2014



Source: IMF, World Economic Outlook database.

Figure 2.3. Sub-Saharan Africa: Imports to GDP, 1995–2011



Source: IMF staff calculations based on Penn World Tables 8.0.

Note: Capital goods include capital goods and industrial supplies. Consumption goods include consumer goods, food and beverages, fuel and lubricants, and transport equipment.

Diversification into Manufactured Exports

Export diversification, especially into manufacturing, has been shown to be an important indicator of competitiveness (for example, Johnson, Ostry, and Subramanian 2010).[6] One possible reason for this is Hausmann and Hidalgo's (2012) finding that most manufactured goods tend to be closely connected to other goods, facilitating further diversification.

- The share of manufacturing in the region's exports, relative to the share of global manufacturing in total global exports, confirms that sub-Saharan Africa remains far less specialized in manufacturing than other countries that have grown strongly for a sustained period (Figure 2.5).[7]
- Specifically, sub-Saharan Africa shows a degree of specialization in manufacturing that is just above half of that in the world as a whole. However, the region's share was higher than the average degree of specialization in other low-income developing countries.[8] Moreover, many countries in the region have manufacturing shares comparable to Bangladesh and Vietnam, countries that have made substantial progress in recent years in diversifying their exports.
- Of greater concern is the fact that between 1991–95 and 2008–12, the share of manufacturing in the region's exports declined relative to the world as a whole (Figure 2.5).

[6] While globally, export diversification towards the manufacturing sector has been closely related to growth, some sub-Saharan African countries have enjoyed success in diversifying their exports of services and commercial/non-traditional agricultural products. This could be a path that a few other countries in the region may take too.

[7] The manufacturing sector's domestic value-added exported as a share of total value-added exports relative to the same ratio for the world has a similar pattern.

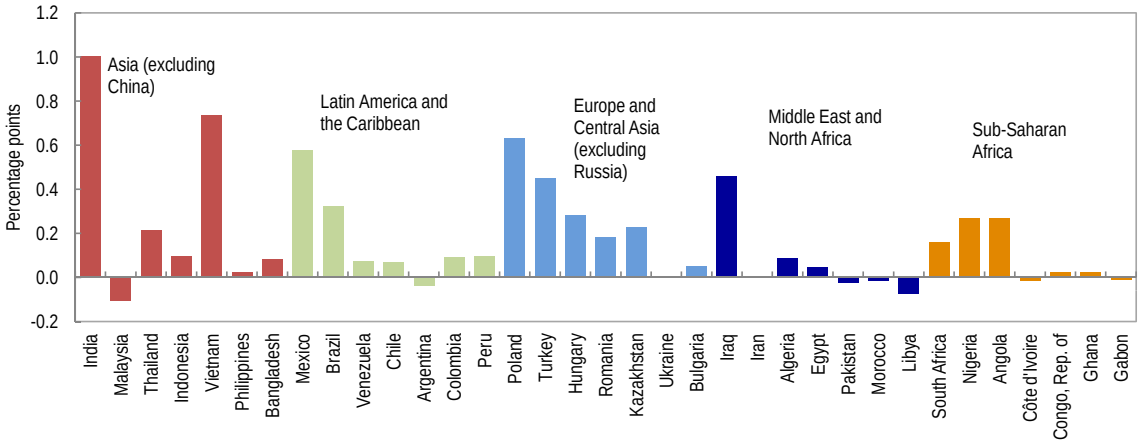
[8] These countries include: Afghanistan, Bangladesh, Bhutan, Cambodia, Djibouti, Haiti, Honduras, Kyrgyz Republic, Lao PDR, Mauritania, Moldova, Mongolia, Myanmar, Nepal, Nicaragua, Papua New Guinea, Sudan, Tajikistan, Uzbekistan, Vietnam, and Yemen.

In summary, the evolution of trade aggregates presents a mixed picture of competitiveness in sub-Saharan African countries. While the significant role of capital imports in explaining the deterioration in trade balances is reassuring, the performance of exports, particularly of the manufacturing sector, raises questions about the region's competitiveness. These developments suggest that a deeper analysis of the region's competitiveness is warranted to assess where sub-Saharan African countries stand in relation to their peers.

INDICATORS OF COMPETITIVENESS: WHAT DO THEY REVEAL?

In the discussion below we consider the evolution of a wide range of competitiveness indicators (Table 2.1). We first look at real effective exchange rate (REER) indices, followed by relative aggregate price levels adjusted for changes in productivity across countries (for example, the Balassa-Samuelson effect), and then at disaggregated price components. Finally, this section looks at nonprice

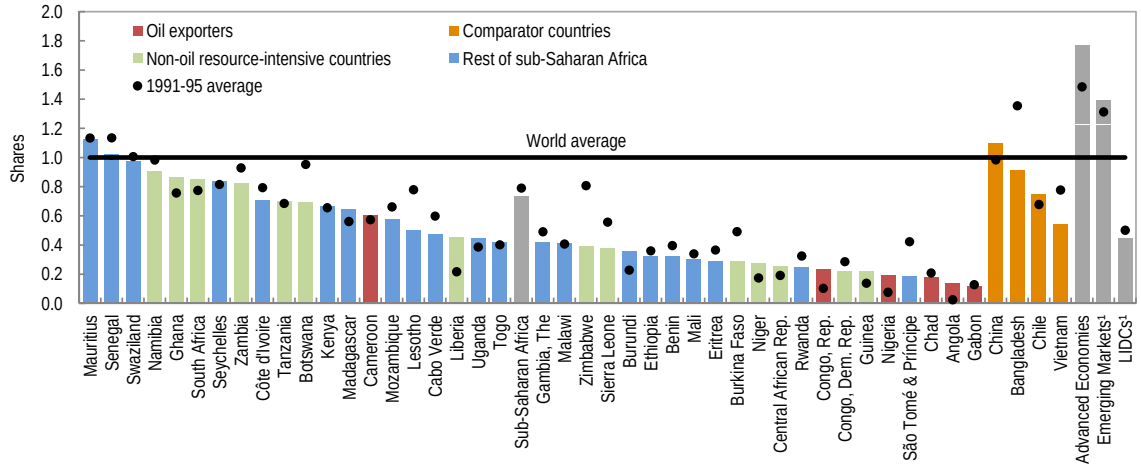
Figure 2.4. Selected Countries: Domestic Exports as a Share of Total Global Exports, Change from 1995–2014



Source: IMF staff calculations based on data from IMF, Direction of Trade Statistics.

Note: Only emerging and developing countries with 2012 GDP per capita below US$20,000 from each region are considered. China is excluded from the Asia group and Russia from the Europe and Central Asia Group, as their value is significantly greater than the average for that region.

Figure 2.5. Sub-Saharan Africa and Comparator Countries: Manufacturing's Share of Gross Exports by Country Relative to World, Average over 2008–12



Source: IMF staff calculations based on data from IMF, Eora database.

Note: A value of 0.5 indicates that, for the country in question, the share of manufacturing in gross exports is only 50 percent of that share at the global level.

[1]Excluding sub-Saharan African countries. LIDCs = low-income developing countries.

Table 2.1. Competitiveness Indicators

Indicator	Description	Strengths	Weaknesses
Price Index-Based Indicators			
Standard real effective exchange rate (REER)	The REER is an index calculated as the trade-weighted average of bilateral real exchange rates against trade partners that uses the Consumer Price Index (CPI) as the price deflator and gross bilateral trade shares as weights. An increase in the REER implies that exports become more expensive and imports become cheaper; that is, a loss in trade competitiveness.	Widely used; easy to compute.	It is an index that only provides information on changes in competitiveness relative to trade partners; uses gross exports and imports that are not an accurate reflection of domestic production in the calculation of trade shares; and uses the CPI, which does not accurately reflect domestic costs of production. Reflects the use of different consumption baskets across countries. Trade partners remain fixed over time.
Global value chain (GVC) REER	GVC-based REER uses value-added exports and imports as weights instead of gross exports as in the case of the standard REER.	Provides a more accurate description of domestic production due to the use of value-added trade weights and the GDP deflator, which better reflect production costs.	Data are less easily available, with some missing data in terms of countries. Data available only through 2012.
Price Level-Based Indicators			
Balassa-Samuelson adjusted relative price level	This is a direct measure of competitiveness of the real exchange rate, taking account of the Balassa-Samuelson effect, that is, the deviation of the real exchange rate from the level predicted taking account of the Balassa-Samuelson effect, whereby wealthier countries have more appreciated real exchange rates on account of higher productivity.	Based on price-level data relative to the United States. Strong theoretical link to export performance and growth. Estimated using Penn World Tables data that include consistent data for a large amount of countries over a long time period.	Does not capture other structural factors (for example, business environment) that may have an impact on competitiveness. Unlike the REER does not provide an assessment of competitiveness relative to all trading partners.
Import and export basket	Calculates the domestic cost of the country's import basket, and the foreign cost of the export basket using price-level data from the World Bank's International Comparison Program.	Uses comparable consumption baskets across countries; uses price level instead of indices and allows trade weights to change over time. This makes it comparable across countries and over time.	Data are available for only two years, 2005 and 2011.
Non-Price-Based Indicators			
Global Competitiveness Index	Based on surveys and data collection, describes institutions, policies and factors that determine productivity in a country.	Based on theoretical and empirical research, takes into account the different stages of development of countries.	Opinions collected in surveys answered by business leaders are subjective, may be influenced by changes in perceptions.

Source: Prepared by IMF staff.

competitiveness indicators, with a view to capturing institutional and structural constraints that hold back the tradable sector.

Real Effective Exchange Rate Indices

The REER, which measures relative movements in aggregate price indices across countries, has traditionally been a key indicator to assess competitiveness. We consider here two concepts of the REER. The standard REER measures the changes in the consumer price index (CPI) relative to trade partners, expressed in a common currency and weighted by the gross bilateral trade share by partner. The analogous value-added REER (the global value chain [GVC] REER), which takes into account value-added instead of gross bilateral trade, also substitutes GDP deflators, as a proxy for the price of exported domestic value added (see Annex 2.1).[9]

[9]See Bems and Johnson (2012) for a discussion of the construction of this index.

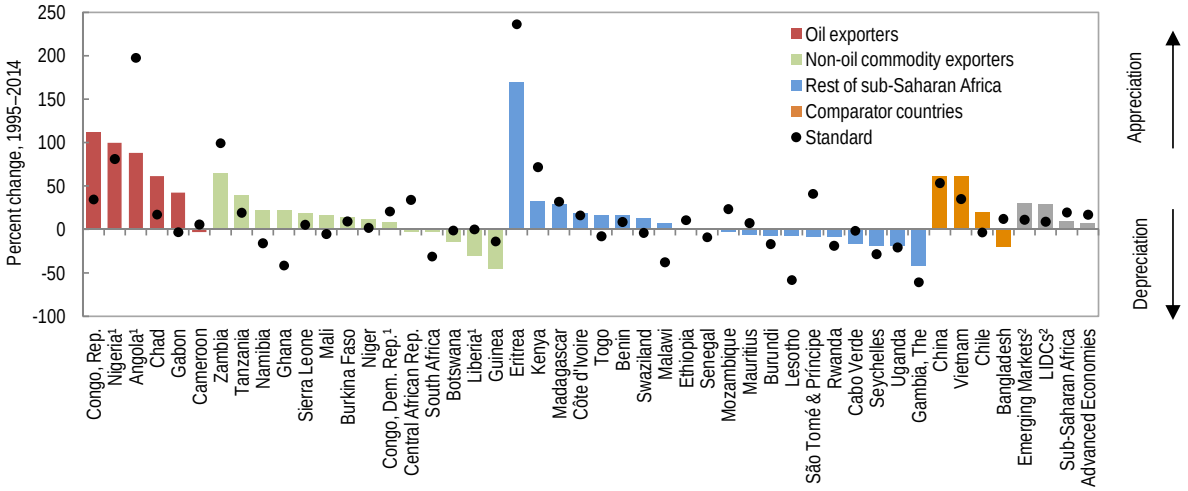
An appreciation of the REER makes exports more expensive than foreign competition and imports cheaper than domestic production, and thus signals a loss in competitiveness relative to trading partners.[10]

The aggregate picture is of a modest appreciation in both the REER and the GVC REER over 1995–2014 (Figure 2.6). However, this masks the pronounced change in trend over time and the marked diversity at the individual country level.

- Notably, both REERs point to a sustained depreciation over 1995–2002 followed by a strong appreciation since 2002 (Figure 2.7).
- This pattern is more pronounced in commodity exporters, where REERs have on average appreciated by 40 percent since 2002, and is

[10]Alternatively, an appreciation of the REER signals an improvement in the profitability of nontraded goods relative to traded goods. This draws resources away from the traded sector and eventualy results in a deterioration in the trade balance.

Figure 2.6. Sub-Saharan Africa and Comparator Countries: Change in Real Effective Exchange Rate, Standard versus Global Value Chains, 1995–2014



Sources: IMF, staff calculations based on data from IMF, Information Notice System (INS), and Eora database.

¹Global value chain (GVC) REERs (in bars) are based on 1995–2012. Data for these countries begin after 1995 due to data availability (with start dates in parentheses): Angola (2000); Democratic Republic of Congo (2010); Liberia (2000); Nigeria (1999).

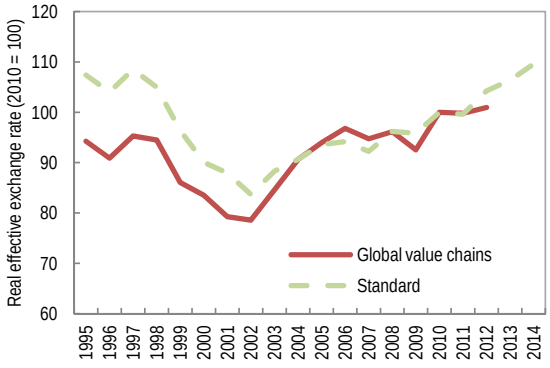
² Excluding sub-Saharan African countries. LIDCs = low-income developing countries.

suggestive of Dutch disease associated with the period of strong commodity prices (Figure 2.8). As a consequence, many commodity exporters, including Nigeria and Angola, which are among the largest countries in the region, show substantial appreciation of their REERs over the entire period 1995–2014.

- REERs of noncommodity exporters have also appreciated since 2002, but not as sharply as in commodity exporters (Figure 2.8). Indeed, over 1995–2014, REERs in most noncommodity exporters either appreciated modestly or depreciated.
- Countries with pegged exchange rates seem to show a more stable REER than floaters (Figure 2.9).

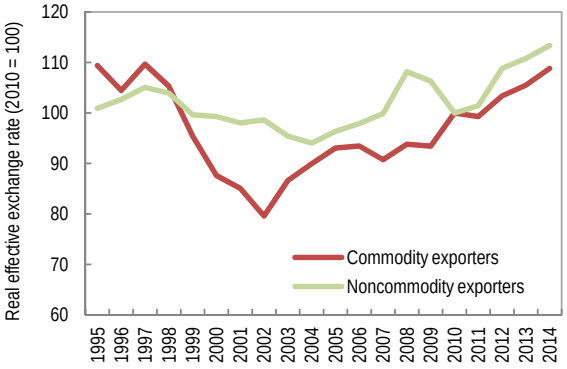
A decomposition indicates that nominal exchange rate depreciations are the main contributors to the depreciation of the REER, most notably in countries with floating exchange rate regimes,

Figure 2.7. Sub-Saharan Africa: Change in Real Effective Exchange Rate, Global Value Chains versus Standard, 1995–2014



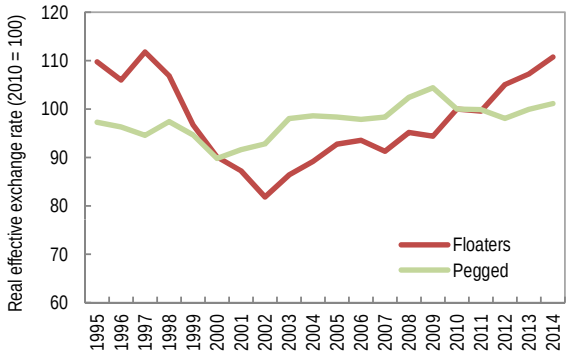
Sources: IMF staff calculations based on data from IMF, Information Notice System (INS), and Eora database.

Figure 2.8. Sub-Saharan Africa: Change in Standard Real Effective Exchange Rate, Commodity Exporters versus Noncommodity Exporters, 1995–2014



Source: IMF staff calculations based on data from IMF, Information Notice System (INS).

Figure 2.9. Sub-Saharan Africa: Change in Standard Real Effective Exchange Rate, Countries with Floating versus Pegged Exchange Rate Systems, 1995–2014



Source: IMF staff calculations based on data from IMF, Information Notice System (INS).

whereas relatively large inflation is often the driver behind their appreciation (Figure 2.10). In a number of countries, mainly floaters, nominal currency depreciations were accompanied by offsetting inflation, although many were also able to sustain a depreciation of the REER. Peggers generally saw little change in their nominal exchange rates or inflation.

Relative Price Level Adjusted for Balassa-Samuelson Effects

An important advantage of the standard REER is that it is easily computable from readily available data. However, REERs are indices, and hence only permit a comparison of relative price changes, but not relative and absolute price levels across countries. Thus, movements in the REER may indicate that a country is becoming more competitive relative to its trading partners, while it remains at a competitive disadvantage on account of its higher cost levels. To account for this, we consider a country's aggregate price level relative to the United States to assess where countries in the region presently stand (in level terms) with regard to competitiveness.[11]

This indicator also adjusts for the Balassa-Samuelson effect, that is, the upward bias of the REER and GVC REER indicators associated with faster productivity growth in the tradable goods sector, which is not necessarily reflective of a deterioration in competitiveness.[12] Hence, this adjustment corrects for differences in relative price levels that result from differences in productivity across countries and time. Figure 2.11 plots the relative price level for countries around the world. As predicted by the Balassa-Samuelson effect, there does indeed seem to be a robust positive relationship between relative prices and income levels.[13] A price level relative to the United States below the trend line could be indicative of a country benefitting from strong competitiveness, and vice versa. Many sub-Saharan African countries have relative prices that are higher than predicted by their income levels, suggesting they could be uncompetitive relative to other countries.

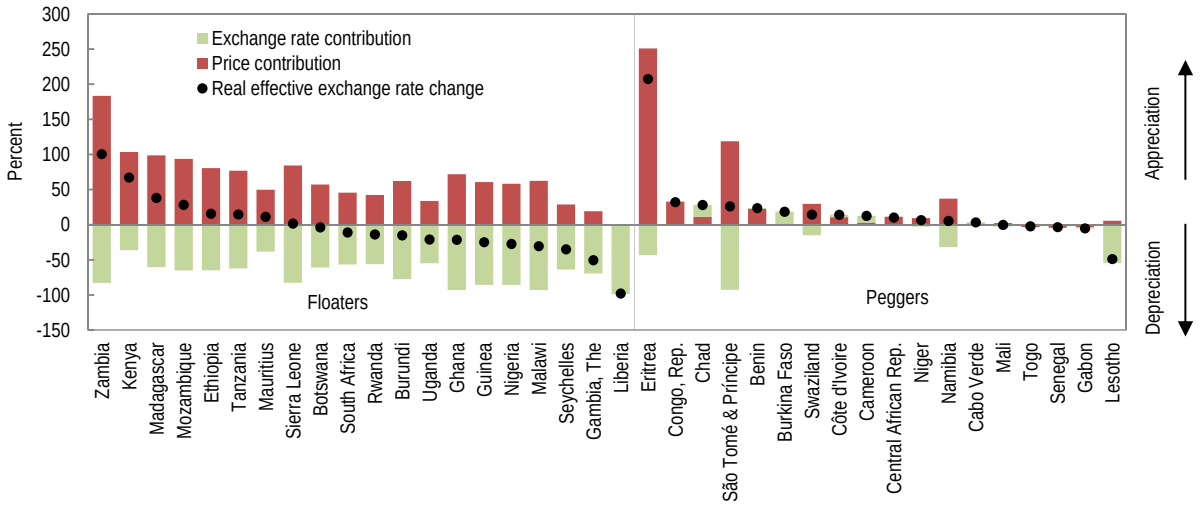
To further explore the competitiveness of sub-Saharan African countries we run a series of cross-section regressions that correct relative prices for differences in income levels. The results suggest that relative prices in sub-Saharan Africa in 2014 (or latest observation available) are on average 8 percent above the level predicted after adjusting for the Balassa-Samuelson effect, pointing to signs of a competitiveness problem (Figure 2.12). With a few notable exceptions (for example, Burundi, Kenya, and Mozambique) nearly all countries that appear to be uncompetitive are either commodity

[11] Specifically, we use aggregate price-level data since 1980 from the Penn World Tables, consisting of the price level in the country concerned relative to the United States. As noted by Rodrik (2008) this is equivalent to the real exchange rate.

[12] The Balassa-Samuelson effect conjectures that fast-growing countries are characterized by relatively faster productivity and wage growth in the tradable sectors that also exert upward pressure on wages in the nontradable sector. With no increase in productivity in the nontradable sector, prices rise, resulting in a deterioration in competitiveness. For further details see Rogoff (1996).

[13] We use data from the Penn World Tables (version 8.0), extended to 2014 (or the latest observation available) using data from the World Bank's WDI database. The Penn World Tables have the benefit of being consistent across countries and over time, and also including comparable data back to at least the 1970s—an important element given evidence that the Balassa-Samuelson effects matter over longer-term horizons (De Gregorio and Wolf 1994).

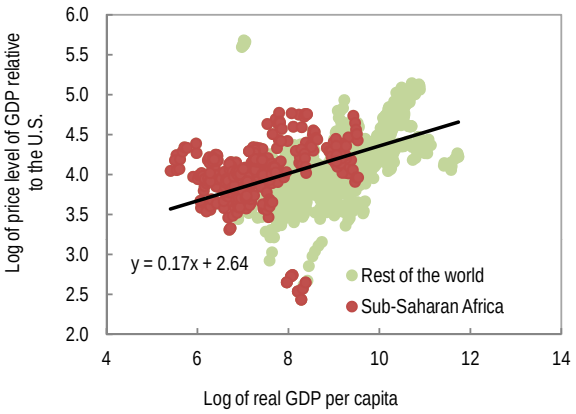
Figure 2.10. Sub-Saharan Africa: Contribution to Change in Standard Real Effective Exchange Rate, 1995–2012 Cumulative



Source: IMF staff calculations based on data from IMF, Information Notice System.

Note: Real effective exchange rate is Information Notice System weighted and uses consumer price indices.

Figure 2.11. Sub-Saharan Africa and Rest of the World: Balassa-Samuelson Effect



Source: IMF, staff calculations based on data from Penn World Tables and World Bank, World Development Indicators (2015).

producers or have pegged exchange rates. By contrast, countries with competitive relative price levels tend to have floating exchange rates and not be commodity exporters.[14]

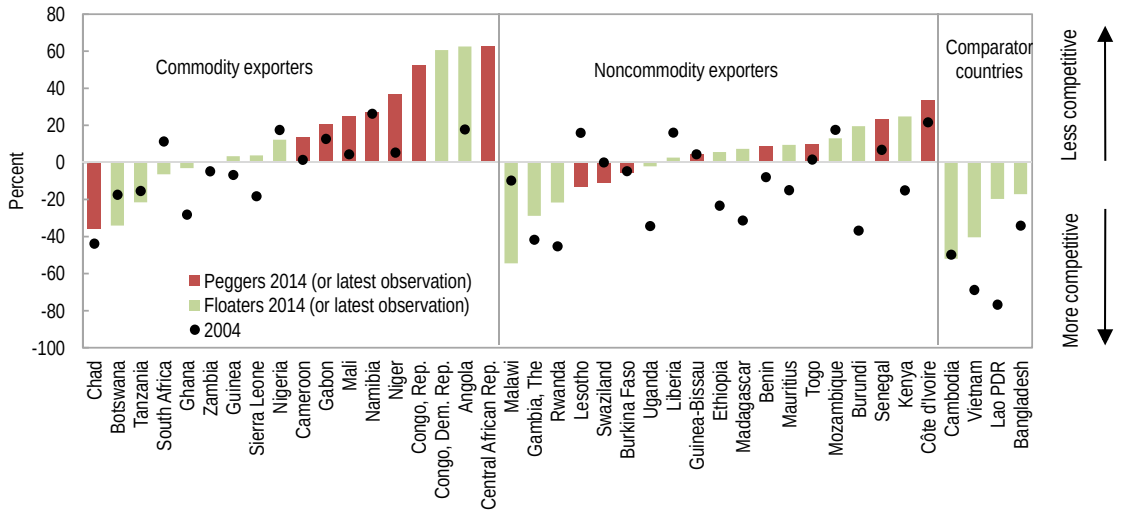
For the purpose of assessing the competitiveness of countries in the region, we also identify as comparators a group of other low-income countries, whose economic circumstances are likely to be most closely related to sub-Saharan African countries. Furthermore, we restrict the comparators to countries that have in recent years managed to integrate well into global trading networks and diversify their exports, and hence are likely to be sub-Saharan Africa's main competitors as they seek to achieve similar objectives. On this basis, we use Bangladesh, Cambodia, Lao PDR and Vietnam as a set of comparators for sub-Saharan Africa.[15] It is notable that relative price levels in our comparator group in 2014 were below the level consistent with competitiveness after the Balassa-Samuelson adjustment, in some instances by large margins.

Moreover, a comparison with data for 2004 suggests that competitiveness has deteriorated in all but a handful of countries. Commodity exporters appear to have struggled with uncompetitive relative price levels for a number of years. On the other hand, it is noticeable that many noncommodity

[14] This lack of competitiveness among countries with pegged exchange rates contrasts with the earlier finding that countries with fixed exchange rates have experienced less REER appreciation since 2010 because of lower inflation. A closer examination of data suggests however that this low inflation was often accompanied by lackluster growth. Côte d'Ivoire and Senegal, for example, have recorded average real per capita GDP growth below 1 percent since 2004.

[15] Low-income countries (LICs) in the Middle East and North Africa (MENA) and Latin America and the Carribean (LAC) have not enjoyed the same success in integrating into global trading networks. As defined by the IMF, the only LIC in Europe is Moldova, which is structurally very different from sub-Saharan African LICs.

Figure 2.12. Sub-Saharan Africa: Balassa-Samuelson-Adjusted Real Exchange Rate



Sources: Penn World Tables 8.0; World Bank, World Development Indicators database; and IMF staff estimates.

exporters with floating exchange rates appear to have benefited from competitive relative price levels in the past, a fact that may help explain their recent robust growth performance.

Disaggregated Price Components

The previous section pointed to the high relative price levels in sub-Saharan Africa that made it uncompetitive, especially in relation to its key comparators. Against this background, this section discusses sub-Saharan Africa's standing in relation to its competitors with respect to key production inputs, which have a strong bearing on relative price levels. In particular, we discuss the cost of labor, transportation, communication, and electricity.

Cost of Labor

The cost of labor is an important determinant of production costs, but available wage data for sub-Saharan Africa are scarce. Furthermore, wages in the large informal sector, where employees have a low reservation wage, are not readily available and hence the data may indicate a higher wage level than what actually prevails. This calls into question how good a proxy these wage data are for competitiveness. On the other hand, export activity typically requires larger firm size to overcome the fixed costs of trade, and such firms generally rely on higher-skilled formal sector labor.

Real hourly dollar wages in sub-Saharan Africa, in many instances, seem to be higher than in other emerging and developing countries.[16] Notwithstanding lower nominal dollar wages in the region than elsewhere, it is instructive to note that real wage levels in sub-Saharan African countries remain relatively high. Indeed, when real wages are plotted against real GDP per capita (Figure 2.13) it appears that real wages in the region's countries are higher than in other emerging and developing countries at a comparable income level, likely reflecting the scarcity of skilled labor in the region.[17] Thus, taking account of sub-Saharan Africa's lower productivity, the gap with other regions in terms of unit labor costs is higher still.

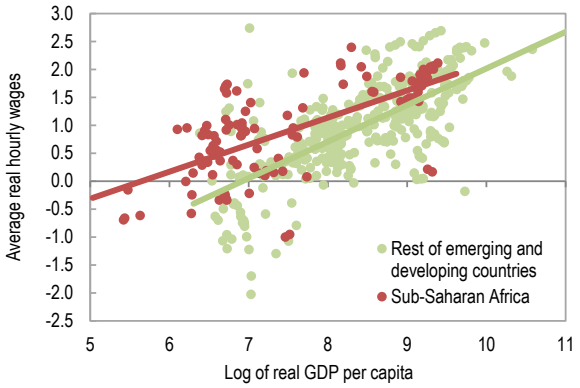
Developments in Nontradable Input Prices

Communications, transport, and electricity are among the most important nontraded inputs in the production process and their costs have a major bearing on a country's aggregate price level. This subsection compares how such costs have evolved in the region and its key comparators (Bangladesh,

[16] These data refer to economy-wide wages, which are particularly susceptible to the caveat about coverage noted above. However, wages in the manufacturing sector exhibit the same pattern.

[17] This result is consistent with findings elsewhere in the literature. See for instance Gelb, Meyer, and Ramchandran (2013).

Figure 2.13. Sub-Saharan Africa and Rest of Emerging and Developing Economies: Real GDP Per Capita and Real Hourly Wage, 1983–2008



Sources: Penn World Tables 8.0; and Occupational Wages around the World database.

Note: Only emerging markets and developing countries from each region are considered.

Cambodia, Lao PDR, and Vietnam), mainly using comparable data on nontradable goods prices across countries for 2005 and 2011, which are available from the International Comparison Program (ICP) of the World Bank.[18]

Figure 2.14 plots average costs of transport, communications, and electricity in sub-Saharan African countries in 2005 and 2011 relative to the four comparator countries identified previously. A value greater than one indicates that the country in question is more expensive than the average of the four comparator countries. The data indicate that:

- The relative cost of transportation has improved significantly in almost all sub-Saharan African countries. While almost all sub-Saharan African countries were relatively expensive in 2005, many had managed to lower transportation costs by 2011, and several had transport costs that were lower than the average comparator. Other data sources, though, present a somewhat less positive picture, with the cost of shipping containers from sub-Saharan African countries still very high in relation to comparators (Figure 2.15). For instance, the average cost of exporting a container from sub-Saharan Africa is around US$2,200, whereas a container can be shipped for as low as US$610 out of Vietnam.
- While the absolute cost of communications had also declined in most sub-Saharan African countries, they have been unable to match the 45 percent decline in such costs in the average comparator over the 2005–11 period. Thus, in relative terms, the cost of communication has increased in most countries of the region.
- Compared with 2005, the cost of electricity has increased in almost all sub-Saharan African countries. While several countries were cheaper than the average comparator in 2005, rising electricity costs have rendered most of them relatively expensive.

The Impact of Changing Trade Partners on Competitiveness

An important development in recent years has been the change in the composition of the region's trade partners, with a sharp increase in the share of trade with emerging markets and developing economies.[19] This has a bearing on the region's competitiveness, and to assess this, we construct two alternate measures of effective exchange rates (see Annex 2.2 for details of the construction).[20] In addition to factoring in the change in trade weights over time, something that the standard CPI-based REER does not do, these alternative effective exchange rate measures are based on price levels rather than indexes. Furthermore, these measures also assess relative prices based on common consumption baskets. By construction, as with the standard REER, an increase in the value of these indices indicates a loss in competitiveness.

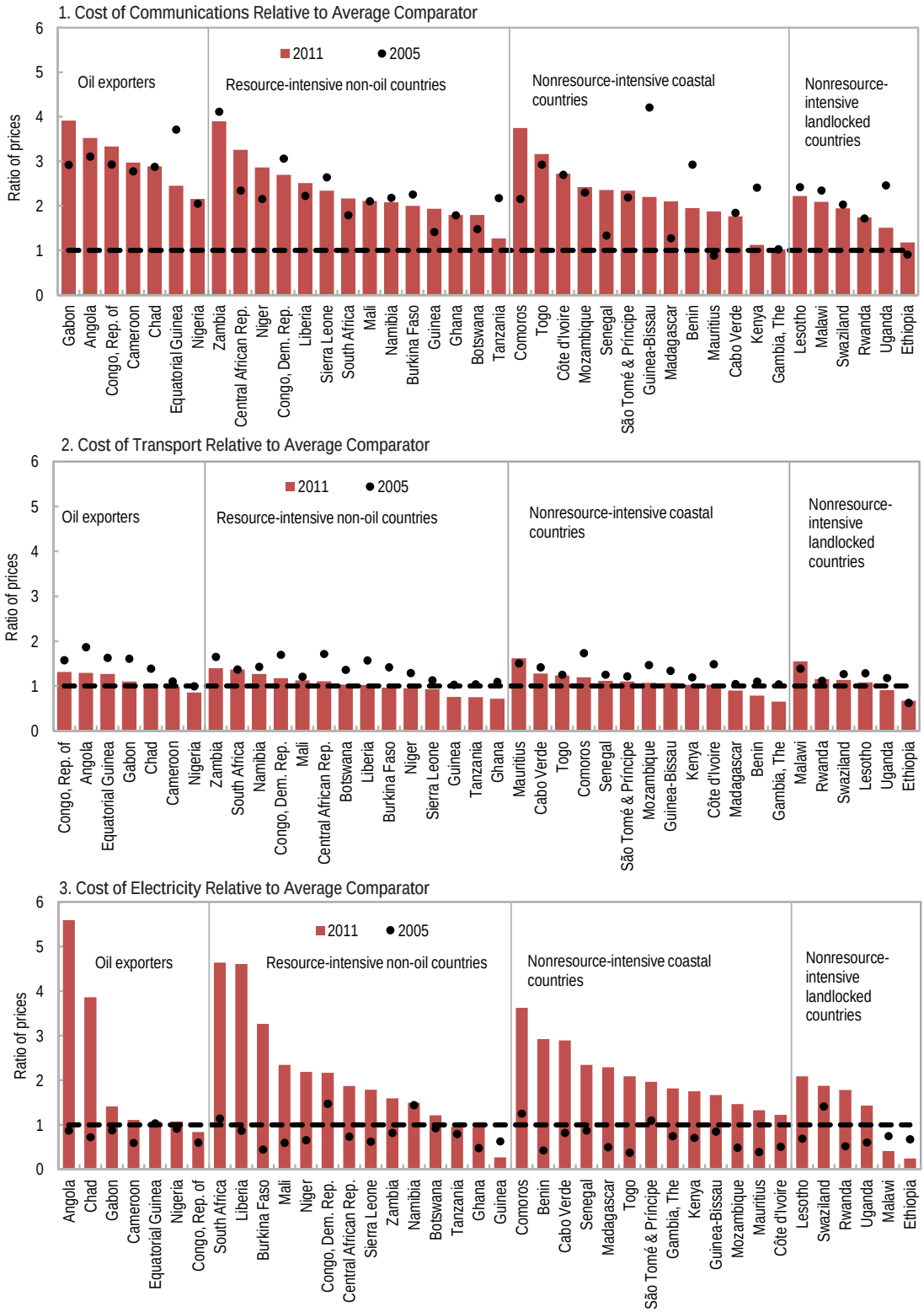
The Import Average Relative Price (Q^M) evaluates the relative price of the home consumption basket in the domestic market with the price of the same basket in the "average" partner country. In particular, the measure is obtained by calculating the price of the basket relative to each partner country and then aggregating over the home country's trading

[18] The ICP collects prices for more than 1,000 products to estimate purchasing power parities for the world economies (the latest round of the ICP, 2011, covered 198 countries). Data on 12 common consumption categories are made publicly available. For details, see http://siteresources.worldbank.org/ICPEXT/Resources/ICP_2011.html. See also World Bank (2015b).

[19] See Chapter 3 of *Regional Economic Outlook: Sub-Saharan Africa*, April 2015.

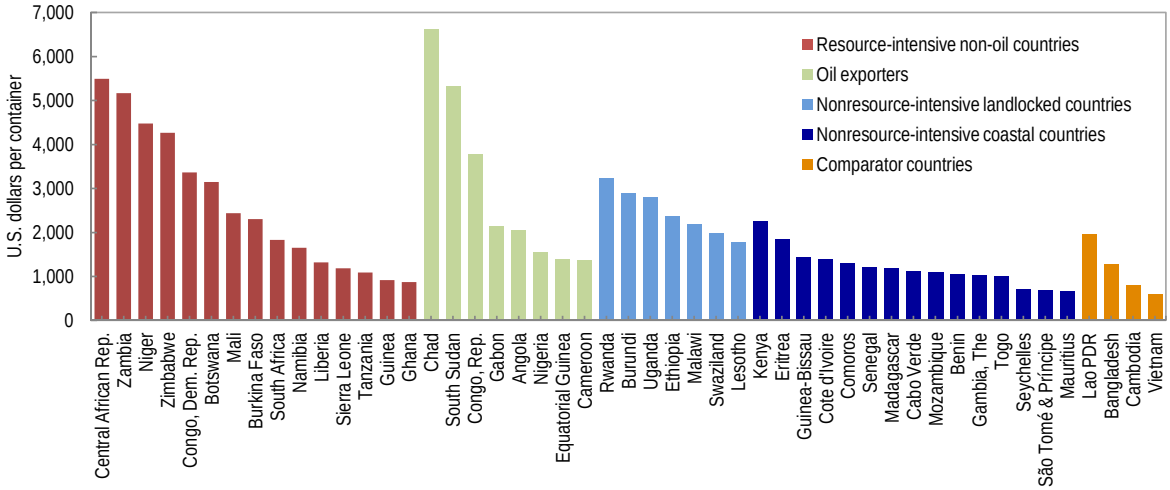
[20] See Tulin and Kranjnyák (2010).

Figure 2.14. Sub-Saharan Africa: Relative Price of Key Nontraded Goods and Services



Sources: World Bank, International Comparison Program; and IMF staff calculations.
Note: Comparators include Bangladesh, Cambodia, Lao PDR, and Vietnam.

Figure 2.15. Sub-Saharan Africa and Comparator Countries: Shipping Cost per Container, 2014



Sources: World Bank, World Development Indicators; and IMF staff estimates.

Note: Includes costs for documents, administrative fees for customs clearance and technical control, customs broker fees, terminal handling charges and inland transport.

partners (using the geographic composition of import trade volumes). Thus, Q^M measures the price of the home consumption basket in the domestic market relative to its price in the "average" import source country.

Analogously, the Export Average Relative Price (Q^X) evaluates the price of the foreign consumption basket in the domestic market relative to its price in the "average" partner country. It is obtained by aggregating the cost of the basket relative to each partner over the home country's export partners.

Figure 2.16 plots the changes in Q^X and Q^M for 43 sub-Saharan African countries for which ICP data are available for 2005 and 2011. In terms of the Q^M, most sub-Saharan African countries lost competitiveness, implying that imports have become cheaper than domestically produced goods. In terms of the Q^X, a majority of the region's countries, including frontier and emerging markets like Kenya, Nigeria, South Africa and Uganda, lost competitiveness between 2005 and 2011, while a few small countries have seen an improvement in their competitiveness.

A decomposition of the changes indicates that for both Q^X and Q^M, a shift in trade partners toward low-cost emerging markets and developing countries has reduced the cost of imports and the cost of export-competing products, and has hence contributed to reducing the competitiveness of sub-Saharan African countries.[21] This shift in trade partners has in many instances partially or fully offset the price reductions that countries in the region have been able to achieve. In some instances though, both higher relative costs and a shift towards low-cost trade partners has contributed to deteriorating competitiveness between 2005 and 2011. The fact that new entrants with cheaper exports have emerged as competitors was not captured by the previous indicators.

Nonprice Competitiveness Indicators

The previous discussion highlighted the role of infrastructural constraints in influencing countries' costs, and hence competitiveness. Similarly, countries' competitiveness also depends on their economic and institutional environments. Indeed, structural and institutional deficiencies can adversely influence the impact of changes in the nominal exchange rate on exports (see Boxes 2.1 and 2.2). Thus, notwithstanding such indicators changing slowly over time, and previous studies reporting that countries have been able to launch successful development experiences even with indicators at the same level as sub-Saharan Africa's today, it is important to make progress in mitigating

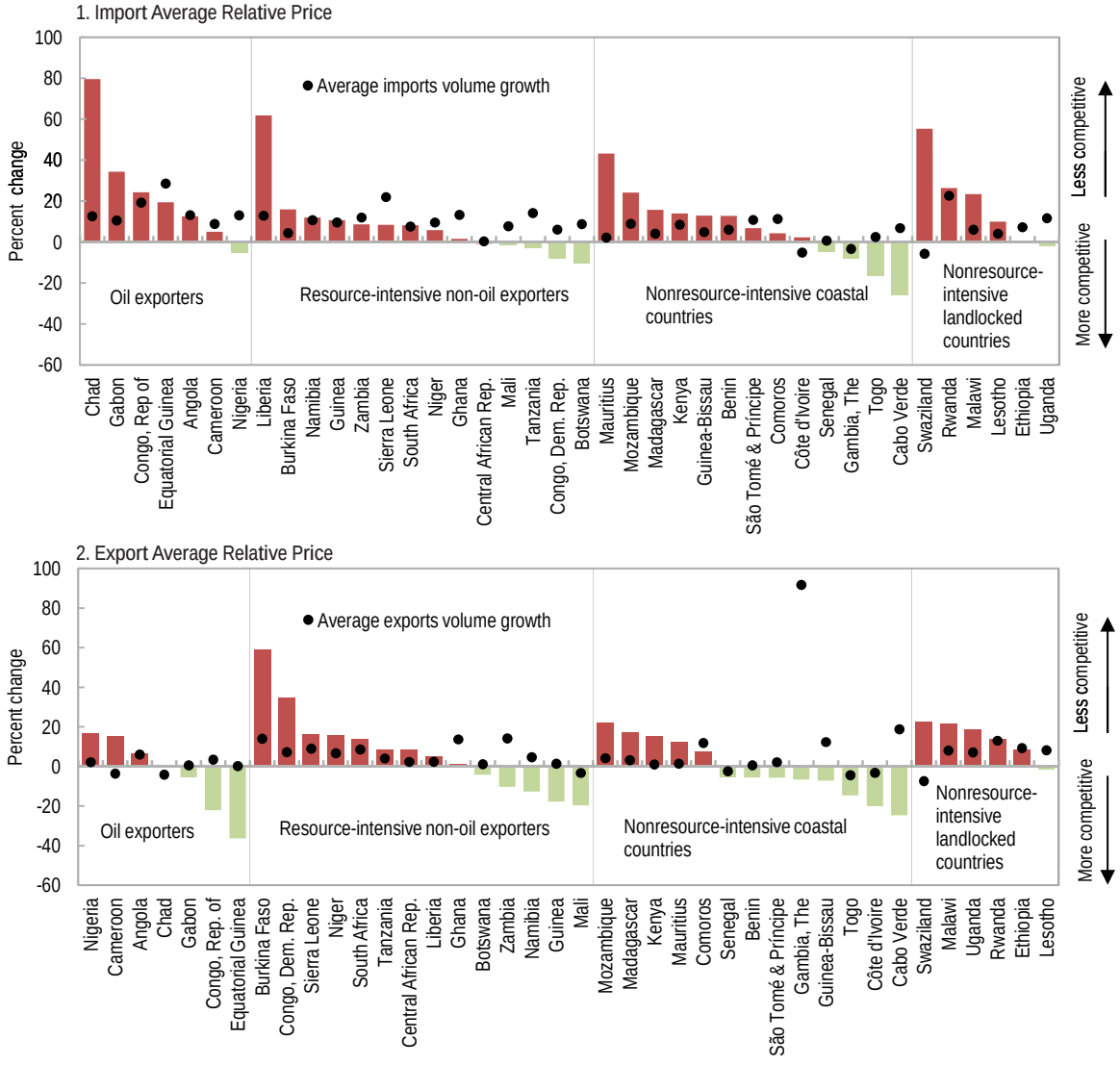
[21] Annex 2.2 provides technical details about the decomposition.

such constraints. The two most widely used sets of indicators are the Global Competitiveness Index developed by the World Economic Forum (WEF) and the Doing Business Indicators prepared by the World Bank. For sub-Saharan Africa, they give broadly similar results, and hence we report below only the Global Competitiveness Index results.

The Global Competitiveness Index contains 12 pillars and the rankings by region are shown in Figure 2.17. It indicates, unsurprisingly, that sub-Saharan Africa's economic and institutional environment trails all other regions of the world.

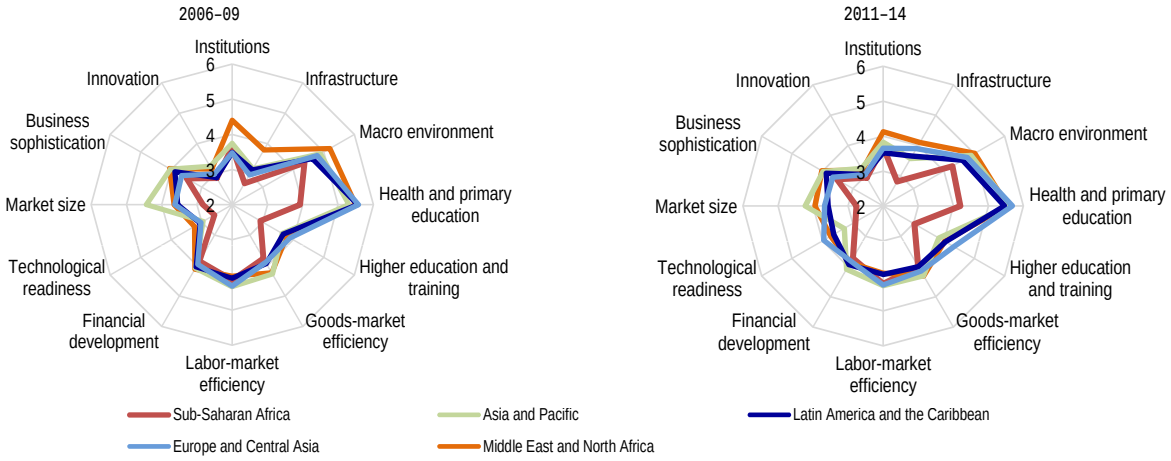
A concern, though, is the limited improvement in such conditions between 2006–09 and 2011–14, especially in relation to other countries. The key bottlenecks in the region were in the areas of infrastructure, market size, technological readiness, and the provision of health and education. The limited progress in market size is understandable, but the persistent gap in infrastructure nowithstanding significant investment in recent years is disappointing. Furthermore, relative to some other regions, for instance Europe and Central Asia, progress in improving technological readiness was rather weak,

Figure 2.16. Sub-Saharan Africa: Relative Price-Based Measure of Real Effective Exchange Rate, 2005–11



Sources: World Bank, International Comparison Program; IMF, Direction of Trade Statistics; and IMF staff calculations.

Figure 2.17. Selected Regions: Pillars of Competitiveness



Source: World Economic Forum.

Note: Only emerging markets and developing countries from each region are considered.

while the gap with other regions in the provision of health and education remained very large.

Reflecting these developments, sub-Saharan Africa has the lowest Global Competitiveness Index score among all regions, but there is substantial heterogeneity among countries (Figure 2.18). While the weaker performers on the index, such as Guinea, Chad, Angola, Burundi and Sierra Leone, have some of the lowest scores anywhere in the world, other countries, such as Mauritius, South Africa, Rwanda, Botswana, Namibia, Kenya, and Seychelles, have an overall competitiveness index score that is similar or even slightly higher than the averages observed in emerging markets and developing countries elsewhere. Nonetheless, they still trail behind the best performers in most other regions.

Putting It All Together

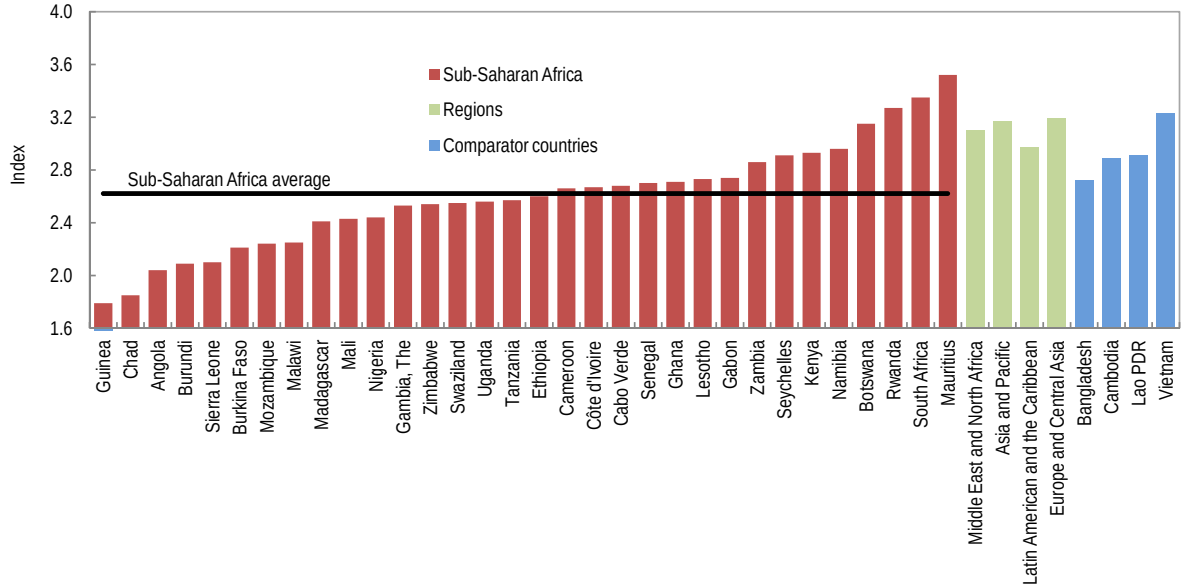
The declining share of manufacturing exports and evidence from the battery of indicators points to the erosion of competitiveness in most sub-Saharan African countries in recent years (Figure 2.19).[22]

In particular, our survey of competitiveness indicators suggests the following:

- Both the standard REER and the GVC REER suggest that following strong gains since the mid-1990s, sub-Saharan Africa's competitiveness has declined since 2002. While the loss in competitiveness is fairly broad-based, the pattern is more pronounced among commodity exporters and seems to be largely driven by high inflation.
- As a result, relative price levels in sub-Saharan Africa tend to be high, even after adjusting for increases that result from relative productivity gains in the tradable sector associated with fast growth. Competitiveness by this measure has deteriorated since 2004, a year when nearly half the region's countries would have been assessed to be competitive. Notably, a number of commodity exporters and countries with fixed exchange rates are now uncompetitive. By contrast, a comparator group of countries that have successfully integrated into global value chains in recent years all have strongly competitive exchange rates.

[22] Table 2.2 uses a confidence band of ±10 percent around the point estimates of the exchange rate measures. While the true confidence intervals are hard to determine, the IMF's Consultative Group on Exchange Rate Issues (CGER) methodology advocates a ±10 percent band for REER assessments (see "How to Apply CGER Methodologies to Non-CGER Countries: A Guide for Desk Economists," http://intranetapps.imf.org/fundwide/KE/Topics/External-Sector-Assessment/Pages/documents.aspx). Thus, in Table 2.2, changes in the REER, GVC REER, and import and export basket REER point estimates within ±10 percent are characterized as no change. Similarly, overvaluation estimates of the Balassa-Samuelson adjusted relative price level within this confidence band are also characterized as not being overvalued or undervalued. For the Global Competitiveness Index, only changes in rankings by more than five places are characterized as an improvement or a deterioration.

Figure 2.18. Sub-Saharan Africa, Other Regions, and Comparator Countries: Global Competitiveness Index, 2014



Source: World Economic Forum.

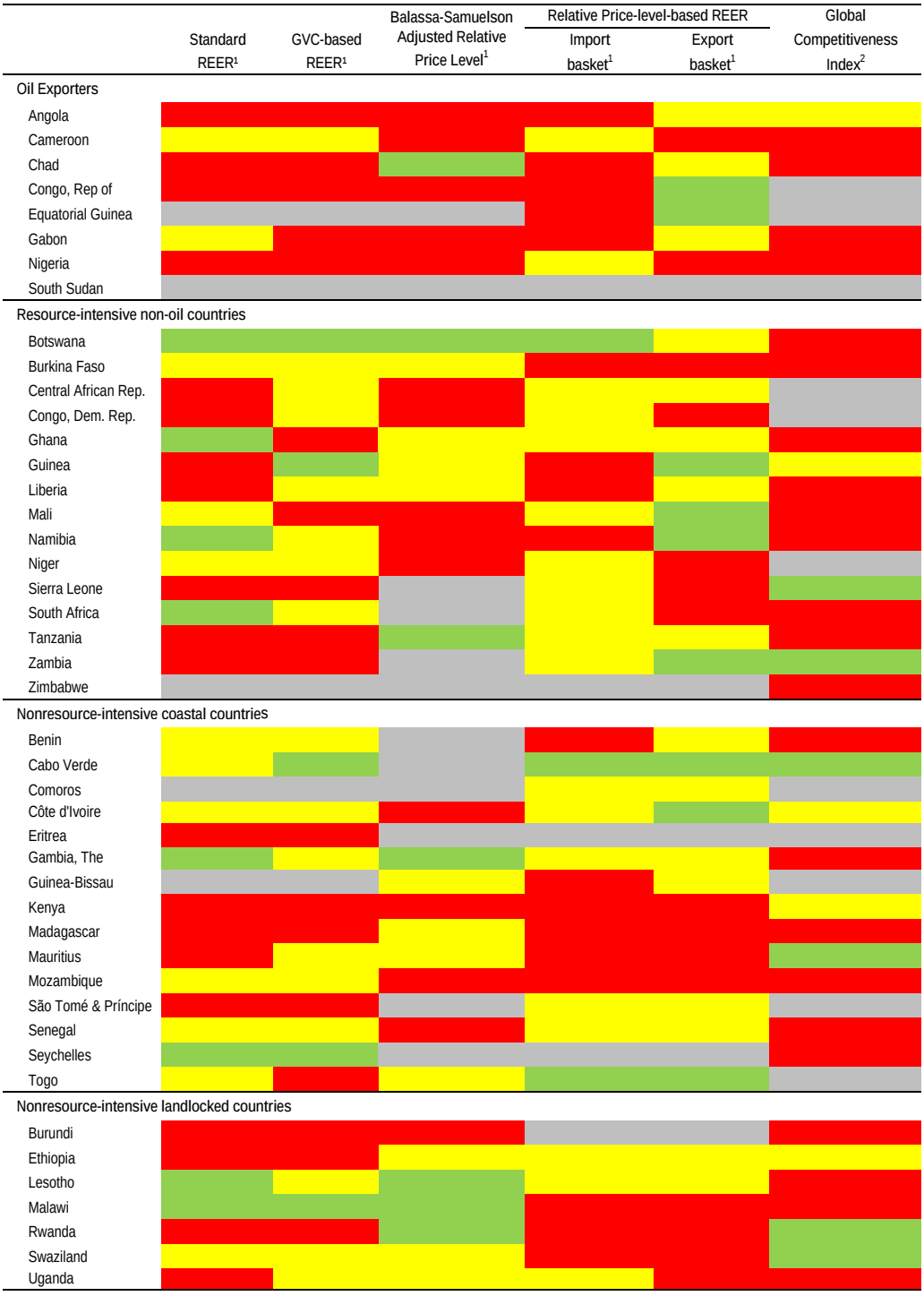
Note: Countries with higher values are more competitive. Only emerging and developing countries from each region are considered.

- The finding of a fairly broad-based deterioration in competitiveness is corroborated by developments in price levels of key inputs. In particular:
  - ◊ Relatively high real wages in sub-Saharan Africa are an important contributor to the lack of competitiveness, especially given the low productivity levels. As a result, unit labor costs in sub-Saharan Africa are the highest anywhere in the world.
  - ◊ In addition, competitiveness is hampered by the region's lagging infrastructure—the cost of key inputs such as communications, electricity, and transportation remain more expensive than in the comparator group of countries. Similarly, poor institutions compare unfavorably to comparator countries in other regions.
- In recent years, the shift in the composition of trade towards lower-cost emerging and developing countries has been an important factor that has impacted the region's competitiveness.
- However, there is significant heterogeneity among countries. In particular, a number of countries that are not largely reliant on commodities—for example, Ethiopia, Kenya, Tanzania, and Uganda—tend to compare favorably both in terms of transport and communication costs and the quality of institutions. These are countries that have had competitive exchange rates for an extended duration of time and, in the case of Tanzania and Uganda, continue to do so. These are also the countries that have made the most progress in achieving global value chains integration and, as discussed elsewhere in this section, in sustaining growth.[23]

As discussed above, a number of unique circumstances helped jumpstart growth in sub-Saharan Africa in the mid-1990s. The trends noted previously indicate that strong competitiveness was not an important factor behind the growth momentum over this period in many countries. However, with growth tailwinds now dissipating, the findings in this chapter raise the question as to whether many sub-Saharan African countries are sufficiently competitive to sustain the robust growth observed in recent years. We now explore this topic by analyzing in more detail the relationship between competitiveness and growth.

[23] For further details, see Chapter 3, *Regional Economic Outlook: Sub-Saharan Africa,* April 2015.

Figure 2.19. Sub-Saharan Africa: Price Competitiveness Indicator Heatmap



Sources: IMF, Information Notice System; World Economic Forum; Penn World Tables 8.0; Eora database; and IMF staff calculations.

Note: GVC = global value chain; REER = real effective exchange rate.

[1] Green denotes a decrease of 10 percent or more, red denotes an increase of 10 percent or greater, and yellow denotes variations in between.

[2] Green means an improvement in the world ranking between 2014–15 and the first report available, corresponding to 2010–11, yellow means no change or a slight worsening in the ranking of less than five positions, and red a worsening of more than five places.

COMPETITIVENESS AND GROWTH

This section assesses the possible implications of sub-Saharan Africa's deteriorating competitiveness on the likelihood that the recent favorable growth performance can be sustained in the face of mounting external headwinds (see Chapter 1).

Stylized Facts on Growth Spells

Our definition of a sustained period of growth ("growth spell") is a period of at least five years with real GDP growth per capita in excess of 2 percent.[24] Based on this definition, data from the Penn World Tables (PWT 8.0) extended to 2014 using data from the World Bank's WDI database yields 162 growth spells over 1980–2014, 62 of which are ongoing. Of these 162 spells, 32 occurred in sub-Saharan Africa, an amount somewhat below the share of sub-Saharan African countries in the sample—24 percent (Figure 2.20). As in Berg, Ostry, and Zettlemeyer (2012), we find that the duration of spells in sub-Saharan African countries is relatively short, suggesting that while countries in the region are able to get growth going, they face a particular challenge in sustaining the kind of growth necessary to produce a durable increase in incomes and reduction in poverty. Consistent with the region's improving macroeconomic performance, the overwhelming majority of growth spells in sub-Saharan Africa are of recent vintage, with nearly 60 percent of all spells starting after 2000, compared with 28 percent in the rest of the world.

What Is The Impact of Competitiveness on the Duration of Growth Spells?

Next, we evaluate empirically the impact of competitiveness—measured using the Balassa-Samuelson adjusted real exchange rate described earlier—on the probability of sub-Saharan Africa countries sustaining the relatively robust growth observed in recent years.[25]

A plot of the real exchange rate deviation from the level predicted by the Balassa-Samuelson effect against spell duration suggests that countries with competitive exchange rates tend to have longer growth spells (Figure 2.21). In sub-Saharan Africa, some 21 countries have had growth spells since 2000. In about half of these countries competitiveness did not play a role in the growth spell taking place—they were mainly commodity exporters or emerging from conflict. In the remaining countries, including Burkina Faso, Ethiopia, Ghana, Kenya, Rwanda, Tanzania, and Uganda, strong competitiveness supported growth spells (Figure 2.22).

A more formal econometric exercise confirms that competitiveness has a strong and significant impact on the duration of growth spells at the global level. Specifically, a real exchange rate 10 percent below the level predicted by the Balassa-Samuelson effect increases the expected length of a growth spell by 7 percent. Excluding the 32 growth spells in the region increases the importance of competitiveness even further.[26]

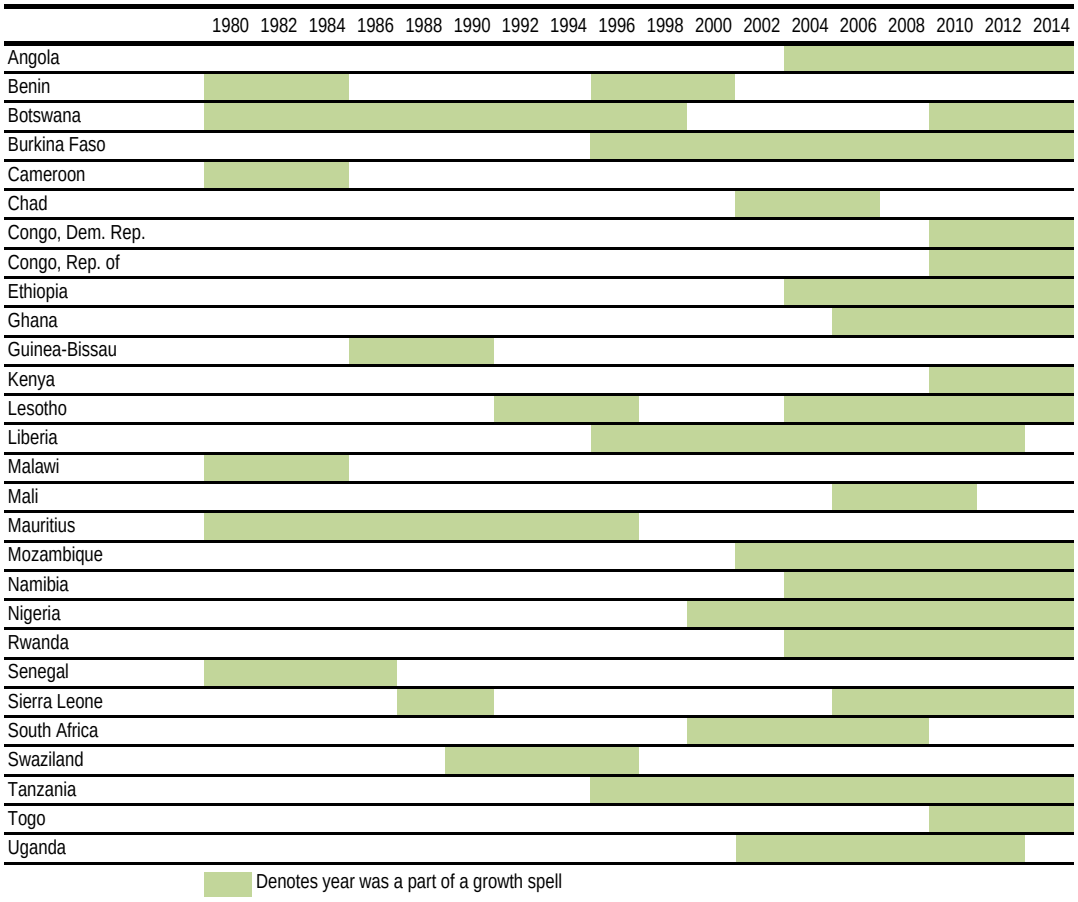
Our results confirm the important role of competitiveness in improving the prospects for sustained growth. While many countries in the region may have been able to achieve high average growth rates in recent years, fewer countries have been able to achieve sustained growth spells. Among these countries, competitiveness has been an important factor in explaining growth spells—once you exclude countries that were exiting from conflict, or benefiting from high commodity prices.

[24] In addition, we assume that growth must increase by at least 2 percent at the start of a spell (to capture the idea of a growth acceleration). To accommodate temporary shocks, we allow growth as low as zero in any one year and merge spells separated by less than three years. Annex 2.3 provides further details on the methodology and checks the robustness of the results to different definitions of growth spells. It also discusses the alternative definitions of spells used in the literature and how the definition used here compares with them.

[25] The use of Balassa-Samuelson adjusted real exchange rates calculated using data from Penn World Tables is standard in this literature, given the comparability of this measure across countries and time.

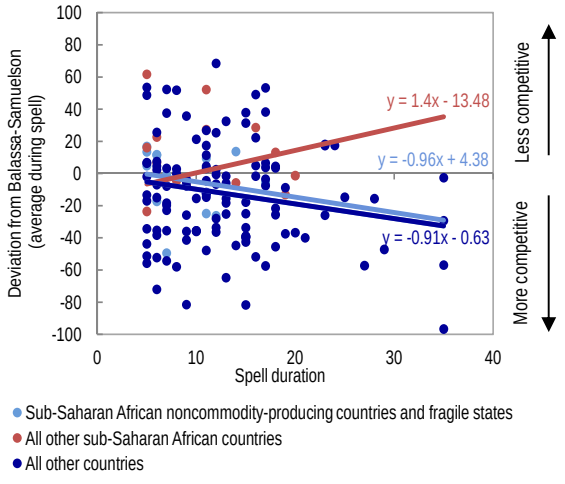
[26] In addition to competitiveness, an increase in the U.S. interest rate has a large and positive impact on spell duration. Terms-of-trade shocks, the initial level of institutions, lower inequality, and increases in the degree of forward integration in global value chains are also associated with longer spells, although the impact is not significant. These results are broadly in line with those found in other studies, including Berg and others (2012).

Figure 2.20. Sub-Saharan Africa: High Growth Spells, 1980–2014



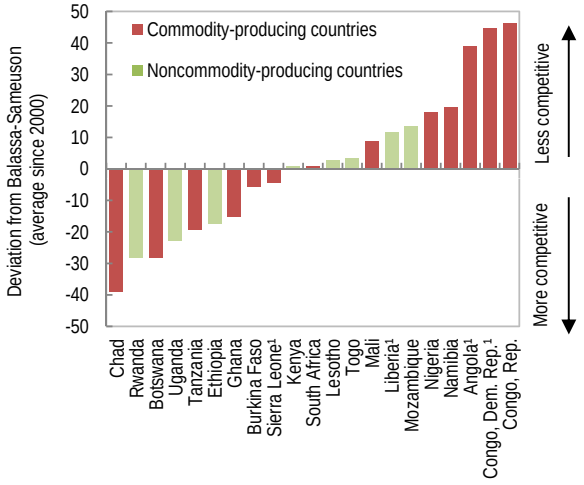
Source: IMF staff calculations.

Figure 2.21. Selected Countries: Spell Duration and Competitiveness



Sources: Penn World Tables 8.0; World Bank, World Development Indicators database; and IMF staff estimates.

Figure 2.22. Sub-Saharan Africa: Competitiveness with Growth Spells since 2000



Sources: Penn World Tables 8.0; World Bank, World Development Indicators database; and IMF staff estimates.

[1] Countries exiting from conflict around the start of a growth spell.

SOME POLICY IMPLICATIONS

Sub-Saharan Africa is in a situation where competitiveness has deteriorated in the last decade and a half. A number of countries in the region, especially commodity exporters, are more expensive than key competitors at a time when competition from new and more efficient trade partners is increasing and tailwinds supporting growth are dissipating. The experience around the world indicates that a strong competitive position helps jumpstart and sustain growth. With countries in sub-Saharan Africa lagging behind most other regions of the world in terms of their infrastructure and institutions, the implementation of strong policy actions now to improve competitiveness needs to be a priority. Such action could help them capitalize on the favorable perceptions about the region that have emerged in recent years and take full advantage of the preferential trading arrangements it enjoys.

In the near-term, steps that could be considered include:

- Countries in the region must limit the buildup of macroeconomic imbalances that could lead to economic instability, including an increase in inflation that would adversely impact competitiveness.
- In this regard, where countries have flexible exchange rate regimes, they should allow them to adjust to respond to shocks (see Chapter 1).

Structural reforms are also imperative to enhance competitiveness. The following measures could usefully be considered by most countries in the region:

- Much of sub-Saharan Africa still maintains high trade barriers, which hinders trade integration, especially in GVCs, where access to cheap and high-quality imports is crucial for generating exports. Thus, furthering trade liberalization, something that can be pursued in the near term, is critical to realizing the full benefits of enhanced competitiveness.
- Efforts to improve human capital and enhance the region's labor productivity are critical. Some near-term improvements on this front can be achieved through learning and technology transfer associated with investment. However, the region must also continue to invest over the medium term in human capital to achieve sustainable improvements. This is especially important if it is to fully benefit from the ongoing demographic transition in the region.
- Countries must also continue to invest judiciously in building up over the medium term the region's infrastructure to address key bottlenecks that increase the costs of production. The region's infrastructure deficit has long been recognized as an important impediment to its competitiveness. However, it is critical that such investments proceed in a manner that does not compromise debt sustainability. In this regard, enhancing investment selection processes and capabilities is critical to putting scarce resources to their best possible use.
- Work to eliminate other structural impediments that adversely impact the business climate and production costs must also continue. Here too, countries should seek to identify key near-term actions, but recognize that institution building takes time. In this regard, it has been noted that other countries have launched successful development experiences with similar institutions as those in sub-Saharan Africa, but it is critical that the region not allow itself to fall behind other regions of the world, and that it gradually bridge the gap.

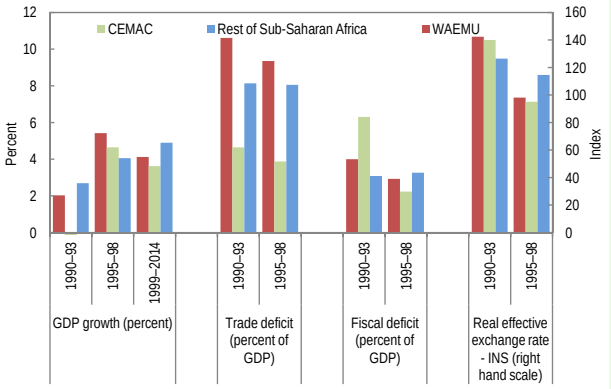
Box 2.1. CFA Franc Devaluation

The CFA franc zone devaluation in 1994 illustrates that competitiveness has many facets and that a nominal exchange rate devaluation alone cannot restore competitiveness. Specifically, it shows how a devaluation can help jumpstart growth, but also how, in the absence of supporting reforms, the benefits of a devaluation can quickly peter out.[1] Prior to the devaluation, goods produced by CFA franc zone countries were priced out of the world market and, partly as a result of this, these countries' economies grew little or not at all during the 1980s and early 1990s. This was especially true of the Central African Economic and Monetary Union (CEMAC) region, which contracted by about a ¼ percent on average over 1990–93 (Figure 2.1.1).

In 1994, member countries devalued the CFA franc by 50 percent, with significant beneficial macroeconomic effects. Growth increased by nearly 4 percentage points for the West African Economic and Monetary Union (WAEMU) region and more than 5 percentage points for the CEMAC region, when comparing four-year averages before and after the devaluation. This was significantly faster growth than achieved in the rest of sub-Saharan Africa. Trade and fiscal deficits also declined before and after the policy change, with especially notable adjustment of the fiscal deficit in the CEMAC region.

Devaluation was not intended to be a silver bullet, however, nor did it turn out to be. One of its immediate side effects was a one-time surge in prices, which lead to inflation picking up. Furthermore, as the momentum on structural and institutional reforms was not maintained, with the exception of Benin and Burkina Faso, the CFA franc zone countries were unable to embark on a period of sustained economic growth. This highlights the fact that a competitive exchange rate is best thought of as a way to jumpstart growth and underscores the importance of coupling a competitive exchange rate with a sound macroeconomic and institutional environment.

Figure 2.1.1. CFA Franc Zone: Selected Indicators



Sources: IMF, World Economic Outlook database; and IMF, Information Notice System (INS).

[1] The CFA franc zone consists of 15 countries in sub-Saharan Africa, all but one affiliated with one of two monetary unions. Benin, Burkina Faso, Côte D'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo comprise the West African Economic and Monetary Union, or WAEMU, founded in 1994 to build on the foundation of the West African Monetary Union, founded in 1973; six countries — Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea, and Gabon — comprise the Central African Economic and Monetary Union, or CEMAC; and The Comoros. These two unions maintain the same currency, the CFA franc, which stands for Communauté Financière Africaine (African Financial Community) within WAEMU and Coopération Financière en Afrique Centrale (Financial Cooperation in Central Africa) within CEMAC. WAEMU and CEMAC account for 14 percent of Africa's population and 12 percent of its GDP.

Box 2.2. South Africa's Export Performance and the Role of Structural Factors[1]

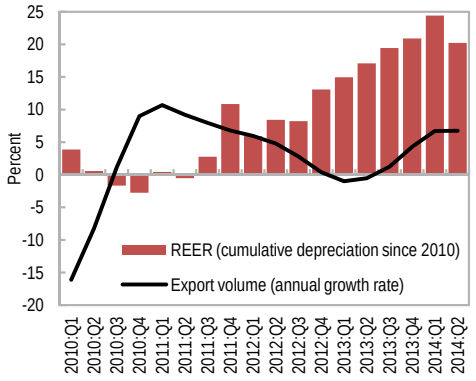
Despite a prolonged and substantive depreciation of the rand, South Africa's export performance remains weak. South Africa's real effective exchange rate (REER) depreciated by about 25 percent during January 2011–July 2014, one of the longest and largest depreciation episodes in emerging markets (Figure 2.2.1). Notwithstanding this real depreciation, South African exports grew at an average 4.3 percent during 2011–14.

Weaker external demand, coupled with softer commodity prices, doesn't fully explain the weak performance of South African exports. South Africa's export growth averaged around 82 percent of its trading partners' import growth during 2011–14—one of the lowest proportions among emerging markets, with its share of global exports falling by nearly 15 percent (Figure 2.2.2).

Binding structural constraints may be one of the reasons behind South Africa's poor export performance. In the last few years, supply constraints, such as availability of electrical power and production disruptions due to strike activities, have become more binding, hurting production and hence exports. The firm-level data are used to study the role of structural constraints in affecting the responsiveness of exports to the REER changes. The use of firm-level data allows us to isolate the impact of sector-specific factors on REER responsiveness, as macroeconomic conditions remain the same for all firms in the economy.

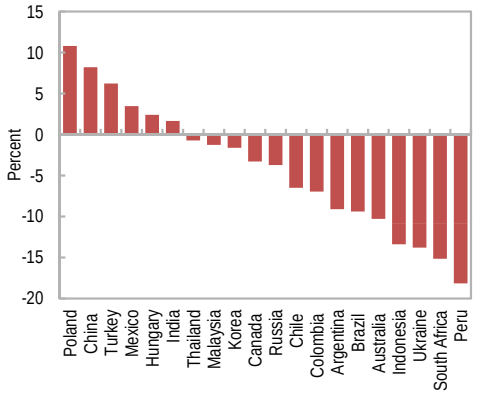
Firm-level estimates suggest that electricity bottlenecks, limited product market competition, and labor market constraints have reduced the responsiveness of exports to the exchange rate depreciation. Firms in electricity-intensive sectors have seen lower export growth as power shortages have hindered export expansion. Similarly, firms in sectors with greater labor market rigidities have worse export performance. The econometric findings also suggest that exports from sectors with high concentration have been less responsive to the depreciation, as low competition may have resulted.

Figure 2.2.1. South Africa: Real Effective Exchange Rate Cumulative Depreciation and Annual Growth of Trade Volumes, 2010–14



Sources: Haver Analytics; SARB; and IMF staff calculations.

Figure 2.2.2. Selected Countries: Change in Shares of World's Exports, 2010–14



Sources: Haver Analytics; and IMF staff calculations.

[1] For more information see IMF (2014a).

Annex 2.1. Methodology on Construction of GVC-Based REER[1]

We follow the standard Information Notice System (INS)[2] methodology of calculating the real effective exchange rate (REER). For a country *i*, the REER index in year *t* is calculated by

$$REER_{i,t} = \frac{P_{i,t} * X_{i,t}}{\prod_{j \neq i} (P_{j,t} * X_{j,t})^{w_{i,j,t}}}$$

where *j* is the subscript denoting trading partners, *P* is an index of prices, *X* is the nominal bilateral exchange rate index (U.S. dollar per national currency), and $w_{i,j,t}$ is a weight assigned to trade partners. The REER index increases when currency *i* appreciates nominally faster than its trading partners and/or when country *i* experiences higher inflation than partners, driving a real appreciation effect.

The IMF produces several variants of the REER which differ on the measure of prices ($P_{i,t}$) and the weighting methodology ($W_{i,j,t}$). The REER using consumer prices indices (CPI) is available for almost all countries, while the unit labor cost (ULC)-based REER is published for selected economies with data availability. The standard IMF weighting methodology is calculated by taking into account the amount of goods and services traded by each partner and type of goods and services traded. The weights are:

$$W_{i,j} = (a_M + a_S) * W_{i,j}(M) + a_C W_{i,j}(C) + a_T W_{i,j}(T)$$

where $W_{i,j}(M)$, $W_{i,j}(C)$, and $W_{i,j}(T)$ are the manufacturing, commodities, and tourism weights, respectively; a_M, a_S, a_C, and a_T are shares of manufactures, nontourism services, commodities, and tourism in overall trade (Bayoumi and others 2005). Derivation of commodity weights differs from that of manufacturing and tourism; the former assumes perfect substitutability with a single price, while the latter two take into account direct competition between country *i* and *j*, but also indirect competition in all third-country markets. The degree of competition in third markets is either measured by domestic sales data if data are available, or by arbitrarily setting equal weights to direct competition and third-market competition proxied on trade flows alone.

The global value chain (GVC)-based REER presented herein is a first step in using value-added measures of trade to weigh the importance of trading partners. From a matrix of bilateral value-added trade, we construct for each country *i* a set of GVC weights as follows:

$$W_{i,j}(GVC) = \frac{\sum_c w_i^c \, s_j^c}{\sum_c w_i^c (1 - s_i^c)}$$

where *j* represents all partner countries, w_c^i represents the share of value-added flows in sector *c* of country *i*, and s_j^c represent the share of country *j* in the totality of value flows in the world for sector *c*. A sector that is important to country *i* sees higher volumes of value-added imports and exports, represented by a higher value of w_i^c. This weight directly scales with the partner country's global importance in that particular sector. Summing over all sectors thus yields a number that measures the importance of country *j* with respect to the industries in country *i*. This weight is then normalized. The methodology is identical to that of the commodity weights in Bayoumi and others (2005). We use this simplification because our dataset lacks sales data in the tourism and manufacturing sector. Following Bems and Johnson (2012), we use GDP deflator in place of CPI and ULC as the price index, to reflect the point that when tasks are traded across the world, the relative price of tasks is better captured by a GDP deflator than other price indices.

Lastly, we calculate a set of GVC weights for each year. The standard practice of the IMF is to use the same set of weights for several years before updating. The GVC-based REERs presented are thus adjusted for changes in value-added trade on a yearly basis.

[1] Prepared by Fan Yang.

[2] See Zanello and Desruelle (1997).

Decomposition of REER into Price and Exchange Rate Effects

To decompose the change in the REER into price and exchange rate effects, we first rearrange the REER formula for time *t* into a product of two factors: the relative prices and the relative exchange rates.

$$REER_{i,t} = \left(\frac{P_{i,t}}{\prod_{j\neq i} {P_{j,t}}^{w_{i,j,t}}}\right) * \left(\frac{X_{i,t}}{\prod_{j\neq i} {X_{j,t}}^{w_{i,j,t}}}\right)$$

Suppose that in *t*+1, each factor changes by some number (ΔP and ΔX):

$$REER_{i,t+1} = \left(\frac{P_{i,t}}{\prod_{j\neq i} {P_{j,t}}^{w_{i,j,t}}} + \Delta\mathrm{P}\right) * \left(\frac{X_{i,t}}{\prod_{j\neq i} {X_{j,t}}^{w_{i,j,t}}} + \Delta\mathrm{X}\right)$$

Taking differences and expanding,

$$\begin{aligned} REER_{i,t+1} - REER_{i,t} &= \left(\frac{P_{i,t}}{\prod_{j\neq i} {P_{j,t}}^{w_{i,j,t}}} + \Delta\mathrm{P}\right) * \left(\frac{X_{i,t}}{\prod_{j\neq i} {X_{j,t}}^{w_{i,j,t}}} + \Delta\mathrm{X}\right) - \left(\frac{P_{i,t}}{\prod_{j\neq i} {P_{j,t}}^{w_{i,j,t}}}\right) * \left(\frac{X_{i,t}}{\prod_{j\neq i} {X_{j,t}}^{w_{i,j,t}}}\right) \\ &= \frac{P_{i,t}}{\prod_{j\neq i} {P_{j,t}}^{w_{i,j,t}}}\frac{X_{i,t}}{\prod_{j\neq i} {X_{j,t}}^{w_{i,j,t}}} + \frac{P_{i,t}}{\prod_{j\neq i} {P_{j,t}}^{w_{i,j,t}}}\Delta\mathrm{X} + \Delta\mathrm{P}\frac{X_{i,t}}{\prod_{j\neq i} {X_{j,t}}^{w_{i,j,t}}} + \Delta\mathrm{P}\Delta\mathrm{X} - \frac{P_{i,t}}{\prod_{j\neq i} {P_{j,t}}^{w_{i,j,t}}}\frac{X_{i,t}}{\prod_{j\neq i} {X_{j,t}}^{w_{i,j,t}}} \\ &= \frac{P_{i,t}}{\prod_{j\neq i} {P_{j,t}}^{w_{i,j,t}}}\Delta\mathrm{X} + \Delta\mathrm{P}\frac{X_{i,t}}{\prod_{j\neq i} {X_{j,t}}^{w_{i,j,t}}} + \Delta\mathrm{P}\Delta\mathrm{X} \end{aligned}$$

We define the contribution of a factor using the above equation. For example, if both relative prices and exchange rate ratios increased, the change in the REER due to prices is the change in relative prices multiplied by the previous period's relative exchange rate plus the contribution of prices in the shared effect.[3] There are four possible combinations of change (two factors and two directions of change), each of which is decomposed in a similar approach.

[3] The contribution of the price effect to a change in the REER would be calculated as follows:

$$\textit{Contribution of price effect} = \frac{\Delta\mathrm{P} * \mathrm{X_t} + \frac{\Delta\mathrm{P}^2 * \Delta\mathrm{X}}{\Delta\mathrm{P} + \Delta\mathrm{X}}}{REER_{i,t+1} - REER_{i,t}}.$$

Annex 2.2. Construction of Import Average and Export Average Relative Price Measures

Benchmark relative prices are computed using two variables of the World Bank's International Comparison Program (ICP) data: real individual expenditure per capita expressed in international dollars and price-level indices. The ICP provides data for 12 categories of expenditure as per the Classification of Individual Consumption according to Purpose (COICOP). Using real per capita expenditure as weights, we compute the price level of a country and two measures of bilateral relative prices for 25 import and export partners of each country.

The first measure of bilateral relative price is for import partners and computed as follows:

$$Q^M = \frac{\sum p^H . y^H}{\sum p^P . y^H} . E \qquad (1)$$

Whereas H and P denote the home country and its trading partner, y and p are real consumption expenditure basket and prices in local currency, E is the nominal exchange rate expressed in domestic currency units per foreign currency unit.

Similarly, the second measure of bilateral relative price for export partners is computed as:

$$Q^X = \frac{\sum p^H . y^P}{\sum p^P . y^P} . E \qquad (2)$$

Further, using equations (1) and (2) above, the average relative price measures for 2005 and 2011 are computed as the weighted average of bilateral measures and import/export trade weights from the IMF's Direction of Trade Statistics. As export and import partners can differ significantly, two different sets of countries are used for export and import weights to compute these measures.

By construction, any change in the relative price measure can be attributed to a change in relative price levels, trade patterns, and changing consumer preferences. Since for competitiveness we are not interested in changing consumer preferences, we further disaggregate the change in the relative price measure for the average partner as the change in the bilateral relative price of each partner and their corresponding weights in the calculation as in equation (4) below.

$$\Delta Q = \sum_{i=1}^{N} w_i^{2011} Q_i^{2011} - \sum_{i=1}^{N} w_i^{2005} Q_i^{2005} \qquad (3)$$

$$\Delta Q = \sum_{i=1}^{N} \left(w_i^{2011} - w_i^{2005}\right). Q_i^{2011} + \sum_{i=1}^{N} \left(Q_i^{2011} - Q_i^{2005}\right). w_i^{2005} \qquad (4)$$

where ΔQ refers to change in average price measure, N = 25 is the number of partners, and w is the export/import weight. The first term in equation (4) refers to the contribution of change in trade weights while the second term captures the change in relative price levels [1].

[1] Technically, a change in the bilateral relative price measure is a combination of three factors: domestic prices, consumer preferences, and the nominal exchange rate.

Annex 2.3. Estimation of Duration Dependence of Growth Spells

To study the determinants of the length of growth spells we employ survival analysis models that are commonly used in medical, political, and microeconomic applications. Survival analysis models how various factors (for example, competitiveness) affect the survival time of a subject (for example, a growth spell).[1]

Let t denote survival time (time since growth accelerated) and T duration (the length of a growth spell). The "hazard rate" $\lambda(t)$ is defined as the probability of a spell ending at time t, conditional on survival up to that time. Formally:

$$\lambda(t) = \lim_{h \to 0} \frac{P(t \leq T < t + h | T \geq t)}{h}$$

The most popular way of parameterizing the hazard rate is Cox's (1972) proportional hazard model, which assumes that the "baseline hazard" (the hazard rate common to all subjects of the population) is multiplicatively separable from its dependence on other covariates $X(t)$ that may affect the probability that a growth spell ends, and does not require estimation. Formally:

$$\lambda\big(t; X_i(t)\big) = \lambda_0(t)\exp\left[X_i(t)\beta\right]$$

where $\lambda_0(t)$ is the baseline hazard at time t and β is a vector of parameters to be estimated.

A large number of potential determinants of growth spells have been discussed in the literature (see, for example, Berg, Ostry, and Zettelmayer 2012; and Tsangarides 2012). Given our focus on the role of competitiveness we control for to a relatively small number of covariates that are standard in the literature or were found to be significant determinants of spell duration.

Results

The estimated coefficients of the survival model are summarized in Annex Table 2.3.1. together with the associated robust standard errors. A coefficient of 0.15 implies that a one-unit increase in the regressor increases the risk that the spell will end in the next period by 15 percent.

The results suggest a large and significant impact of exchange rate overvaluation. In particular, a 10 percent overvaluation is associated with an increase in the probability that a growth spell will end by 6 percent (0.006 x 10) in our baseline definition of growth spells using the Frankel measure of overvaluation (*model 1*), and 7 percent using the Rodrik measure (*model 2*).

The other parameters estimates are broadly in line with those found in the literature. Higher initial incomes are associated with shorter growth spells, a finding Tsangarides (2012) suggests may reflect the greater likelihood that growth spells end as incomes approach an outer "frontier." Consistent with Rodrik (2008) we find a modest, but not statistically significant, impact of positive terms-of-trade shocks on spell duration. Contrary to Berg and Ostry (2012), we find a large and statistically significant impact on growth duration from increases in the U.S. interest rate, suggesting that shocks to the U.S. interest rate may reflect improvements to the global economy. As in Berg and Ostry (2012) we find that higher inequality, proxied by the Gini coefficient, has a large negative impact on spell duration. Strengthening of democratic institutions as measured by the Polity2 measure—measured on a scale of –10 (most autocratic) to 10 (most democratic)—has a positive but insignificant impact on growth spell duration at the start of a spell, as does increases in the degree of backward integration in global value chains. Finally, inflation—a proxy of macroeconomic stability—is associated with shorter growth spells but not significantly so.

[1] For further details see Wooldridge (2010, Chapter 20).

Robustness

The lack of observations for sub-Saharan Africa complicates estimating the model only for countries in the region. However, dropping sub-Saharan Africa from the sample (*models 3 and 4*) does not have a significant impact on the estimated impact of exchange rate overvaluation on growth duration, suggesting that the results for sub-Saharan Africa are likely to be broadly consistent with those for the sample as a whole.

The impact of overvaluation declines somewhat in spells with a minimum duration of eight years (*models 5 and 6*), but (in the case of the Frankel measure of overvaluation) remains significant. While it is tempting to interpret this as a decreasing role for a competitive exchange rate relative to other structural characteristics the longer the growth spell, it more likely reflects the fact that it is difficult for countries to maintain an undervalued real exchange rate for long periods of time.

As a further robustness check we follow Hausmann, Pritchett, and Rodrik (2004) and estimate a probit model (*models 7 and 8*) where the dependent variable is a dummy variable that takes the value of one around the time a growth spell ends (and zero otherwise). Specifically, we set the dummy equal to one for $i=t-1$, t, and $t+1$ where t is the year the growth spell ends. The results confirm the important role for exchange rate overvaluation, with a 10 percent overvaluation increasing the probability of a spell ending by 2–3 percent.

One potential problem that may arise in the estimation of the baseline hazard model is the potential feedback from spell duration to covariates that may bias the parameter estimates. To control for this we re-estimate the baseline hazard model using (with the exception of the initial level of income and institutions) covariates lagged by one year. The results in *models 9 and 10* decline somewhat but in the case of the Frankel measure of overvaluation remain significant. Interestingly, the coefficient on the change in U.S. interest rates changes sign and, though insignificant, becomes associated with shorter spell duration as in Berg, Ostry, and Zettelmeyer (2012).

Annex Table 2.3.1.Estimation Results

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Initial income	0. 210	0.214	0.071	0.079	0.206	0.208	0.129*	0.132**	0.19	0.193
	-0.169	-0.169	-0.199	-0.2	-0.24	-0.24	-0.066	-0.066	-0.156	-0.156
Overvaluation (Frankel)	0.006*		0.007**		0.005*		0.003		0.005*	
	-0.003		-0.003		-0.003		(0.001)*		-0.003	
Overvaluation (Rodrik)		0.007**		0.008**		0.005		0.002		0.005
		-0.003		-0.003		-0.003		-0.002		-0.003
U.S. interest rate change	-0.280**	-0.291**	-0.320**	-0.334	-0.399***	-0.410***	-0.069	-0.069*	0.057	0.055
	-0.092	-0.094	-0.105	-0.107	-0.099	-0.099	-0.042	-0.042	-0.091	-0.091
Terms-of-trade growth	-0.007	-0.007	-0.012	-0.012	-0.01	-0.011	-0.007	-0.007	-0.012	-0.012
	-0.01	-0.001	-0.011	-0.011	-0.021	-0.021	-0.006	-0.006	-0.012	-0.012
Gini	0.025	0.026	0.016	0.017	0.005	0.005	0.010*	0.010*	0.017	0.017
	-0.016	-0.016	-0.021	-0.021	-0.029	-0.029	-0.006	-0.006	-0.015	-0.015
Consumer price index inflation	0.005	0.006	0.008	0.009	0.006	0.006	-0.002	-0.002	-0.001	-0.001
	-0.012	-0.011	-0.011	-0.011	-0.013	-0.013	-0.003	-0.003	0	0
Polity 2 (initial value)	-0.036	-0.037	-0.017	-0.019	-0.031	-0.03	-0.015	-0.014	-0.028	-0.027
	-0.026	-0.034	-0.036	-0.037	-0.042	-0.043	-0.012	-0.012	-0.033	-0.033
Change in backward integration	-0.09	-0.085	-0.019**	-0.020**	-0.098	-0.099	-0.047	-0.046	-0.111**	-0.109**
	-0.067	-0.069	-0.009	-0.009	-0.092	-0.092	-0.035	-0.035	-0.051	-0.052
Observations	855	855	735	735	506	506	92	921	871	871
Spells	98	98	78	78	52	52			101	101
Failures	50	50	43	43	33	33			52	52

Source: IMF staff calculations.
Note: Robust standard errors in parentheses. *** p<0.01; ** p<0.05; * p<0.1.

3. Inequality and Economic Outcomes in Sub-Saharan Africa

Sub-Saharan Africa has among the highest levels of inequality—both income and gender—in the world, even after accounting for the lower levels of per capita income in the region. With growing international evidence that such inequality can impede macroeconomic stability and growth (Box 3.1), this chapter considers factors behind high levels of inequality and how they differ from the experience in other parts of the world, and discusses policy options for reducing inequality and raising sustainable growth.

The main findings are:

- Income inequality is higher in sub-Saharan Africa than in other regions (the only exception is Latin America and the Caribbean). Gender inequality is also higher in sub-Saharan Africa than elsewhere.
- The last 15 years of high growth in sub-Saharan Africa have seen a small decline in the level of gender inequality, but income inequality has remained broadly unchanged.
- Interestingly, the relationship between income inequality and the per capita income level in sub-Saharan Africa is quite a bit different from much of the rest of the world. Inequality seems markedly higher at all levels of income in the region than elsewhere. And the findings do not point to gender inequality as being the main driver of this result.
- Further progress in reducing income and gender inequality could deliver significant growth dividends. The analysis suggests that annual economic growth in sub-Saharan African countries could be higher by close to 1 percentage point if inequality were reduced to the levels observed in the fast-growing Association of Southeast Asian Nations (ASEAN), but with differences across subgroups:
  - ◊ Compared with the ASEAN countries, in the region's low-income countries and fragile states, the drag on growth is stronger from infrastructure and educational attainment gaps and, to a lesser degree, from the prevailing higher gender inequality. This suggests that addressing infrastructure and human capital gaps remain the appropriate focus of policies to raise growth.
  - ◊ In the region's middle-income countries, our findings suggest that there could be a growth dividend for policies directly aimed at reducing inequality. In this country group, we find that the growth payoff from reducing income and gender inequality to the levels observed in the ASEAN countries is higher than that of closing the infrastructure gap with this same group of countries.
  - ◊ For the region's oil exporters, legal gender-related restrictions stand out as the most important factor explaining the growth differential with the ASEAN countries following improvements in infrastructure.
- While the high levels of income inequality in the region appear to be partly driven by the structural features of sub-Saharan African countries, such as the dependence of some of the countries on oil exports, the evidence also points to the importance of policies that influence the access of low-income households and women to opportunities in education and health.
- Carefully designed fiscal and financial sector policies and the removal of gender-based legal restrictions could reduce inequality. Fiscal policy should focus on redressing the regressivity of taxes and expenditures, while scaling up well-targeted expenditures on health care and

This chapter was prepared by a team led by Dalia Hakura and Christine Dieterich comprising of Anni Huang, Mumtaz Hussain, Clara Mira, Monique Newiak, Vimal Thakoor, Alun Thomas, and Fan Yang under the guidance of David Robinson. Research assistance was provided by Cleary Haines and Azanaw Mengistu.

education. To enhance the efficiency of social spending, across-the-board subsidies should be replaced by targeted social transfer schemes. On the financial front, greater emphasis should be placed on complementing financial deepening with initiatives aimed at improving financial inclusion, including for women. Removal of legal restrictions on women's participation in economic activities would contribute to economic development and growth.

SUB-SAHARAN AFRICAN TRENDS IN INEQUALITY

Poverty on the Decline, but Income and Gender Inequality Persist

Sub-Saharan African poverty rates, income inequality, and gender inequality remain among the highest in the world. Although there has been some decline in poverty in the last 15 years, sub-Saharan Africa continues to have the world's highest poverty levels (Figure 3.1).[1] Alongside this, however, it has the second highest level of income inequality, after Latin America and the Caribbean (Figure 3.2).[2, 3] Within the region, income inequality is highest among middle-income and oil-exporting countries, such as South Africa and Angola. Sub-Saharan Africa also remains one of the regions with the highest gender inequality as measured by the United Nations' gender inequality index (GII), just behind the Middle East and North Africa, with very high levels observed in Niger, Chad, and Mali (Figure 3.3).[4]

The evolution of income inequality during the recent years of high growth in the region is not particularly encouraging. Overall, it appears to have remained broadly unchanged, although there is quite a bit of variation across country experiences (Figure 3.4).[5, 6] Countries such as Sierra Leone, Niger, and Lesotho experienced significant declines in income inequality. However, in one-third of countries for which data are available, such as Rwanda, Uganda and Ghana, growth episodes were associated with increases in income inequality as measured by the net Gini during 1995–2011. While the available data give an indication of the trends in the region, they should be interpreted carefully, since household surveys in sub-Saharan Africa are often not comparable.[7]

Gender inequality has also declined more slowly than in other regions, despite improvement in recent years thanks to shrinking gender gaps in education, improved health outcomes, and significant progress in eliminating restrictions on women's economic rights.

[1] The World Bank has just released new poverty estimates based on 2011 purchasing power parities (Beegle and others, forthcoming). However, these have not been incorporated in this chapter. As a result, poverty rates referred to here may be subject to revision.

[2] The findings on the regional trends in inequality are broadly robust to the use of inequality estimates based on household survey data.

[3] Sala-i-Martin (2002) shows that poverty and inequality increased in sub-Saharan Africa between 1970 and 1998.

[4] The GII captures key dimensions of outcome- and opportunity-based gender inequality: the labor market (the gap between male and female labor force participation rates); education (the difference between secondary and higher education rates for men and women); empowerment (the share of female members of parliament); and health (the maternal mortality ratio and adolescent fertility). The index ranges between 0 (equal) and 100 (unequal). Sub-Saharan Africa also scores high on gender inequality based on a gender development index that was recently put together by the United Nations Development Programme and focuses on gender gaps in health, education and income outcomes. The empirical analysis in the chapter is based on the GII because of its availability for a longer time series.

[5] A recent Pew Research Center survey (Kochhar 2015) suggests that most of the movement out of poverty in sub-Saharan Africa was to income levels just above the poverty line and few countries experienced a substantial expansion of the "middle class."

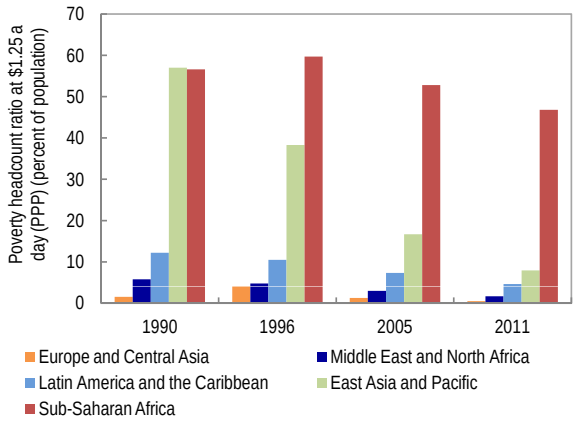
[6] Other studies, including Beegle and others (forthcoming) and Bhorat and others (2015), also note that on average, income inequality has not declined in the region over the last decades.

[7] The Standardized World Income Inequality Database (SWIID) used in this chapter incorporates a number of data sources to maximize the comparability and coverage across countries over time. Its disadvantage is that missing observations are generated via model-based multiple imputation estimates. However, the presented trends are broadly consistent with those using data of higher quality available for a smaller set of countries. Other measures of inequality, such as the ratio of the top 20 to the bottom 40 percentiles of the income distribution, also confirm that inequality, while having declined marginally, remains high in sub-Saharan Africa and Latin America and the Caribbean.

The high level of income inequality in sub-Saharan Africa begs the question of what roles, if any, the generally lower level of income and higher level of gender inequality might be playing. It appears, in fact, that factors well beyond these are actually at work, as described below.

- Considering the link between the income levels and income inequality, Simon Kuznets (1955) famously hypothesized an inverse "U" shaped relationship between the two variables, according to which levels of inequality are low at earlier stages of development; inequality increases as countries industrialize and income rises rapidly; and inequality declines at higher income levels. What we observe in sub-Saharan Africa is in general markedly higher levels of income inequality at all levels of per capita income than in countries at similar income levels in other regions (Figure 3.5). By comparison, the successful growth performance of ASEAN countries has in part been attributed to these countries' lower initial levels of income inequality (Balakrishnan, Steinberg, and Syed 2013).

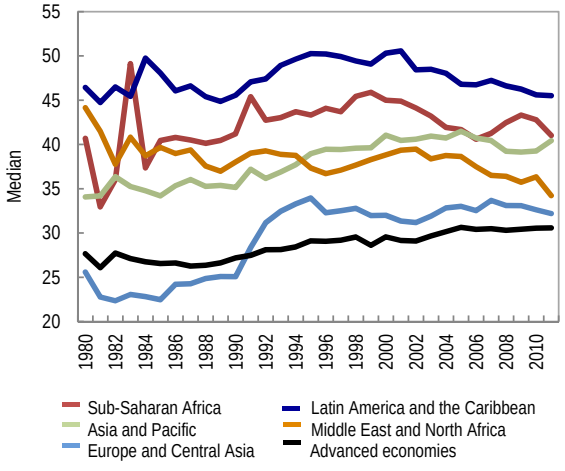
Figure 3.1. Selected Regions: Poverty Headcount Ratio



Source: World Bank, World Development Indicators database.

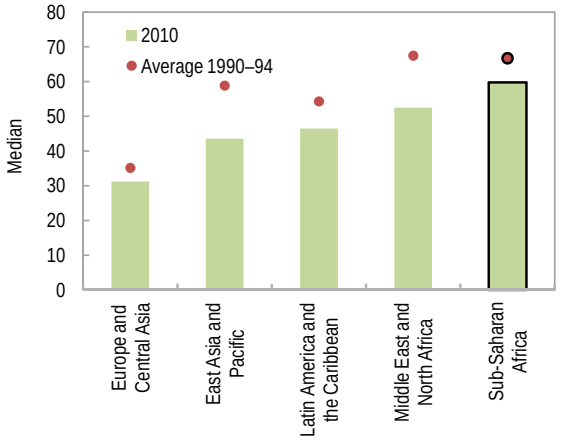
Note: The aggregate headcount index for a region is the population-weighted average of the headcount indices across the countries in that region. PPP = purchasing power parity.

Figure 3.2. Selected Regions: Gini Index of Net Income Inequality, 1980–2011



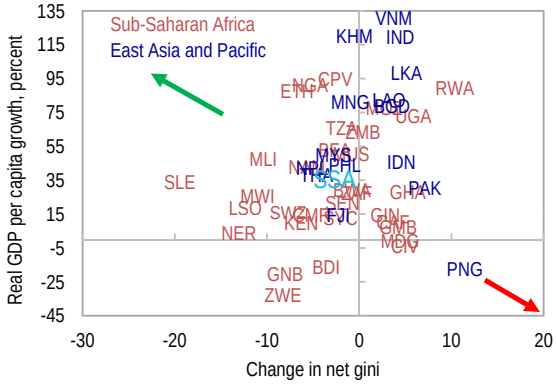
Source: Solt (2014).

Figure 3.3. Selected Regions: Gender Inequality Index, Average 1990–94, and 2010



Sources: United Nations Development Programme; and Gonzales and others (forthcoming).

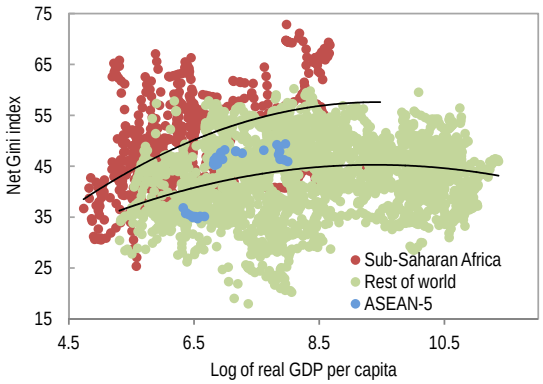
Figure 3.4. Selected Regions: Change in Gini Coefficient and Real GDP per Capita Growth, 1995–2011



Sources: World Bank, World Development Indicators database; and Solt (2014).

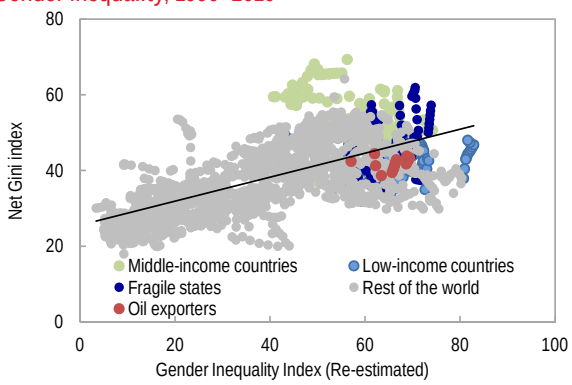
Note: Change is between 1995 (or next earliest available year) and 2011 (or latest available year). See page 78 for country acronyms. SSA = sub-Saharan Africa.

Figure 3.5. Sub-Saharan Africa: Kuznets Curve, Effects of GDP Per Capita on Gini Coefficient



Sources: Solt (2014); and IMF staff calculations.
Note: The ASEAN-5 are Indonesia, Malaysia, the Philippines, Thailand, and Vietnam.

Figure 3.6. Sub-Saharan Africa: Income Inequality and Gender Inequality, 1990–2010



Sources: Solt (2014); United Nations Development Programme; and Gonzales and others (forthcoming).

- Recent empirical work finds that at the global level gender inequality is an important source of income inequality, with gender gaps in education and health outcomes the main drivers of gender inequality in emerging markets and low-income countries (Gonzales and others forthcoming). However, despite both indicators being high compared with other regions, the association between overall gender inequality and income inequality appears much weaker in sub-Saharan Africa than elsewhere in the world, also pointing to other factors to account for income inequality in the region (Figure 3.6).

Against this backdrop, the next two sections consider:

- Whether high levels of income and gender inequality have affected sub-Saharan Africa's growth performance compared to other regions.
- What might have been influencing the trends in income inequality in the region over the last two decades.

INEQUALITY AND GROWTH PERFORMANCE IN THE REGION

Reducing Inequality Can Boost Growth

This section empirically examines whether persistently high levels of inequality have had a bearing on the region's growth performance. An econometric analysis is conducted relating growth in GDP per capita in a sample of 115 advanced, emerging market, and developing economies to various indicators of inequality as well as commonly used growth determinants.[8] These include initial income—as lower levels tend to be associated with higher growth as countries catch up—the initial level of infrastructure, years of schooling, and investment to GDP—capturing the quality of the capital and the labor force—inflation and indicators of institutional quality—proxying the quality of macroeconomic and political management—and terms-of-trade changes to reflect external shocks (see more details in Annex 3.1). Inequality is captured through various dimensions, including various measures of income inequality, the gender inequality index, and an index of gender-related legal restrictions.[9]

[8] A key consideration was to include as many sub-Saharan African countries in the sample as possible. Given data availability, the model was estimated for the 1995–2014 period. To account for possible endogeneity of the inequality and investment variables, the estimations use two-step system generalized method of moments and initial levels of inequality for each five-year period. The regressions rely on non-overlapping five-year averages of the data to abstract from business cycle fluctuations in growth rates and deal with data gaps in certain years (for example, in the education and inequality measures).

[9] Recent empirical work has mainly focused on the effect of one dimension of inequality at a time on economic growth and has not specifically focused on the implications for sub-Saharan Africa (for example, Ostry, Berg, and Tsangarides 2014, Dabla-Norris and others 2015, and Gonzales and others forthcoming). It should be noted that the measures of income inequality capture inequality at the household level. The gender inequality index, on the other hand, captures a combination of intra- and interhousehold inequality to the extent that women are members of a household or that they head a household.

Finally, the analysis allows for testing whether the growth-inequality relationship varies between low-income, fragile, middle-income, and oil-exporting countries within sub-Saharan Africa.

Further refining the findings of Ostry, Berg, and Tsangarides (2014), Dabla-Norris and others (2015a), and Gonzales and others (forthcoming), the results show that high inequality has had a detrimental effect on growth performance primarily in low-income countries (Table 3.1). Indeed, as noted in recent studies, the growth-inequality link is likely to be nonlinear at different levels of development (Castello 2010), and previous empirical work tends to find a negative association between growth and income inequality only below a certain threshold of income per capita (Neves and Silva 2013). To account for this possible nonlinearity, we allow for the relationship to be different between low-income

Table 3.1. Growth, Income Inequality and Gender Inequality: Regression Results[1]

	(1)	(2)	(3)	(4)	(5)	(6)
Measures of Inequality						
Initial top 20 to bottom 40 income ratio	0.006					-0.188 ***
Initial top 20 to bottom 40 income ratio x LICs	-0.207 ***					
Initial income inequality (net Gini)		-0.009				
Initial income inequality (net Gini) x LICs		-0.030 ***				
Initial income share of middle class[2]			0.081 **			
Gender inequality (lagged)				-0.017		0.005
Gender inequality x LICs (lagged)				-0.029 ***		-0.020 **
Female legal equity (index)					0.256 **	0.296 **
Female legal equity (index) x LICs						
Other Control Variables						
Initial income per capita (log)	-1.234 ***	-1.347 ***	-1.081 ***	-1.746 ***	-1.184 ***	-1.608 ***
Fixed capital investment (% GDP)	0.134 *	0.184 ***	-0.014	0.093 *	0.113	0.028
Schooling (years)	0.119	0.068	0.159 *	0.045	0.102	0.154 *
Dependent population growth (%)	-0.356 **	-0.293 **	-0.539 ***	-0.224	-0.303 **	-0.286 **
Infrastructure index	0.238 *	0.194	0.270 *	0.294 *	0.241	0.334 **
High inflation dummy	-1.583 ***	-1.627 ***	-1.621 ***	-1.228 ***	-1.549 ***	-1.552 ***
Terms of trade (percent change)	0.068 **	0.076 ***	0.091 ***	0.098 ***	0.063 **	0.094 ***
Institutional quality (index)	0.047 ***	0.063 ***	0.040 **	0.080 ***	0.064 ***	0.054 ***
Constant	4.117 *	4.087 **	3.171	7.889 **	1.302	6.840
Number of instruments	15	15	14	15	14	17
Serial correlation (p-value)	0.071	0.025	0.202	0.209	0.167	0.274
Hansen test (p-value)	0.210	0.335	0.319	0.445	0.963	0.700
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Time (period) fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	344	384	237	419	304	240
Number of countries	110	106	104	115	78	78

Source: IMF staff calculations.

Note: LIC = low-income country.

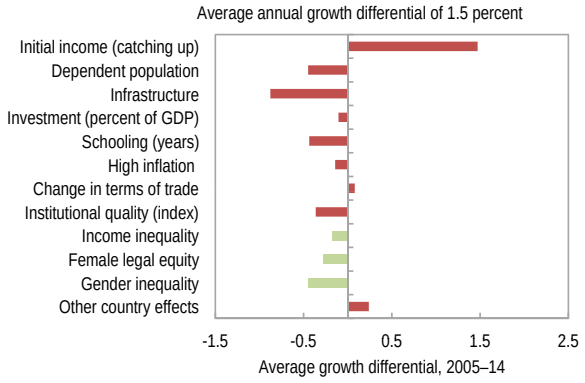
[1] The dependent variable is real GDP per capita growth, averaged over nonoverlapping five-year periods, for 1995–2014. The LIC group includes countries classified as low-income and lower-middle-income countries by the World Bank. The regressions are estimated using the robust two-step system generalized method of moments (GMM) estimator and include country and period effects. The symbols *, **, and *** indicate that the estimated coefficient is statistically significantly different from zero at the 10, 5, and 1 percent level, respectively. The p-values of the tests of second-order serial correlation and the Hansen test of overidentifying restrictions are reported. See Annex 3.1 for exact definitions of variables and sources of data reported.

[2] Income share of middle class is the percent share of income attributed to the third and fourth quintiles of the population.

countries and the other countries in the sample.[10, 11] The main results of the analysis are as follows:

- The negative association between growth and income inequality among low-income countries is robust to the measure of inequality, proxied by the Gini coefficient, the income gap between the top 20 percent and the poorest 40 percent segments of the population, or the income share of the middle class (as proxied by the 40th to 80th percentiles of population in the income distribution), as shown in Models 1 to 3 of Table 3.1. For example, a 1 percentage point reduction in the initial Gini coefficient in low-income countries is associated with a 0.15 percentage point cumulative increase in growth over a five-year period.
- Growth is also negatively associated with gender inequality in low-income countries and with gender-related legal restrictions for all countries, as shown in Models 4 to 6 of Table 3.1. A 1 percentage-point reduction in gender inequality in low-income countries is associated with higher cumulative growth over five years of 0.2 percentage point in low-income countries, a result in line with previous estimates (Amin and others 2015).[12]
- The finding that both inequality variables significantly affect growth suggests that gender inequality impacts growth through other channels than income inequality. For example, higher gender inequality may adversely impact educational attainment and hence growth. Similarly, other aspects of household income inequality that are unrelated to gender inequality may be affecting growth, such as rural-urban income inequality.
- A growth decomposition analysis suggests that addressing high inequality could significantly affect growth in sub-Saharan Africa (Figure 3.7). Compared to a subgroup of ASEAN countries (Indonesia, Malaysia, the Philippines, Thailand and Vietnam) that have a strong track record in terms of growth, sub-Saharan Africa's average annual real GDP per capita growth has been about 1½ percentage points lower over the last decade. Weaker infrastructure, lower levels of investment in fixed and human capital, higher dependency ratios, and lower quality of institutions were key factors explaining this growth shortfall. But the contribution of inequality was also substantial. More precisely, reducing the three inequality indicators to the level currently observed in ASEAN countries could boost the region's average annual per capita GDP growth by 0.9 of a percentage point, roughly the same order of magnitude as the impact on annual per capita GDP growth from closing the infrastructure gap between the two regions.

Figure 3.7. Sub-Saharan Africa: Growth Differential with ASEAN Countries
(Percentage points)



Sources: IMF, World Economic Outlook database; PRS Group; World Bank, World Development Indicators database; and IMF staff estimates.

Note: The estimated regression coefficients of model 6 in Table 3.1 are applied to the differences between the average values of the factors associated with growth for the last 10 years for sub-Saharan Africa and comparator (ASEAN-5) countries. Green bars represent the 3 inequality indicators included in the regression. A bar with a negative value denotes what share of the growth shortfall in sub-Saharan Africa is explained by a particular variable. The ASEAN-5 are Indonesia, Malaysia, the Philippines, Thailand, and Vietnam.

[10] In the following, low-income countries refers to the group of low-income countries and lower-middle-income countries, as classified by the World Bank.

[11] The analysis uses interaction terms to capture nonlinearities in the inequality-growth nexus. However, the estimated effects of the income and gender inequality variables are broadly robust to limiting the sample only to developing countries and to reducing the number of control variables. The finding of significant effects of income and gender inequality after controlling for variables that may be interrelated with the inequality variables is consistent with Berg and Ostry (2011), and Ostry, Berg, and Tsangarides (2014).

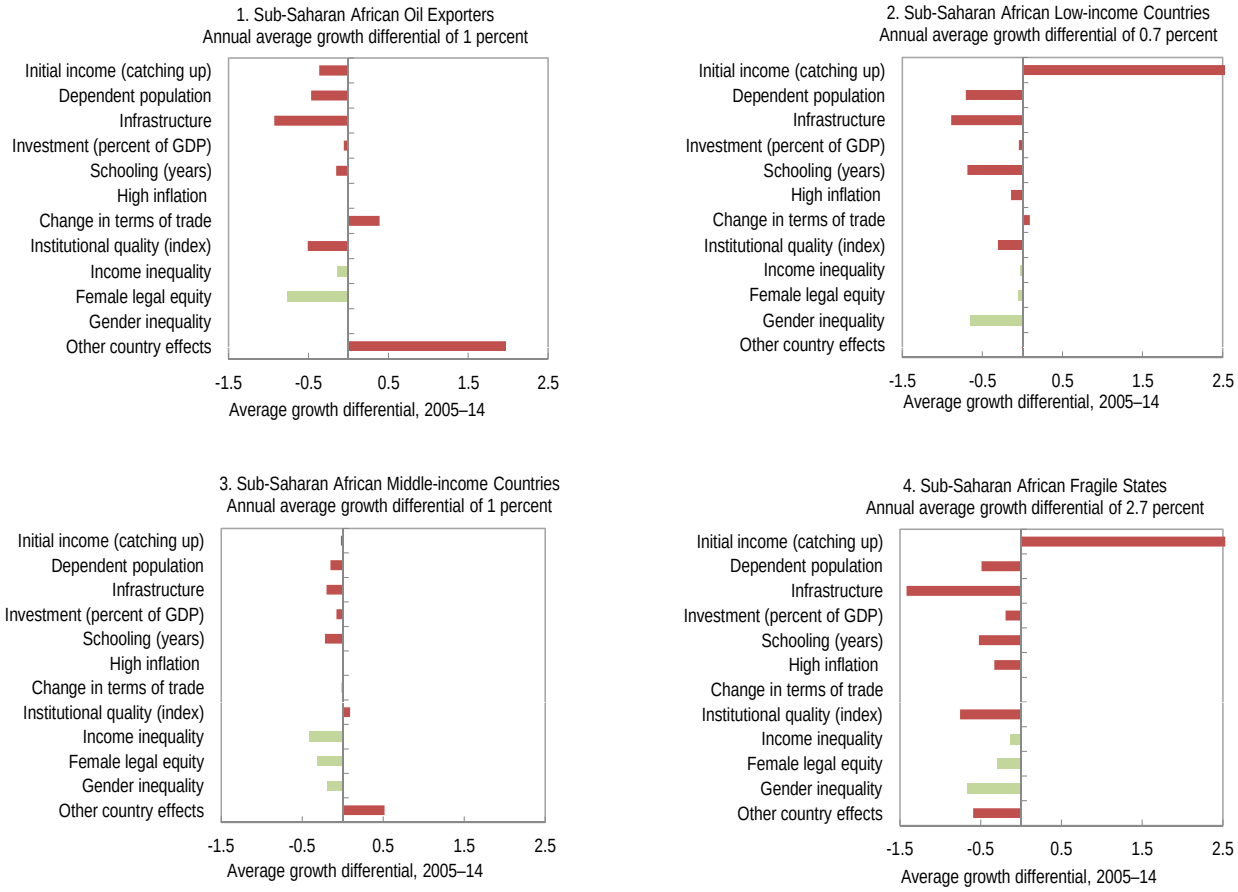
[12] Many studies also rightly note the significance of the value added to the economy by women from family-related activities, which are not measured in GDP, and hence not captured here.

Some Variations across Countries

The impact of income and gender inequality on growth varies across subgroups in sub-Saharan Africa (Figure 3.8). Using the same approach as for the whole region, the growth decomposition analysis for the subgroups yields the following additional lessons:

- In low-income countries, low initial income compared with ASEAN countries contributes about 2½ percentage points of real GDP per capita growth. However, this catch-up effect is largely undone by weak infrastructure, lower human capital accumulation, and high population dependency. Likewise, for fragile states, the lower quality of infrastructure and institutions explains the largest fraction of the growth differential. For both country groups, reducing gender inequality could boost annual GDP per capita growth by two-thirds of a percentage point, while the potential effects of a reduction in income inequality and legal gender-based restrictions are estimated to be smaller
- For middle-income countries—where infrastructure and educational attainment gaps tend to be smaller—and for oil-exporting countries,

Figure 3.8. Subgroups of Sub-Saharan Africa: Growth Differential with ASEAN Countries
(Percentage points)



Sources: IMF, World Economic Outlook database; PRS Group; World Bank, World Development Indicators database; and IMF staff estimates.

Note: The estimated regression coefficients of model 6 in Table 3.1 are applied to the differences between the average values of the factors associated with growth for the last 10 years for sub-Saharan Africa and comparator (ASEAN) countries. Green bars represent the three inequality indicators included in the regression. A bar with a negative value denotes what share of the growth shortfall in sub-Saharan Africa is explained by a particular variable. The ASEAN-5 are Indonesia, Malaysia, the Philippines, Thailand, and Vietnam.

reducing income inequality to the levels observed in ASEAN countries is an important factor to raise growth. The growth payoff from removing legal gender-related restrictions also appears particularly strong for oil-exporting sub-Saharan African countries.[13]

WHAT DRIVES INCOME INEQUALITY?

With income inequality appearing to have had an adverse impact on growth in sub-Saharan African countries, it is important to understand the factors that may be driving income inequality in the region.

Taking Stock of Inequality of Opportunity

Studies have associated income inequality with inequality of opportunity, including across genders (Dabla-Norris and others 2015b; Gonzales and others forthcoming). In sub-Saharan Africa, these opportunities have generally improved but many countries are lagging behind countries of similar income in other regions.

- Overall educational attainment improved as progress has been made in raising male and female primary school enrollment since the turn of the century in the context of the Millennium Development Goals. Education inequality has declined, and health indicators generally improved. However, average educational attainment remains low compared with other regions (Figure 3.9). In addition, access to education and health care remains restricted for certain categories of the population due to insufficient resources to pay for these services, limited geographical access (especially in rural areas), legal restrictions, and social norms.
- Infrastructure gaps remain large. For instance, electricity production in other developing countries was nearly eight times sub-Saharan Africa's average of 200 KWh per capita in 2010 (*Regional Economic Outlook: Sub-Saharan Africa,* October 2014). Limited access to basic infrastructure and utilities such as clean water and electricity, can divert time from education and productive activities in poor households, particularly in rural areas and for women (World Bank 2012).
- Financial inclusion has generally improved. The percentage of the population with an account at a financial institution has increased in recent years, but more so for men than for women. In some countries, such as Kenya, mobile-based money has overtaken access to traditional bank accounts, thereby contributing to reducing inequality in access to finance between income groups. However, gender gaps in access to mobile money are generally even higher than for traditional bank accounts. Gender gaps in financial access are similar to those in other regions but gaps across income groups are larger (Figure 3.10). Box 3.2 illustrates the effectiveness of lowering constraints on firms' access to finance to raise growth and reduce inequality in various countries of the region.
- Legal restrictions on women's economic activity remain the highest in the world (Figure 3.11). These legal restrictions discourage women from saving in a formal institution and borrowing for business activities, and are estimated to account for as much as 5 percentage points of the difference in labor market participation between men and women in some countries of the region (Hallward-Driemeier and Hasan 2013; Demirguc-Kunt and others 2013; Gonzales and others 2015).

The inequality of opportunity across genders highlighted above contrasts with the comparatively low gender gaps in female labor force participation. The gap between male and female labor force participation rates, which is used to proxy employment given scarce employment data in low-income countries, is on average 15 percentage points lower in sub-Saharan Africa than in the rest of the world. This mainly reflects the generally low female labor force participation gaps in low-income and fragile

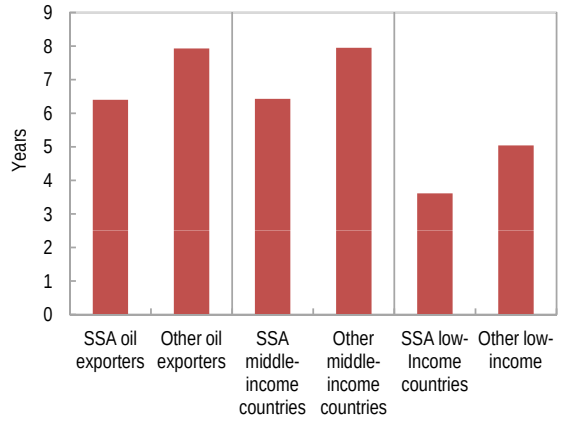
[13] The finding that the removal of gender-related restrictions affects growth positively in the oil-exporting countries may reflect correlation rather than causation given that oil-exporting countries can, if conditions are right, grow without much labor effort as oil and minerals are capital intensive. This would be the case if gender equality were correlated with other conditions, such as better property rights, or a greater integration with developed-country capital markets, that make it easier for foreign companies to exploit mineral reserves.

economies, where women have to work for sub sistence, often in the low-productivity agricultural sector. At higher income levels, the gap increases, as women may face the trade-off between homemaking and joining the labor force (Figure 3.12). The poor ranking of low-income sub-Saharan African countries in terms of the gender inequality index, despite relatively low gender differences in labor force participation rates, suggests that other aspects of gender inequality in education, health, and empowerment play a substantial role.

Accounting for Income Inequality: Structural Features and Policies

To shed further light on the factors driving income inequality in the region, an empirical analysis is undertaken using a sample of 135 advanced, emerging, and developing countries over 1991–2010. The analysis assesses if changes in inequality can be explained by various country characteristics—demographic factors, various other dimensions of inequality, dependence on trade in natural resources, fiscal policy variables, including

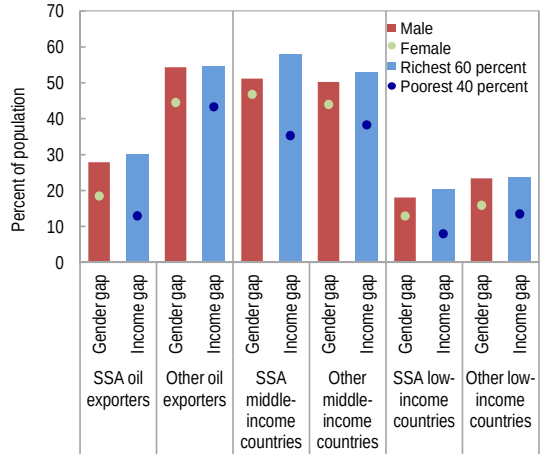
Figure 3.9. Sub-Saharan Africa: Average Years of Schooling Completed Among People Age 25 and Above, 2010



Source: Barro and Lee Education Attainment dataset.

Note: SSA = sub-Saharan Africa.

Figure 3.10. Sub-Saharan Africa: Account at a Financial Institution, 2014



Source: Findex 2014.

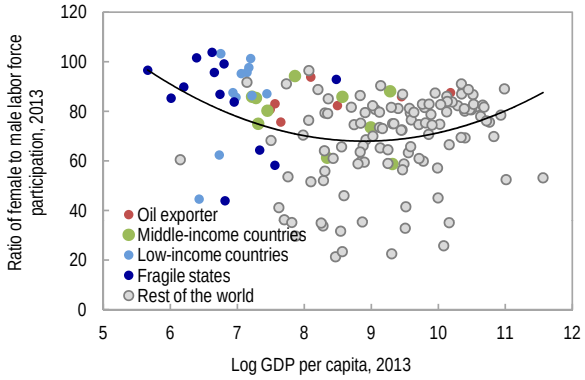
Note: SSA = sub-Saharan Africa.

Figure 3.11. Sub-Saharan Africa: Legal Gender-Based Restrictions, 1990 and 2010

Sources: World Bank, Women, Business and the Law 2014; and Gonzales and others (2015).

Note: SSA = sub-Saharan Africa.

Figure 3.12. Sub-Saharan Africa: Female Labor Force Participation and Development



Sources: IMF, World Economic Outlook database; and World Bank, World Development Indicators database.

the extent of redistribution and public spending on education spending, and other macroeconomic determinants identified in the literature (see Annexes 3.1 and 3.2 for further details)[14] The association between changes in inequality and each of these characteristics is examined in separate regressions, and is reported in separate lines in Table 3.2. The exercise is intended to provide broad evidence on the factors that are associated with changes in inequality rather than to articulate channels through which the various factors affect income inequality, not least because many of the variables are endogenous. The analysis for the most part relies on relating five-year changes in inequality to beginning-of-period values of drivers of inequality to mitigate such possible reverse causality. The regressions also control for the effect of the initial level of inequality.[15]

Among the wide range of factors analyzed, the following appear to be positively associated with reducing inequality: GDP per capita growth, private capital stock, education spending, the share of the working-age population, and fiscal redistribution, measured as the difference between market and net Gini. Conversely, higher beginning-of-period gender inequality tends to increase net income inequality. The results also support the existence of a convergence effect, whereby countries starting at a higher level of inequality tend to experience larger reductions in income inequality.

The effect of financial sector deepening does not seem to matter for inequality. This is in line with recent literature findings that at early stages of development, financial sector deepening can aggravate inequality by mainly benefiting higher-income groups that already have financial sector access (for example, Roine and others 2009). For

[14] The sample includes 469 observations of nonoverlapping five-yearly changes in inequality between 1991 and 2010. To disentangle the factors specific to low-income countries and sub-Saharan Africa and to account for the income dimension under high collinearity, interaction terms are included. Quantile regressions are used as their estimates are more efficient than those focusing on the mean, including binary models. This also allows for investigating the drivers of both increases and decreases in inequality over the sample period.

[15] The initial level of income per capita is not included as an additional explanatory variable in the regressions because it is highly correlated with the initial level of inequality.

Table 3.2. Various Regressions of Determinants of Change in Inequality (Net Gini)[1]

Explanatory variable (EV)	EV	EV*LIC	EV*SSA
Growth:			
1. GDP per capita growth	-0.1010 ***	0.0994	
2. GDP per capita growth	-0.0991 ***		0.3500 ***
Structural factors:			
3. Share of agriculture	0.0515 ***	-0.0544 ***	
4. Share of working-age population	-0.0585 *	-0.0084	
5. Education inequality	0.0168	-0.0113	
6. Education inequality	0.0240 **		-0.0349 ***
7. Gender inequality index	0.0301 **	-0.0150 *	
8. Gender inequality index	0.0308 ***		-0.0251 ***
9. Women's right to open bank account (dummy)	1.3330 *	-0.0213	
10. Women's right to open bank account (dummy)	1.4530 *		-0.6840
11. Change in share of natural resources exports[2]	-0.0275	0.0978 **	
12. Change in share of natural resources exports[2]	-0.0335		0.1060 ***
Fiscal policy:			
13. Fiscal redistribution	-0.0842 ***	-0.3280 **	
14. Education spending	-0.1830 *	-0.2000	
15. Education spending	-0.1400		-0.2060 **
Other macroeconomic factors:			
16. Financial depth (M2/GDP)	-0.0014	-0.0018	
17. Public capital stock	-0.0003	-0.0055	
18. Private capital stock	-0.0056 ***	-0.0051 *	
19. Trade openness	0.0008	0.0031	

Source: IMF staff calculations.

Note: LIC = low-income countries; SSA = sub-Saharan Africa.
[1] The table summarizes the findings from separate regressions, with the dependent variable being the change in net Gini. GDP per capita growth, education inequality, and the change in the share of natural resource exports are averaged over the period. All other variables are initial period observations. The results are based on quantile regressions, with the initial level of inequality included as an explanatory variable throughout. Interaction terms reflect development level and regional specificities. LIC is a dummy that takes a value of 1 for low- and lower-middle income countries as defined by the World Bank and 0 otherwise. SSA is a dummy that takes a value of 1 for sub-Saharan African countries and is 0 otherwise. The symbols *, **, and *** indicate that the estimated coefficient is statistically significantly different from zero at the 10, 5, and 1 percent level, respectively.
[2] Exports of agricultural raw materials, ores and metals, and fuel as a percentage of total merchandise exports.

the group of countries that achieved large reductions in inequality (not reported in Table 3.2), enhancing women's access to financial services seems to have played a role in reducing income inequality. One last noteworthy result is that the effects of some of the determinants of changes in income inequality appear, in some cases, to be different in sub-Saharan Africa.

The key takeaways for sub-Saharan Africa are as follows:

- In recent years, per capita income growth has not been sufficient to reduce income inequality in sub-Saharan Africa. Indeed, on average for the region and unlike elsewhere, higher GDP per capita growth appears to have been accompanied by higher inequality. Given the already high level of income inequality in the region, this is very concerning.
- The channels linking growth to inequality may be different than in other developing countries, given the importance of commodity price booms in driving growth in a number of sub-Saharan African countries. Indeed, increases in dependence on trade in natural resources, most notably oil, are found to be associated with increases in economic inequality over the same period. This is consistent with Buccellato and Alessandrini (2009), who find that when revenues from natural resources and their extraction process are controlled by a limited number of households, a greater dependence on trade in natural resources can raise income inequality.
- Other structural features of sub-Saharan African economies also appear to be associated with higher inequality. The region's continued high fertility rate limits the share of the working-age population, thereby postponing the expected "demographic dividend" in terms of lowering inequality. This underscores the importance of accelerating the demographic transition by raising investment in human capital (*Regional Economic Outlook: Sub-Saharan Africa*, April 2015).
- Fiscal policy can be used to lower inequality: redistribution (through taxes and transfers) and government education spending appear to be associated with larger reductions in inequality in sub-Saharan Africa than in other countries.
- Reduced gender inequality appears to be associated with subsequent reductions in economic inequality, although the effect is weaker than for other countries.

POLICIES TO REDUCE INEQUALITY

While the focus here is on policies that could contribute to reducing inequality in the region, it is important to emphasize that the link between these policy measures, reductions in inequality, and growth remains complicated. While the literature finds that redistribution in general does not impede growth, particular redistributive policies aimed at reducing income inequality can also create distortions and disincentives to participate in the labor force. The specific design of redistributive policies should therefore be mindful of these potential tradeoffs. The policy recommendations in this section are based on combining the analyses in the previous sections with the findings in the literature, but should not be considered comprehensive. For example, price stability has been shown to also have important distributional consequences (Bulir 2001), but this is not explored here.

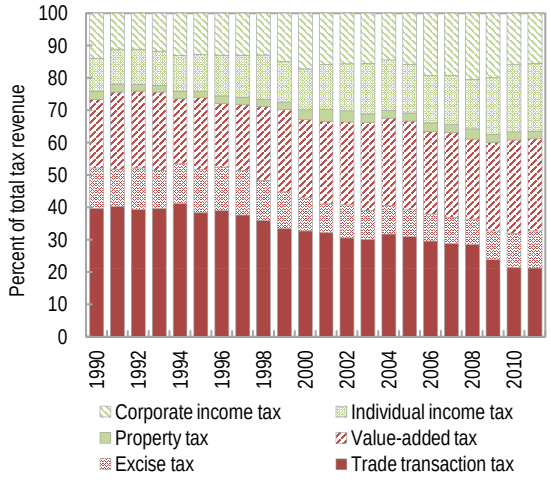
Improving Fiscal Policy

As pointed out in the previous section, redistributive policies in the form of taxes and transfers can be highly relevant for reducing inequality in low-income countries. Moreover, Ostry, Berg and Tsangarides (2014) provide cross-country empirical evidence that these redistributive policies do not adversely impact growth.[16]

Tax systems in the region have become more progressive, but partly at the expense of exemptions. The region is increasingly relying on value-added tax (VAT) revenues (Figure 3.13). VAT is by

[16] This finding is also confirmed when the redistribution variable is added as an additional explanatory variable as well as with an interaction term for sub-Saharan Africa in the growth regression analysis undertaken earlier in the chapter.

Figure 3.13. Sub-Saharan Africa: Tax Revenue, 1990–2011



Source: IMF, Fiscal Affairs Department database.

nature a regressive tax, but this is mitigated in many countries by substantial recourse to VAT exemptions and reduced tax rates for basic goods.[17] However, this approach is a poorly targeted redistributive tool because most revenues foregone accrue to the better off. Even though the poor spend a large proportion on basic goods, the rich are likely to spend more in absolute terms (Keen 2013).

On the spending side, redistributive policies often remain highly untargeted. In particular, across-the-board fuel subsidies, meant to support the poorer segments of the population, tend to benefit mainly richer households (Arze del Granado, Coady, and Gillingham 2012). There is also evidence from household surveys that even health and education spending, usually considered "social expenditures," are mainly benefiting the well-off, instead of facilitating access to opportunities that are crucial to reduce inequality (Figure 3.14).

A more effective approach would be to focus on reaching the targeted populations via spending policies while reducing tax exemptions.

- The progressivity of specific tax measures should be assessed taking into account the distribution of the benefits of the additional expenditure they finance. For instance, in some cases, a regressive tax may be the most efficient way to finance strongly progressive spending.
- Redistributive policies on the spending side should be implemented through more targeted tools. Some countries (for example, Burkina Faso, the Republic of Congo, Liberia, Malawi, Niger, Tanzania, Togo, and Madagascar) are currently conducting pilots to develop the institutional, implementation, and monitoring frameworks for targeted cash transfers. Spending on health care and education would also need to be better targeted to reduce their regressivity and possible gender bias.

Removal of Legal Restrictions

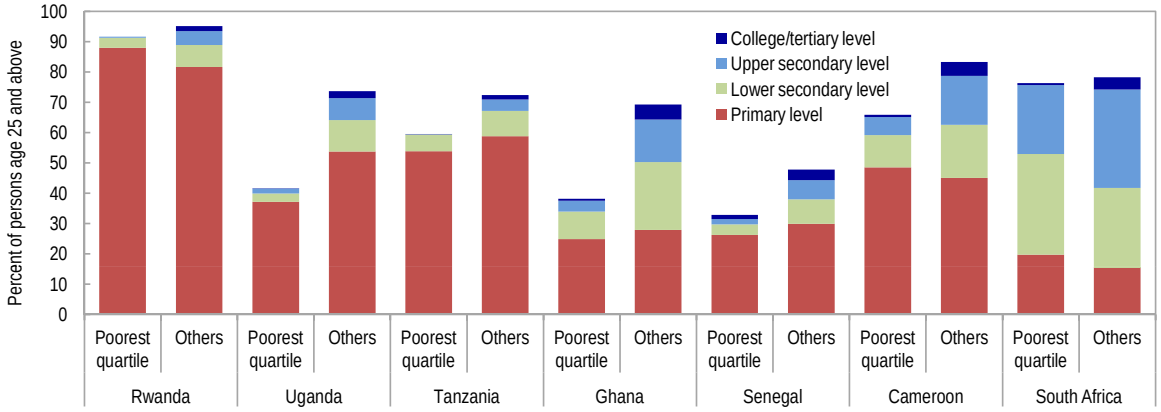
Removing legal gender-based restrictions in the region can boost growth and reduce inequality by stimulating female economic activity. Meanwhile, doing away with restrictions on ownership and inheritance of assets would provide women with access to collateral. This, together with removing restrictions for married women to open a bank account, would promote women's inclusion in the financial system and support entrepreneurship (Box 3.3). In middle-income countries, removing restrictions on women's rights to freely pursue a profession would facilitate and encourage their participation in formal-sector activity. However, by advocating for equal opportunities for women, this chapter does not render a judgment about countries' broadly accepted cultural and religious norms.

Facilitating Access to Financial Sector Services

The analysis in this chapter shows that financial sector deepening alone could aggravate inequality. Therefore, it should be accompanied with reforms aimed at facilitating access to financial services, including for women (Box 3.3). New technologies like mobile banking have the potential to facilitate access and should be complemented by other measures that reduce costs and enhance efficiency, such as establishing or strengthening credit and collateral registries, which reduce banks' information costs.

[17] See, for example, Grown and Valodia (2010); and World Bank (2014).

Figure 3.14. Selected Sub-Saharan African Countries: Highest Education Level Attained



Source: Country household survey data.
Note: Countries are ordered from lowest to highest real GDP per capita in 2005 U.S. dollars. Survey years are as follows: Rwanda 2009; Uganda 2009; Tanzania 2009; Ghana 2005; Senegal 2005; Cameroon 2007; and South Africa 2013.

CONCLUSIONS

Despite some progress in reducing income and gender inequality in sub-Saharan Africa over the last 20 years, the region continues to be characterized by comparatively high levels of inequality. The analysis in this chapter highlights that addressing the high levels of inequality could yield important growth payoffs. Given that inequality varies from country to country, and in view of the multiple factors driving inequality, policies must be tailored to country-specific situations and take into account administrative capacity and potential trade-offs. In the context of efforts to achieve the Millennium Development Goals, good progress has been made in alleviating poverty as well as boosting male and female primary school enrollment. Building on this progress, sub-Saharan Africa should accentuate its efforts to reduce inequality in support of more rapid and inclusive development in the context of the post-2015 Sustainable Development Goals.

Carefully designed policies are key to continued progress in reducing inequality and enhancing inclusiveness in the region. Accordingly, fiscal policy should aim at making the tax system more progressive, removing regressive fuel subsidies, enhancing the progressivity of expenditures on health and education, and providing equal opportunities for women. By the same token, financial sector and labor market policies should be aimed at strengthening legal, regulatory, and institutional frameworks that support women's ability to participate fully and productively in economic activities.

Box 3.1. Why Care About Income and Gender Inequality? Global Evidence and Macroeconomic Channels

At the global level, there is growing evidence that inequality of income and gender hampers growth:

- Lower net income inequality (measured by the Gini coefficient after taking into account the effects of taxes and redistributive government programs) has been robustly associated with faster growth and longer growth spells for a large number of advanced and developing countries (Berg and Ostry 2011; Ostry and others 2014). Other evidence suggests that income inequality holds back growth in low-income countries but encourages growth in high-income countries (Barro 2000).
- Increases in the income share of the richest 20 percent of the population have been associated with lower GDP growth for a large sample of advanced, emerging-market, and developing countries, while increases in the income share of the poorest 10 percent were associated with higher growth (Dabla-Norris and others 2015a).
- Gender gaps in economic participation have been shown to result in large GDP losses across countries of all income levels (Cuberes and Teigner 2015; Stotsky 2006).

The negative effects of income and gender inequality on growth work through various channels. Some of these channels may have a stronger impact at early stages of development and become less binding as economies develop.

Income Inequality

With imperfect credit markets, income inequality prevents an efficient allocation of resources by reducing low-income households' ability to make investments in education and physical capital. It also limits income mobility (Galor and Zeira 1993; Corak 2013).

High inequality of income and wealth can lead to socio-political instability and poor governance, which dis-courages private investment (Bardhan 2015).

Gender Inequality

Gender gaps in economic participation restrict the pool of talent in the labor market, yielding a less efficient allocation of resources and total factor productivity losses (Cuberes and Teigner 2015).

As women are more likely than men to invest a large proportion of their household income in the education of their children and grandchildren, closing the earnings gap between men and women could translate into higher expenditure on school enrollment for children (Duflo 2003; Heintz 2006; Miller 2008, Rubalcava and others 2004; Thomas 1990).

Box 3.2. Financial Inclusion, Growth, and Inequality in Sub-Saharan Africa

Accelerating financial deepening in many sub-Saharan African countries over the past two decades has not yet translated into broad-based use of financial services. To illustrate the impact of financial inclusion on growth, productivity, and inequality in the region, this box draws on the findings from an application of a recently developed micro-founded general equilibrium model by Dabla-Norris, Townsend, and Unsal (2015b) to quantify the effects of removing the most binding financial constraints to firms' financial inclusion for a set of countries and monetary unions (Kenya, Mozambique, Nigeria, Uganda, Zambia, the Central African Economic and Monetary Community (CEMAC) and the West African Economic and Monetary Union (WAEMU)).

Model Specification

The model allows for assessing the effects of relaxing three financial constraints on GDP, productivity, interest rate spreads, income inequality, the share of firms with access to credit, and the nonperforming loan ratio:

High collateral requirements due to imperfect enforceability of contracts. Poor legal, regulatory, and institutional frameworks that fail to adequately protect property and creditor rights result in higher collateral requirements and hence smaller collateral leverage ratios and overall bank lending.

High participation costs. These costs relate to factors such as physical distance to banks or automated teller machines (ATMs), the documentation required for opening or maintaining an account or applying for a loan, and the use of electronic payments and new technologies.

High intermediation costs. High intermediation costs often stem from a lack of public information on borrowers, for example through credit bureaus or credit registries. Also, limited bank competition can increase inefficiencies and raise intermediation costs.

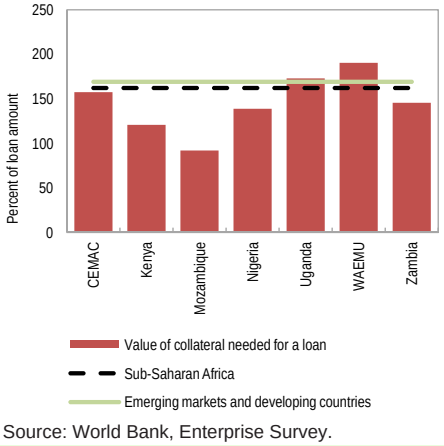
The impact on growth and inequality of increased financial access operates through two different channels. First, by increasing the availability of credit, it facilitates firms' borrowing and investment, which in turn increases capital, output, and productivity, as firms can operate at a larger scale. This channel could increase inequality if credit is mainly reallocated to firms that are already in the financial system and that have relatively higher income. Second, lowering participation costs permits new firms to access the market, borrow and invest, and increase output. This channel may reduce inequality, as more businesses are able to access credit.

Model Findings

Lowering collateral constraints is the most effective way to boost growth and productivity, though its impact on inequality is less clear. The value of collateral needed for a loan is high in the region—on average above 160 percent of the value of the loan—with the exceptions of Kenya, Mozambique and Nigeria and broadly in line with the average for emerging market and developing economies (Figure 3.2.1). GDP increases from easing collateral requirements range between 8 and nearly 20 percentage points (Figure 3.2.2). Lowering borrowing constraints slightly increases inequality, with the exception of the cases of Uganda and Kenya (Figure 3.2.3).

Lowering participation costs would generally boost growth and productivity and reduce inequality. In the region, the percentage of firms with a bank loan or line of credit is low, with an average close to 25 percent, compared with nearly 35 percent on average

Figure 3.2.1. Selected Countries: Borrowing Constraints, Value of Collateral Needed for a Loan



Source: World Bank, Enterprise Survey.

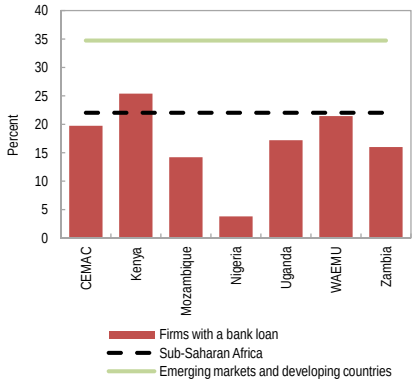
(continued)

Box 3.2. *(continued)*

for emerging markets and developing countries (Figure 3.2.4). The increases in GDP are in general lower than when removing borrowing constraints (Figure 3.2.2). The reduction of participation costs leads to higher access to finance for firms previously excluded from the financial system, thereby reducing inequality (Figure 3.2.3).

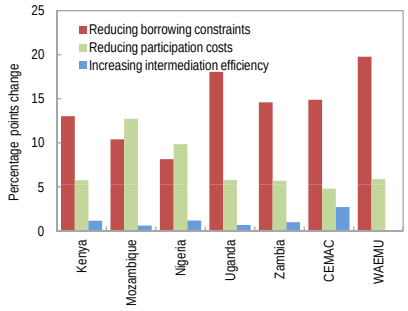
Reducing intermediation costs results in a modest increase in growth and productivity and a slight deterioration in inequality. Intermediation costs are fairly high in the region, with the spread between the lending rate and the deposit rate close to 11 percent, against an average of 7½ percent for emerging and developing countries (Figure 3.2.5). Nonetheless, reducing these costs does not increase GDP by more than 3 percentage points for any country (Figure 3.2.2). Lower intermediation costs facilitate a more efficient allocation of capital, and thus result in total factor productivity improvements (Figure 3.2.6). The reason behind the inequality increase is that this measure benefits mostly highly leveraged firms.

Figure 3.2.4. Selected Countries: Access, Firms with a Bank Loan/Line of Credit



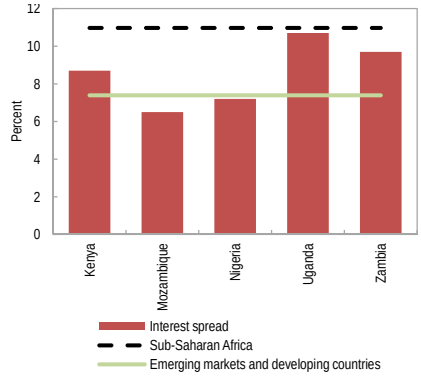
Source: World Bank, Enterprise Survey.

Figure 3.2.2. Selected Countries: Growth Impact



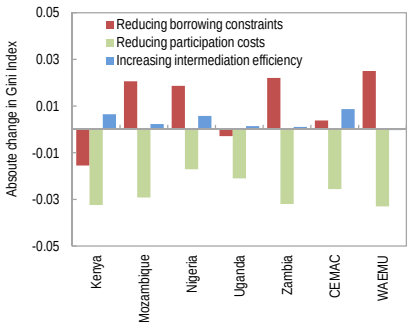
Sources: IMF country staff reports; Dabla-Norris and others (2015); and IMF staff calculations.

Figure 3.2.5. Selected Countries: Intermediation Cost, Interest Rate Spread



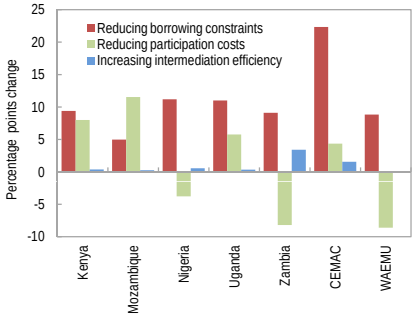
Source: World Bank, Enterprise Survey.

Figure 3.2.3. Selected Countries: Inequality Impact



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

Figure 3.2.6. Selected Countries: Total Factor Productivity Impact



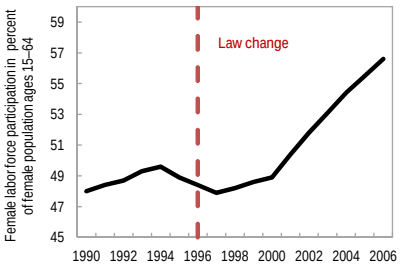
Sources: IMF country staff reports; Dabla-Norris and others (2015); and IMF staff calculations.

Box 3.3. Policies to Close Gender Gaps: Insights from Sub-Saharan African Countries

Creating equal opportunities for women to be economically active can boost development and growth outcomes and has positive side effects in terms of lowering fertility rates and improving intergenerational mobility. With 62 percent of economically active women working in agriculture in the region, addressing gender-based constraints in this sector could significantly boost productivity (AfDB 2015). Key policies measures have included:

- *Institutional and legal reforms to improve the opportunities for women, including access to finance.* In 1996 Namibia passed the "Married Persons Equality Act" which equalized property rights for married women and granted women the right to sign a contract, head a household, pursue a profession, open a bank account, and initiate legal proceedings without the husband's permission. Female labor force participation increased by almost 8 percentage points in the 10 years following the change (Figure 3.3.1) (Gonzales and others 2015). The right of women to own assets, if well enforced, would moderate gender-based discrimination and provide women with collateral to access finance, thus relaxing one main constraint to women's economic activity, including in the agricultural sector (AfDB 2015).

Figure 3.3.1. Namibia: Six Law Changes and Female Labor Force Participation



Sources: World Bank, Women, Business and the Law (2014); and Gonzales and others (2015).

- *Enhanced political empowerment.* In Rwanda, change in this area has taken two forms: (1) gender mainstreaming, which includes integrating a gender perspective into policies, activities, and budgets in all sectors; and (2) affirmative action that seeks to correct gender imbalances. The 2003 Constitution enshrined the principle of gender equality by establishing 30 percent quotas for women's representation in all decision-making structures. The 1999 Civil Code and the 2013 law governing land ensure women equality in terms of land ownership and inheritance. As a result, Rwanda was classified seventh (out of 136 countries) in the rankings of the World Economic Forum's 2014 Global Gender Gap Report and had among the lowest gender inequality index values in the region in 2010.
- *Improved access to health care and education, including training, to support the transition of women to the formal sector.* Evidence suggests that education reduces fertility rates and improves the opportunities for women to remain in the formal sector. In Malawi, a cash transfer program to current schoolgirls or recent dropouts conditional on staying in or returning to school decreased the probability of getting pregnant for recent dropouts by 30 percent (Baird and others 2009). In Liberia, training young women in business development and job skills increased employment rates for these women by about 50 percent (World Bank 2012). Targeted agricultural programs, including on the enhancement of farming techniques, would increase productivity in the sector, including for women (AfDB 2015).
- *A scaling up of infrastructure investment (water, electricity, and transport) to reduce transaction costs and free up women's time.* Roads can enable farmers to sell their agricultural produce faster. Electricity and access to water reduces the time allocated to collecting wood and searching for water. These improvements can increase productivity and provide women who are usually the primary persons in charge of these tasks in the household with time to seek more formal employment or prolong their education. Evidence from micro-surveys in Ghana suggests halving water-fetching time increases girls' school attendance by 2.4 percent on average, with larger effects in rural areas (Nauges and Strand 2013). Estimates from Ethiopia suggest that female farm managers spend almost nine hours less per week on agricultural work than their male peers due to domestic work (AfDB 2015).

Annex 3.1. Understanding Income and Gender Inequality in Sub-Saharan Africa

This annex provides further details on the empirical approach and data definitions and sources used in the empirical analyses on the growth effects of inequality and the drivers of income inequality. It also specifies the country coverage used in both sections.

Assessing the Growth Effects of Income and Gender Inequality

The empirical analysis on the growth effects of inequality is based on data spanning 25 years (1990–2014) from several commonly used macroeconomic databases. To mitigate the issue of data availability, the data in annual frequency was reduced to five (nonoverlapping) five-year periods. The sample covers 159 countries, including high-income countries, middle-income countries, and low-income countries. However, due to the paucity of data across inequality measures and growth determinants, the country coverage varies between models. This section briefly describes the variables used in the analysis.

Data

Real GDP per capita growth is measured by the average annual percent change in real per capita GDP over each of the five-year intervals. The main source of the data is the Penn World Tables 8.1 (PWT), augmented by the World Economic Outlook database for 2013 and 2014. Observations with average annual changes of ±20 percent or more over any five-year period are treated as extreme and thus excluded from the empirical analysis.

Measures of Income Inequality

The empirical analysis focuses on three measures of income inequality:

- *Initial income inequality* is the net Gini and is taken from the Standardized World Income Inequality Database (SWIID version 5.0). For each five-year period, the initial value represents the observation in the first year or, if unavailable, the latest available observation in the previous period. The empirical results are broadly similar if the traditional (market) Gini is used to measure income inequality.
- *Initial top-20-to-bottom-40 ratio* is an alternative measure of inequality, related to the Palma Index of Inequality. This measure of inequality gives more prominence to income distribution at the top 20 percent of the population relative to that at the bottom 40 percent of population. The source of the data is the World Bank's World Development Indicators (WDI) database, and is supplemented by the UNU-WIDER database. For each five-year period, the initial value represents the observation in the first year or, if unavailable, the latest available observation in the previous period.
- *Initial income share of middle class* is calculated by the sum of income shares of the third and fourth quintiles of population. Data sources are the same as the ones for the variable "initial top-20-to-bottom-40 ratio."

Measures of Gender Inequality

Gender inequality is captured by the gender inequality index (GII), calculated using the UN methodology, which covers the 1990–2010 period (details are reported in Gonzales and others forthcoming). The GII is averaged over each five-year period.

Female legal equity is the sum of six legal indicators (in 0–1 format) representing women's legal rights to earning and holding income and wealth, and ranges between 0 and 6, with higher values corresponding to more equitable legal rights for women. The six indicators included are: (1) unmarried women have equal property rights for immovable property; (2) married women have equal property rights on immovable property; (3) joint titling of property is the default for married couples; (4) married women can get a job or pursue a profession; (5) adult married women can open bank accounts; and (f) married women can sign contracts (without requiring permission from another family member). The data come from the World Bank's Women, Business and the Law (WBL) database.

Additional Variables

Initial income per capita (log) is the real GDP per capita in the first year in each five-year period. The source of the data is the PWT.

Fixed capital investment (percent of GDP) is the gross fixed capital formation, averaged over five-year periods. This data come primarily from the PWT, with some augmentation from the World Bank's WDI database where PWT data was missing.

Schooling (years) is the average years of schooling (in each five-year period) for the population aged 15 and above, and is taken from the Barro-Lee database.

Dependent population growth is the average annual percentage change in the nonworking-age population (under 15 or above 64). The source of the data is the UN Population database.

Infrastructure Index is constructed based on three key infrastructure indicators: (1) electricity consumption (KWh per capita) from the IEA; (2) access to water (percentage of population) from the WDI database; and (3) access to any type of phone (subscriptions per 100 persons) from the WDI database.The index is constructed using the first principal component of the log values of the three indicators. A higher value therefore corresponds to an overall greater level of infrastructure.

High inflation is a dummy variable with value 1 if average annual inflation in consumer prices over a given five-year period is more than 15 percent. It is used as a proxy for the quality of macroeconomic policies. The source of the data is the IMF's World Economic Outlook database.

Change in the terms of trade is the average annual change in the terms of trade over the five-year period, using data from the World Bank's WDI database (constant local currency units).

Institutional quality (index) is proxied by the political risk index from the International Country Risk Guide (ICRG). This index covers the quality of institutions on many dimensions, including government stability, bureaucracy quality, internal and external conflicts, corruption, law and order, and democratic accountability. A higher value of the index, which ranges between 0 and 100, implies better quality of institutions and hence lower risk.

Assessing the Determinants of Change in Income Inequality

The empirical work presented in this chapter on the determinants of inequality uses data spanning 20 years (1991–2010). Using a sample of 135 advanced, emerging, and developing countries and nonoverlapping five-yearly changes (maximum four observations per country), 469 observations for changes in inequality are considered.

Data

Change in net Gini is the difference of net Gini in levels over each five-year interval. In instances where a country does not have both an initial and an end value of Gini in a given period, there is a missing value. The net Gini data come from SWIID v5.0.

Initial inequality is the initial value of net Gini for a particular period.

Share of agriculture is the percentage share of the agriculture sector in total GDP, as published in the World Bank's WDI database. For each period, we take the value from the initial year.

Share of working-age population is the percentage of the working-age (15–64) population in the economy, as published in the UN Population database. For each period, we take the value from the initial year.

Education inequality is measured by education Gini, which is calculated by Castelló-Climent and Doménech (2014) from the latest education database by Barro and Lee.

Fiscal redistribution is defined as the difference between market Gini and net Gini, both of which are published by the SWIID. For each period, we take the value from the initial year.

Education spending is the percentage of public spending allocated to education, as published by the World Bank's WDI database. For each period, we take the value from the initial year.

Financial depth is defined as the ratio of broad money M2 to GDP, as published by the World Bank's WDI database. For each period, we take the value from the initial year.

Financial inclusion is proxied by a dummy variable reflecting the ability of women to open bank accounts. The data come from the World Bank's Women, Business and the Law (WBL) database.

Public capital stock is an estimate of general government capital stock, constructed based on general government investment flows (in 2005 dollar prices). The source of the data is the IMF's Investment and Capital Stock Database (IMF 2015e).

Private capital stock is an estimate of private capital stock, constructed based on private investment flows (in 2005 dollar prices). The source of the data is the IMF's Investment and Capital Stock Database (IMF 2015e). For each period, we take the value from the initial year.

Trade openness is defined as the sum of total exports and imports as a percentage of GDP. The underlying data are obtained from the latest World Economic Outlook database. For each period, we take the value from the initial year.

Change in natural resource exports is the share of exports of agricultural raw materials, ores and metals, and fuel as a percentage of total merchandise exports. The source of the data is the World Bank's WDI database.

Country Coverage

This section specifies the countries included in the empirical analyses in this chapter. Owing to data constraints, not all the countries are included in all the regressions.

High-Income Countries, as Defined by the World Bank

United States, United Kingdom, Austria, Belgium, Denmark, France, Germany, Italy, Luxembourg, Netherlands, Norway, Sweden, Switzerland, Canada, Japan, Finland, Greece, Iceland, Ireland, Malta, Portugal, Spain, Australia, New Zealand, Chile, Uruguay, Barbados, Trinidad and Tobago, Cyprus, Israel, Hong Kong SAR, China, Korea, Rep., Singapore, Russian Federation, Czech Republic, Slovak Republic, Estonia, Latvia, Lithuania, Croatia, Slovenia, and Poland.

Middle-Income Countries Are Those Defined by the World Bank as "Upper-Middle-Income Countries"

Turkey, South Africa, Argentina, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Mexico, Panama, Peru, Venezuela RB, Belize, Jamaica, St. Lucia, Suriname, Iran Islamic Rep., Iraq, Jordan, Malaysia, Maldives, Thailand, Algeria, Angola, Botswana, Gabon, Mauritius, Seychelles, Namibia, Tunisia, Fiji, Marshall Islands, Azerbaijan, Belarus, Albania, Kazakhstan, Bulgaria, China, Turkmenistan, Serbia, Montenegro, Hungary, Macedonia FYR, Bosnia and Herzegovina, and Romania.

Low-Income Countries Are Those Defined by the World Bank as "Lower-Middle-Income" or "Low-Income" Countries

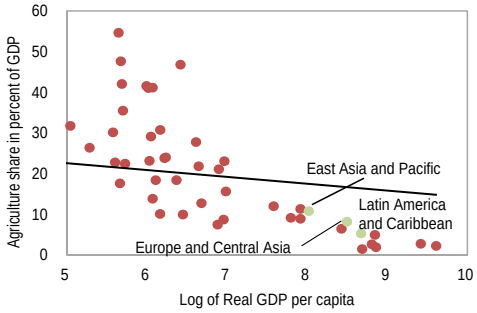
Bolivia, El Salvador, Guatemala, Haiti, Honduras, Nicaragua, Paraguay, Guyana, Syrian Arab Republic, Egypt Arab Rep., Yemen Rep., Afghanistan, Bangladesh, Bhutan, Cambodia, Sri Lanka, India, Indonesia, Lao PDR, Nepal, Pakistan, Philippines, Vietnam, Djibouti, Burundi, Cameroon, Cabo Verde, Central African Republic, Chad, Comoros, Congo Rep., Congo Dem. Rep., Benin, Ethiopia, The Gambia, Ghana, Guinea-Bissau, Guinea, Côte d'Ivoire, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Morocco, Mozambique, Niger, Nigeria, Zimbabwe, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Sudan, Swaziland, Tanzania, Togo, Uganda, Burkina Faso, Zambia, Papua New Guinea, Micronesia Fed. Sts., Armenia, Georgia, Kyrgyz Republic, Moldova, Tajikistan, Ukraine, Uzbekistan, and Mongolia.

Annex 3.2. Drivers of Inequality

This annex provides a more detailed explanation of the empirical strategy in the chapter on the drivers of inequality. It highlights the channels, identified in the literature, through which the determinants of inequality are thought to drive inequality.

- *Initial level of inequality.* The effect of initial inequality on the change in inequality appears ambiguous. In "inequality traps," high initial inequality can exacerbate inequality in the absence of policy measures. By contrast, "inequality convergence toward medium levels" can also imply that higher initial inequality gives rise to a reduction in inequality (Benabou 1996 and Ravallion 2002).
- *Income and economic growth.* Previous empirical work testing the "Kuznets' curve" hypothesis that inequality initially worsens over the course of economic development, and then declines has yielded mixed results (Barro 2000). Our analysis includes the level of income, measured by GDP per capita into the specifications and allows for nonlinearity. Likewise, the effect of real GDP growth is ambiguous—in the context of a structural transformation, inequality may deteriorate with increased growth.
- *Sectoral contributions.* Closely linked to income levels is the share of the agricultural sector (Annex Figure 3.2.1), with particular relevance for sub-Saharan Africa where agriculture accounts for a significant share of GDP and employment in many countries. A higher share of the agricultural sector tends to be associated with lower poverty and inequality in the region (Christiansen, Demery, and Kuhl 2007).
- *Demographics.* A faster demographic transition can contribute to reducing inequality by reducing the number of children, particularly for low-income households, and allowing for greater female labor force participation and investment in human capital, adding benefits beyond the "demographic dividend" (Rosenzweig 1990; Soares 2005; Soares and Falcao 2008).

Annex Figure 3.2.1. Sub-Saharan Africa: Agriculture and Real GDP Per Capita, 2013



Sources: IMF, African Department database; and World Bank, World Development Indicators.

- *Natural resources.* As they are easily appropriable, natural resources can lead to a more unequal income distribution, in particular if they are directly exported instead of representing an intermediate good (Buccellato and Alessandrini 2009).

Likewise, in line with existing studies, we discuss the following policy measures:

- *Redistribution.* Fiscal redistribution is measured as the difference between the market and net Gini—it takes the form of taxes and transfers. It is expected to contribute to a reduction in inequality, particularly if it is progressive, targeted and well implemented (Ostry and others 2014).
- *Education spending* is used as a proxy for human capital. While the impact of education is ambiguous in principal (Dabla-Norris and others 2015a), particularly if access is an issue, spending to improve coverage and quality of delivery can foster equality of opportunity and reduce the skills premium. To cover as many low-income countries as possible, the level of government spending is used.
- *Investment.* Capital stocks are used as proxies for cumulative government and private sector investment. Regional disparities in infrastructure provision can lead to higher spatial inequality and a worsening

urban-rural divide. Access to water and electricity impact inequality as well (World Bank 2012). Infrastructure gaps remain high in sub-Saharan Africa and hinder the development of the private sector, including household enterprises.

- *Trade.* The impact of trade openness on inequality can go both ways (Dabla-Norris and others 2015a), depending on the extent of trade creation and trade diversion. In many low-income countries, the transfer of low-skilled operations from advanced economies (outsourcing) can create opportunities in the manufacturing and services sector, but the overall impact on inequality depends on the extent of the shift from the informal to the formal sector, as well as the wage disparities. Similarly, the closure of industries due to cheaper imports can worsen income inequality.
- *Financial development* can contribute to a worsening of inequality in the presence of financial frictions, causing mostly the rich to have access to financial services (Greenwood and Jovanovic 1990). However, over the course of financial development, greater *financial inclusion* can aid inequality reduction (Dabla-Norris and others 2015a).
- *Gender inequality* is expected to have an adverse impact on income inequality as it reduces the ability of one segment of the economy to fully contribute to growth and development (Elborgh-Woytek and others 2013).

Statistical Appendix

Unless otherwise noted, data and projections presented in this *Regional Economic Outlook* are IMF staff estimates as of 18 September, 2015, consistent with the projections underlying the October 2015 *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

As in previous *Regional Economic Outlooks*, countries are aggregated into four nonoverlapping groups: oil exporters, middle-income, low-income, and fragile countries (see statistical tables). The membership of these groups reflects the most recent data on per capita gross national income (averaged over three years) and the 2013 International Development Association Resource Allocation Index (IRAI).

- The eight 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). Oil exporters are classified as such even if they would otherwise qualify for another group.
- The 12 middle-income countries not classified as oil exporters or fragile countries had per capita gross national income in the years 2012–14 of more than US$1,045.00 (World Bank using the Atlas method).
- The 10 low-income countries not classified as oil exporters or fragile countries had average per capita gross national income in the years 2012–14 equal to or lower than US$1,045.00 (World Bank, Atlas method) and IRAI scores higher than 3.2.
- The 15 fragile countries not classified as oil exporters had IRAI scores of 3.2 or less.
- The membership of sub-Saharan African countries in the major regional cooperation bodies is shown on page 78: 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 Regional Groupings

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

List of Country Acronyms:

References for Figures 1.8, 1.13, and 3.4.

AGO	Angola	CIV	Côte d'Ivoire	LBR	Liberia	RWA	Rwanda
ARG	Argentina	ECU	Ecuador	MDG	Madagascar	PNG	Papua New Guinea
BGD	Bangladesh	GNQ	Equatorial Guinea	MWI	Malawi	STP	São Tomé and Príncipe
BEN	Benin	ERI	Eritrea	MYS	Malaysia	SEN	Senegal
BWA	Botswana	ETH	Ethiopia	MLI	Mali	SYC	Seychelles
BRA	Brazil	FJI	Fiji	MUS	Mauritius	SLE	Sierra Leone
BFA	Burkina Faso	GAB	Gabon	MEX	Mexico	SGP	Singapore
BDI	Burundi	GMB	Gambia, The	MNG	Mongolia	ZAF	South Africa
CPV	Cabo Verde	GHA	Ghana	MAR	Morocco	SSD	South Sudan
KHM	Cambodia	GIN	Guinea	MOZ	Mozambique	LKA	Sri Lanka
CMR	Cameroon	GNB	Guinea-Bissau	NAM	Namibia	SWZ	Swaziland
CAF	Central African Republic	HKG	Hong Kong SAR	NPL	Nepal	TZA	Tanzania
TCD	Chad	HUN	Hungary	NER	Niger	THA	Thailand
CHL	Chile	IND	India	NGA	Nigeria	TGO	Togo
CHN	China	IDN	Indonesia	PAK	Pakistan	UGA	Uganda
COD	Congo, Dem. Rep. of	KEN	Kenya	POL	Poland	VEN	Venezuela
COG	Congo, Republic of	KOR	Korea	PER	Peru	VNM	Vietnam
COL	Colombia	LAO	Lao PDR	PHL	Philippines	ZMB	Zambia
COM	Comoros	LSO	Lesotho	RUS	Russia	ZWE	Zimbabwe

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Tables SA1–SA3, SA6–SA19, SA21, SA24–SA26

Sources: IMF, African Department database, and IMF, World Economic Outlook database, 18 September, 2015.

[1] Excluding fragile countries.
[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.
[4] Excluding South Sudan.

Tables SA4–SA5

Sources: IMF, African Department database, and IMF, World Economic Outlook database, 18 September, 2015.

[1] Excluding fragile countries.
[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.
[3] Excluding South Sudan.

Table SA20

Sources: IMF, African Department database, and IMF, World Economic Outlook database, 18 September, 2015.

[1] Including grants.
[2] Excluding fragile countries.
[3] Fiscal year data.
[4] In constant 2009 U.S. dollars. The Zimbabwe dollar ceased circulating in early 2009. Data are based on IMF staff estimates of price and exchange rate developments in U.S. dollars. Staff estimates of U.S. dollar values may differ from authorities' estimates.
[5] Excluding South Sudan.

Tables SA22–SA23

Sources: IMF, African Department database, and IMF, World Economic Outlook database, 18 September, 2015.

[1] An increase indicates appreciation.
[2] Excluding fragile countries.
[3] Excluding South Sudan.

Table SA27

Source: IMF, International Financial Statistics.
[1] Excluding fragile countries.
[2] Includes offshore banking assets.

Table SA28

Source: IMF, International Financial Statistics.
[1] Excluding fragile countries.
Note: Loan-to-deposit ratio includes deposits and loans of commercial banks to the public sector.

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

Table SA1. Real GDP Growth
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**9.2**	**7.0**	**8.5**	**4.6**	**3.8**	**5.7**	**5.9**	**3.6**	**4.2**
Excluding Nigeria	**10.7**	**1.7**	**4.2**	**3.7**	**2.4**	**6.5**	**4.7**	**2.5**	**3.8**
Angola	17.3	2.4	3.4	3.9	5.2	6.8	4.8	3.5	3.5
Cameroon	3.1	1.9	3.3	4.1	4.6	5.6	5.7	5.3	5.4
Chad	9.7	4.2	13.5	0.1	8.9	5.7	6.9	6.9	4.2
Congo, Rep. of	4.3	7.5	8.7	3.4	3.8	3.3	6.8	1.0	6.5
Equatorial Guinea	13.0	-4.5	-3.8	1.9	5.8	-6.5	-0.3	-10.2	-0.8
Gabon	1.3	-2.3	6.3	7.1	5.3	5.6	4.3	3.5	4.9
Nigeria	8.6	9.0	10.0	4.9	4.3	5.4	6.3	4.0	4.3
South Sudan	...	...	...	...	-52.4	29.3	2.9	-5.3	0.7
Middle-income countries[1]	**5.0**	**0.2**	**4.6**	**4.7**	**3.5**	**3.7**	**2.7**	**2.6**	**2.9**
Excluding South Africa	**5.4**	**3.4**	**7.5**	**7.3**	**5.6**	**6.1**	**4.7**	**4.6**	**5.3**
Botswana	6.0	-7.7	8.6	6.0	4.8	9.3	4.4	2.6	3.2
Cabo Verde	7.1	-1.3	1.5	4.0	1.1	1.0	1.8	3.5	3.7
Ghana	6.3	5.8	7.9	14.0	8.0	7.3	4.0	3.5	5.7
Kenya	4.6	3.3	8.4	6.1	4.6	5.7	5.3	6.5	6.8
Lesotho	4.0	4.5	6.9	4.5	5.3	3.6	3.4	2.6	2.9
Mauritius	4.3	3.0	4.1	3.9	3.2	3.2	3.6	3.2	3.8
Namibia	4.3	0.3	6.0	5.1	5.1	5.1	4.5	4.8	5.0
Senegal	4.5	2.4	4.2	1.8	4.4	3.6	4.7	5.1	5.9
Seychelles	4.8	-1.1	5.9	7.9	6.6	6.0	3.3	3.5	3.7
South Africa	4.8	-1.5	3.0	3.2	2.2	2.2	1.5	1.4	1.3
Swaziland	4.4	1.9	1.4	1.2	3.0	2.9	2.5	1.9	0.7
Zambia	7.7	9.2	10.3	6.4	6.8	6.7	5.6	4.3	4.0
Low-income and fragile countries	**5.7**	**5.1**	**6.5**	**6.2**	**6.5**	**6.6**	**6.9**	**5.9**	**6.5**
Low-income excluding fragile countries	**7.8**	**6.5**	**7.7**	**7.8**	**6.2**	**7.2**	**7.4**	**6.2**	**6.8**
Benin	3.9	2.7	2.6	3.3	5.4	5.6	5.4	5.5	5.3
Burkina Faso	5.9	3.0	8.4	6.6	6.5	6.6	4.0	5.0	6.0
Ethiopia[2]	11.8	10.0	10.6	11.4	8.7	9.8	10.3	8.7	8.1
Mali	4.6	4.5	5.8	2.7	0.0	1.7	7.2	5.0	5.0
Mozambique	7.7	6.5	7.1	7.4	7.1	7.4	7.4	7.0	8.2
Niger	5.2	-0.7	8.4	2.2	11.8	4.6	6.9	4.3	5.4
Rwanda	9.0	6.2	6.3	7.5	8.8	4.7	6.9	6.5	7.0
Sierra Leone	5.8	3.2	5.3	6.0	15.2	20.1	7.1	-23.9	-0.7
Tanzania	6.5	5.4	6.4	7.9	5.1	7.3	7.0	6.9	7.0
Uganda	8.3	8.1	7.7	6.8	2.6	3.9	4.8	5.2	5.5
Fragile countries	**2.7**	**2.6**	**4.4**	**3.2**	**6.9**	**5.6**	**5.8**	**5.2**	**5.9**
Burundi	4.4	3.8	5.1	4.2	4.0	4.5	4.7	-7.2	5.2
Central African Rep.	3.3	1.7	3.0	3.3	4.1	-36.0	1.0	5.5	5.7
Comoros	1.3	1.8	2.1	2.2	3.0	3.5	2.0	1.0	2.2
Congo, Dem. Rep. of	6.1	2.9	7.1	6.9	7.1	8.5	9.2	8.4	7.3
Côte d'Ivoire	1.8	3.3	2.0	-4.4	10.7	8.7	7.9	8.2	7.6
Eritrea	-2.1	3.9	2.2	8.7	7.0	1.3	1.7	0.2	2.2
Gambia, The	3.3	6.4	6.5	-4.3	5.6	4.8	-0.2	4.7	5.5
Guinea	2.9	-0.3	1.9	3.9	3.8	2.3	1.1	0.0	4.9
Guinea-Bissau	3.1	3.3	4.4	9.4	-1.8	0.8	2.5	4.7	4.8
Liberia	7.3	5.1	6.1	7.4	8.2	8.7	0.7	0.9	5.6
Madagascar	5.8	-4.7	0.3	1.5	3.0	2.3	3.3	3.4	4.6
Malawi	6.1	8.3	6.9	4.9	1.9	5.2	5.7	4.0	5.0
São Tomé & Príncipe	5.7	4.0	4.5	4.8	4.5	4.0	4.5	5.0	5.2
Togo	2.4	3.5	4.1	4.8	5.9	5.4	5.0	5.4	5.6
Zimbabwe[3]	-7.5	7.5	11.4	11.9	10.6	4.5	3.3	1.4	2.4
Sub-Saharan Africa	**6.8**	**4.1**	**6.6**	**5.0**	**4.3**	**5.2**	**5.0**	**3.8**	**4.3**
Median	4.8	3.3	6.0	4.8	5.1	5.1	4.5	4.0	5.0
Excluding Nigeria and South Africa	6.8	3.8	6.2	5.9	5.2	6.4	5.7	4.7	5.5
Oil-importing countries	**5.3**	**2.0**	**5.3**	**5.3**	**4.6**	**4.8**	**4.4**	**4.0**	**4.4**
Excluding South Africa	**5.6**	**4.5**	**6.9**	**6.6**	**6.2**	**6.4**	**6.1**	**5.4**	**6.1**
CFA franc zone	4.6	2.0	4.6	2.3	6.1	4.3	5.6	4.5	5.5
WAEMU	3.6	2.9	4.4	1.1	6.8	5.8	6.3	6.1	6.3
CEMAC	5.7	1.1	4.8	3.5	5.4	2.7	4.8	2.6	4.5
EAC-5	6.2	5.2	7.4	6.9	4.6	5.8	5.9	6.1	6.6
ECOWAS	7.4	7.6	8.8	5.0	5.0	5.7	6.0	4.0	4.7
SADC	6.2	0.5	4.2	4.3	3.7	4.2	3.5	3.0	3.1
SACU	4.8	-1.6	3.3	3.4	2.4	2.6	1.8	1.6	1.6
COMESA (SSA members)	6.2	5.6	7.8	7.2	5.8	6.2	6.5	5.9	6.1
MDRI countries	6.5	5.3	7.0	7.3	6.0	6.5	6.5	5.4	6.2
Countries with conventional exchange rate pegs	4.5	2.0	4.6	2.6	6.0	4.3	5.3	4.3	5.2
Countries without conventional exchange rate pegs	7.3	4.4	6.9	5.3	4.3	5.2	5.0	3.8	4.2
Sub-Saharan Africa[4]	**6.8**	**4.1**	**6.6**	**5.0**	**4.6**	**5.0**	**5.0**	**3.9**	**4.3**

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**13.2**	**6.2**	**7.5**	**6.0**	**5.8**	**8.3**	**6.7**	**4.4**	**4.7**
Excluding Nigeria	**13.2**	**6.2**	**7.5**	**7.8**	**5.5**	**8.3**	**5.1**	**2.5**	**3.6**
Angola	17.6	8.1	7.6	9.5	5.5	10.9	8.2	2.1	3.4
Cameroon	3.6	2.9	4.1	4.6	4.6	5.5	5.4	5.1	5.5
Chad	6.3	6.4	17.2	0.2	11.6	8.0	7.1	1.3	3.6
Congo, Rep. of	5.7	3.9	6.5	7.4	9.7	8.1	7.9	2.2	3.3
Equatorial Guinea	31.8	13.0	1.1	9.8	0.3	3.3	-0.5	-0.1	-0.7
Gabon	4.9	-3.3	13.0	10.4	7.0	7.8	4.9	5.1	6.1
Nigeria	...	...	...	5.3	5.9	8.3	7.3	5.0	5.1
South Sudan	...	...	...	...	-0.8	4.1	-17.5	-1.2	1.1
Middle-income countries[1]	**5.0**	**0.2**	**4.6**	**4.2**	**3.4**	**3.6**	**2.7**	**2.5**	**2.8**
Excluding South Africa	**5.4**	**3.4**	**7.5**	**6.0**	**5.5**	**5.9**	**4.6**	**4.3**	**5.1**
Botswana	6.0	-7.7	8.6	6.0	4.8	9.3	4.4	2.6	3.2
Cabo Verde	7.1	-1.3	1.5	4.0	1.1	1.0	1.8	3.5	3.7
Ghana	6.3	5.8	7.9	8.4	7.3	6.7	4.0	2.3	4.7
Kenya	4.6	3.3	8.4	6.1	4.6	5.7	5.3	6.5	6.8
Lesotho	4.0	4.5	6.9	4.5	5.3	3.6	3.4	2.6	2.9
Mauritius	4.3	3.0	4.1	3.9	3.2	3.2	3.6	3.2	3.8
Namibia	4.3	0.3	6.0	5.1	5.1	5.1	4.5	4.8	5.0
Senegal	4.5	2.4	4.2	1.8	4.4	3.6	4.7	5.1	5.9
Seychelles	4.8	-1.1	5.9	7.9	6.6	6.0	3.3	3.5	3.7
South Africa	4.8	-1.5	3.0	3.2	2.2	2.2	1.5	1.4	1.3
Swaziland	4.4	1.9	1.4	1.2	3.0	2.9	2.5	1.9	0.7
Zambia	7.7	9.2	10.3	6.4	6.8	6.7	5.6	4.3	4.0
Low-income and fragile countries	**5.7**	**4.9**	**6.5**	**6.1**	**6.6**	**6.6**	**6.9**	**5.8**	**6.5**
Low-income excluding fragile countries	**7.8**	**6.5**	**7.7**	**7.8**	**6.0**	**7.1**	**7.5**	**6.2**	**6.8**
Benin	3.9	2.7	2.6	3.3	5.4	5.6	5.4	5.5	5.3
Burkina Faso	5.9	3.0	8.4	6.6	6.5	6.6	4.0	5.0	6.0
Ethiopia[2]	11.8	10.0	10.6	11.4	8.7	9.8	10.3	8.7	8.1
Mali	4.6	4.5	5.8	2.7	0.0	1.7	7.2	5.0	5.0
Mozambique	7.7	6.5	7.1	7.4	7.1	7.4	7.4	7.0	8.2
Niger	5.2	-0.7	8.4	1.3	4.2	2.1	8.3	3.7	6.0
Rwanda	9.0	6.2	6.3	7.5	8.8	4.7	6.9	6.5	7.0
Sierra Leone	5.8	3.2	5.3	6.0	15.2	20.1	7.1	-23.9	-0.7
Tanzania	6.5	5.4	6.4	7.9	5.1	7.3	7.0	6.9	7.0
Uganda	8.3	8.1	7.7	6.8	2.6	3.9	4.8	5.2	5.5
Fragile countries	**2.6**	**2.3**	**4.5**	**3.1**	**7.7**	**5.6**	**5.9**	**5.1**	**5.9**
Burundi	4.4	3.8	5.1	4.2	4.0	4.5	4.7	-7.2	5.2
Central African Rep.	3.3	1.7	3.0	3.3	4.1	-36.0	1.0	5.5	5.7
Comoros	1.3	1.8	2.1	2.2	3.0	3.5	2.0	1.0	2.2
Congo, Dem. Rep. of	5.9	2.8	7.2	7.0	7.2	8.6	9.2	8.5	7.3
Côte d'Ivoire	1.8	2.1	2.6	-4.8	13.5	8.8	8.3	7.8	7.6
Eritrea	-2.1	3.9	2.2	8.7	7.0	1.3	1.7	0.2	2.2
Gambia, The	3.3	6.4	6.5	-4.3	5.6	4.8	-0.2	4.7	5.5
Guinea	2.9	-0.3	1.9	3.9	3.8	2.3	1.1	0.0	4.9
Guinea-Bissau	3.1	3.3	4.4	9.4	-1.8	0.8	2.5	4.7	4.8
Liberia	7.3	5.1	6.1	7.4	8.2	8.7	0.7	0.9	5.6
Madagascar	5.8	-4.7	0.3	1.5	3.0	2.3	3.3	3.4	4.6
Malawi	6.1	8.3	6.9	4.9	1.9	5.2	5.7	4.0	5.0
São Tomé & Príncipe	5.7	4.0	4.5	4.8	4.5	4.0	4.5	5.0	5.2
Togo	2.4	3.5	4.1	4.8	5.9	5.4	5.0	5.4	5.6
Zimbabwe[3]	-7.5	7.5	11.4	11.9	10.6	4.5	3.3	1.4	2.4
Sub-Saharan Africa	**6.5**	**2.6**	**5.7**	**5.4**	**5.1**	**6.3**	**5.4**	**4.1**	**4.5**
Median	4.9	3.3	6.0	5.2	5.1	5.1	4.7	4.0	5.0
Excluding Nigeria and South Africa	7.4	4.8	7.1	6.5	6.0	6.8	5.9	4.6	5.4
Oil-importing countries	**5.3**	**1.9**	**5.3**	**4.9**	**4.6**	**4.8**	**4.4**	**3.9**	**4.4**
Excluding South Africa	**5.6**	**4.4**	**6.9**	**6.1**	**6.2**	**6.3**	**6.1**	**5.3**	**6.0**
CFA franc zone	6.6	3.4	5.9	3.5	6.6	5.6	5.8	4.7	5.4
WAEMU	3.6	2.5	4.6	0.9	7.1	5.6	6.5	5.9	6.3
CEMAC	9.7	4.4	7.3	6.2	6.0	5.7	5.0	3.4	4.2
EAC-5	6.2	5.2	7.4	6.9	4.6	5.8	5.9	6.1	6.6
ECOWAS	4.4	3.3	5.4	4.9	6.2	7.8	6.8	4.7	5.3
SADC	6.3	1.2	4.8	5.0	3.7	4.7	3.9	2.9	3.1
SACU	4.8	-1.6	3.3	3.4	2.4	2.6	1.8	1.6	1.6
COMESA (SSA members)	6.2	5.6	7.9	7.2	5.8	6.2	6.5	5.9	6.1
MDRI countries	6.6	5.3	7.0	6.8	6.0	6.5	6.5	5.3	6.0
Countries with conventional exchange rate pegs	6.2	3.2	5.7	3.6	6.4	5.4	5.5	4.6	5.1
Countries without conventional exchange rate pegs	6.8	2.4	5.6	5.6	4.9	6.4	5.6	4.1	4.5
Sub-Saharan Africa[4]	**6.5**	**2.6**	**5.7**	**5.4**	**5.1**	**6.3**	**5.5**	**4.1**	**4.5**

Sources and footnotes on page 80.

Table SA3. Real Per Capita GDP Growth
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**6.2**	**4.1**	**5.6**	**1.8**	**1.0**	**2.9**	**3.0**	**0.8**	**1.4**
Excluding Nigeria	**7.6**	**-1.0**	**1.4**	**1.0**	**-0.4**	**3.6**	**1.9**	**-0.2**	**1.2**
Angola	13.8	-0.6	0.4	0.9	2.1	3.7	1.7	0.5	0.5
Cameroon	0.3	-0.8	0.8	1.6	2.0	3.0	3.1	2.8	2.8
Chad	7.0	1.7	10.8	-2.4	6.2	3.1	4.3	4.3	1.7
Congo, Rep. of	1.4	4.4	5.7	0.5	0.9	1.1	4.5	-1.2	4.3
Equatorial Guinea	9.7	-7.2	-6.5	-0.9	2.8	-9.1	-3.0	-12.6	-3.4
Gabon	-1.0	-3.7	4.7	5.6	3.7	4.1	2.8	2.1	3.5
Nigeria	5.7	6.1	7.0	2.1	1.5	2.6	3.5	1.2	1.5
South Sudan	...	...	...	...	-54.7	23.4	-1.6	-9.4	-1.3
Middle-income countries[1]	**3.3**	**-1.6**	**2.9**	**2.9**	**1.6**	**1.8**	**0.8**	**0.8**	**1.0**
Excluding South Africa	**3.2**	**1.1**	**5.3**	**4.9**	**3.1**	**3.6**	**2.3**	**2.2**	**2.9**
Botswana	4.6	-8.9	7.2	4.8	3.6	8.0	3.2	1.4	2.0
Cabo Verde	6.4	-1.5	1.1	3.3	-2.0	-0.2	0.6	2.2	2.4
Ghana	3.6	3.1	5.2	11.2	5.3	4.6	1.4	0.9	3.1
Kenya	1.8	0.5	6.1	3.4	1.5	2.9	2.6	3.7	4.0
Lesotho	3.9	4.3	6.6	4.3	5.0	3.3	3.2	2.4	2.7
Mauritius	3.8	2.8	3.9	3.7	2.9	3.0	3.6	3.1	3.8
Namibia	2.9	-1.2	4.5	3.6	3.7	3.7	3.0	3.9	4.2
Senegal	1.7	-0.4	1.3	-1.1	1.4	0.7	1.7	2.1	2.9
Seychelles	3.7	-1.5	3.0	6.7	5.4	4.8	2.1	2.3	2.5
South Africa	3.4	-2.9	1.5	1.7	0.7	0.6	-0.1	-0.2	-0.2
Swaziland	5.6	0.7	0.3	0.0	1.8	1.7	1.2	0.7	-0.5
Zambia	4.8	6.1	7.0	3.1	3.4	3.3	2.2	0.9	0.6
Low-income and fragile countries	**2.9**	**2.4**	**3.8**	**3.6**	**3.8**	**4.1**	**4.4**	**3.4**	**4.0**
Low-income excluding fragile countries	**4.7**	**3.8**	**5.0**	**5.2**	**3.7**	**4.7**	**5.0**	**3.9**	**4.4**
Benin	0.6	-0.3	-0.3	0.5	2.6	2.9	2.7	2.9	2.8
Burkina Faso	2.8	0.0	5.3	3.6	3.4	3.6	1.1	2.0	3.0
Ethiopia[2]	9.2	8.3	8.8	9.6	7.0	8.1	8.6	7.0	6.4
Mali	1.3	1.2	2.6	-0.3	-2.9	-1.3	3.9	1.7	1.8
Mozambique	4.8	3.7	4.4	4.8	4.4	4.8	4.7	4.5	5.5
Niger	1.5	-4.1	5.1	-0.9	8.5	1.4	3.7	1.2	2.3
Rwanda	6.8	4.1	3.1	5.4	5.7	1.8	4.1	3.6	4.3
Sierra Leone	2.4	1.2	3.3	3.9	13.0	17.6	4.9	-25.0	-2.5
Tanzania	3.6	2.7	3.8	5.3	2.7	5.2	4.9	4.8	4.9
Uganda	4.6	4.5	4.2	3.5	-0.8	0.3	1.7	2.1	2.4
Fragile countries	**0.1**	**0.0**	**1.7**	**0.4**	**4.1**	**2.9**	**3.1**	**2.6**	**3.2**
Burundi	2.3	1.4	2.6	1.7	1.6	2.0	2.3	-9.3	2.7
Central African Rep.	1.5	-0.2	1.1	1.3	2.1	-37.3	-0.9	3.5	3.7
Comoros	-1.1	-1.2	-0.9	-0.8	0.0	0.5	-1.0	-1.9	-0.8
Congo, Dem. Rep. of	3.0	-0.1	4.0	3.8	4.0	5.3	6.0	5.3	4.2
Côte d'Ivoire	-0.8	0.6	-0.6	-6.8	7.9	5.9	5.2	5.5	4.9
Eritrea	-5.7	0.6	-1.1	5.2	3.6	-1.9	-1.5	-3.0	-1.0
Gambia, The	0.4	3.6	3.7	-6.9	2.8	2.0	-2.9	1.9	2.7
Guinea	0.6	-2.9	-0.7	1.3	1.2	-0.3	-1.4	-2.4	2.3
Guinea-Bissau	0.9	1.1	2.1	6.8	-4.0	-1.4	0.3	2.4	2.5
Liberia	5.7	0.8	1.8	4.7	5.5	5.9	-1.9	-1.7	3.1
Madagascar	2.8	-7.4	-2.5	-1.4	0.2	-0.6	0.5	0.6	1.7
Malawi	3.5	5.3	3.9	1.9	-1.0	2.3	2.7	1.1	2.1
São Tomé & Príncipe	3.0	1.0	1.5	1.9	1.8	1.4	1.9	2.5	2.7
Togo	-0.5	0.9	1.4	2.1	3.2	2.7	2.3	2.7	2.9
Zimbabwe[3]	-8.3	6.6	10.4	9.1	7.8	3.3	2.1	0.3	1.3
Sub-Saharan Africa	**4.3**	**1.7**	**4.2**	**2.6**	**1.8**	**2.8**	**2.6**	**1.4**	**1.9**
Median	3.0	0.8	3.2	2.6	2.8	2.9	2.3	2.0	2.7
Excluding Nigeria and South Africa	4.1	1.2	3.7	3.3	2.6	3.9	3.2	2.2	3.1
Oil-importing countries	**3.2**	**-0.1**	**3.2**	**3.1**	**2.4**	**2.7**	**2.3**	**1.9**	**2.3**
Excluding South Africa	**3.0**	**1.9**	**4.4**	**4.1**	**3.6**	**3.9**	**3.6**	**3.0**	**3.6**
CFA franc zone	1.8	-0.7	1.9	-0.3	3.4	1.7	2.9	1.9	2.8
WAEMU	0.7	0.0	1.6	-1.7	3.9	2.9	3.3	3.2	3.4
CEMAC	2.9	-1.4	2.3	1.1	2.9	0.4	2.5	0.3	2.2
EAC-5	3.2	2.3	4.7	4.1	1.6	3.1	3.3	3.5	4.0
ECOWAS	4.5	4.7	5.9	2.2	2.2	2.9	3.2	1.3	1.9
SADC	4.4	-1.4	2.3	2.3	3.7	2.2	1.5	1.0	1.1
SACU	3.5	-3.0	1.9	1.9	0.9	1.1	0.2	0.0	0.0
COMESA (SSA members)	3.6	3.1	5.4	4.7	3.2	3.7	4.0	3.5	3.7
MDRI countries	3.6	2.6	4.2	4.6	3.3	3.8	3.9	2.8	3.7
Countries with conventional exchange rate pegs	1.8	-0.6	2.0	0.1	3.4	1.8	2.8	1.9	2.8
Countries without conventional exchange rate pegs	4.9	2.0	4.5	2.9	1.9	2.7	2.6	1.4	1.8
Sub-Saharan Africa[4]	**4.3**	**1.7**	**4.2**	**2.6**	**2.2**	**2.6**	**2.6**	**1.5**	**1.9**

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**10.9**	**11.5**	**12.1**	**10.0**	**11.2**	**7.5**	**7.1**	**8.7**	**9.3**
Excluding Nigeria	**9.2**	**8.8**	**7.8**	**7.7**	**8.5**	**4.9**	**4.6**	**7.8**	**8.3**
Angola	20.9	13.7	14.5	13.5	10.3	8.8	7.3	10.3	14.2
Cameroon	2.7	3.0	1.3	2.9	2.4	2.1	1.9	2.0	2.1
Chad	1.5	10.1	-2.1	1.9	7.7	0.2	1.7	4.3	3.1
Congo, Rep. of	3.9	4.3	5.0	1.8	5.0	4.6	0.9	0.9	1.7
Equatorial Guinea	4.4	5.7	5.3	4.8	3.4	3.2	4.3	3.5	2.9
Gabon	0.9	1.9	1.4	1.3	2.7	0.5	4.5	0.6	2.5
Nigeria	11.6	12.5	13.7	10.8	12.2	8.5	8.1	9.1	9.7
South Sudan	...	...	...	...	45.1	0.0	1.7	41.1	14.4
Middle-income countries[1]	**6.8**	**7.9**	**4.6**	**6.5**	**6.2**	**6.1**	**6.7**	**5.9**	**6.1**
Excluding South Africa	**9.2**	**9.4**	**5.2**	**9.1**	**7.1**	**6.8**	**7.7**	**7.5**	**6.5**
Botswana	9.4	8.1	6.9	8.5	7.5	5.8	3.9	4.0	4.4
Cabo Verde	2.9	1.0	2.1	4.5	2.5	1.5	-0.2	1.0	2.5
Ghana	13.3	13.1	6.7	7.7	7.1	11.7	15.5	15.3	10.1
Kenya	8.3	10.6	4.3	14.0	9.4	5.7	6.9	6.3	5.9
Lesotho	6.9	5.9	3.4	6.0	5.5	5.0	3.8	3.9	4.1
Mauritius	7.4	2.5	2.9	6.5	3.9	3.5	3.2	2.0	3.0
Namibia	5.4	9.5	4.9	5.0	6.7	5.6	5.3	4.8	6.0
Senegal	3.3	-2.2	1.2	3.4	1.4	0.7	-1.1	0.6	2.1
Seychelles	9.0	31.8	-2.4	2.6	7.1	4.3	1.4	4.3	2.9
South Africa	5.6	7.1	4.3	5.0	5.7	5.8	6.1	4.8	5.9
Swaziland	6.2	7.4	4.5	6.1	8.9	5.6	5.7	5.2	5.7
Zambia	13.7	13.4	8.5	8.7	6.6	7.0	7.8	7.3	7.5
Low-income and fragile countries	**9.4**	**10.0**	**6.8**	**13.8**	**11.0**	**5.6**	**4.5**	**5.3**	**5.5**
Low-income excluding fragile countries	**9.1**	**8.5**	**5.8**	**16.4**	**14.1**	**5.7**	**4.7**	**5.9**	**6.3**
Benin	3.7	0.9	2.2	2.7	6.7	1.0	-1.1	0.5	2.3
Burkina Faso	3.8	0.9	-0.6	2.8	3.8	0.5	-0.3	0.7	1.8
Ethiopia	18.0	8.5	8.1	33.2	24.1	8.1	7.4	10.0	9.0
Mali	3.1	2.2	1.3	3.1	5.3	-0.6	0.9	2.4	3.6
Mozambique	10.2	3.3	12.7	10.4	2.1	4.2	2.3	4.0	5.6
Niger	4.0	4.3	-2.8	2.9	0.5	2.3	-0.9	1.3	2.1
Rwanda	10.9	10.3	2.3	5.7	6.3	4.2	1.8	2.1	4.2
Sierra Leone	12.5	9.2	17.8	18.5	13.8	9.8	8.3	10.2	12.7
Tanzania	6.6	12.1	7.2	12.7	16.0	7.9	6.1	5.6	5.9
Uganda	7.5	13.1	4.0	18.7	14.0	4.8	4.6	5.7	6.5
Fragile countries	**9.9**	**12.5**	**8.7**	**9.0**	**5.7**	**5.3**	**4.1**	**4.2**	**4.0**
Burundi	11.4	10.6	6.5	9.6	18.2	7.9	4.4	7.4	6.2
Central African Rep.	3.5	3.5	1.5	1.2	5.9	6.6	11.6	5.7	4.9
Comoros	4.0	4.8	3.9	2.2	5.9	1.6	1.3	2.0	2.2
Congo, Dem. Rep. of	14.7	46.2	23.5	15.5	2.1	0.8	1.0	1.0	1.7
Côte d'Ivoire	3.2	1.0	1.4	4.9	1.3	2.6	0.4	1.6	1.5
Eritrea	16.4	33.0	12.7	13.3	12.3	12.3	12.3	12.3	12.3
Gambia, The	6.2	4.6	5.0	4.8	4.6	5.2	6.2	6.5	5.3
Guinea	25.0	4.7	15.5	21.4	15.2	11.9	9.7	9.0	8.7
Guinea-Bissau	4.0	-1.6	1.1	5.1	2.1	0.8	-1.0	1.3	2.3
Liberia	9.8	7.4	7.3	8.5	6.8	7.6	9.9	7.9	8.2
Madagascar	12.5	9.0	9.2	9.5	5.7	5.8	6.1	7.6	7.4
Malawi	11.5	8.4	7.4	7.6	21.3	28.3	23.8	20.1	14.0
São Tomé & Príncipe	20.8	17.0	13.3	14.3	10.6	8.1	7.0	5.8	4.6
Togo	3.8	3.7	1.4	3.6	2.6	1.8	0.2	1.9	2.1
Zimbabwe[2]	39.9	6.2	3.0	3.5	3.7	1.6	-0.2	-1.6	0.0
Sub-Saharan Africa	**8.8**	**9.8**	**8.2**	**9.5**	**9.4**	**6.6**	**6.4**	**6.9**	**7.3**
Median	7.2	7.3	4.4	5.8	6.3	4.8	4.3	4.3	4.6
Excluding Nigeria and South Africa	9.2	9.5	6.6	11.0	9.3	5.8	5.4	6.5	6.4
Oil-importing countries	**7.7**	**8.7**	**5.4**	**9.2**	**8.0**	**5.9**	**5.8**	**5.6**	**5.9**
Excluding South Africa	**9.3**	**9.8**	**6.2**	**12.0**	**9.6**	**6.0**	**5.6**	**6.1**	**5.8**
CFA franc zone	3.1	2.6	1.4	3.1	3.3	1.7	1.2	1.7	2.2
WAEMU	3.4	0.9	0.8	3.7	2.7	1.3	-0.1	1.3	2.1
CEMAC	2.7	4.5	2.0	2.6	3.8	2.1	2.6	2.2	2.4
EAC-5	7.8	11.6	5.2	14.0	12.6	6.2	5.8	5.7	5.9
ECOWAS	10.3	10.4	11.1	9.6	10.3	7.6	7.3	8.3	8.5
SADC	8.0	9.8	6.9	7.6	3.7	6.3	6.0	5.6	6.8
SACU	5.8	7.2	4.4	5.2	5.8	5.7	5.9	4.8	5.8
COMESA (SSA members)	11.5	13.0	7.4	16.1	11.7	6.2	6.1	6.6	6.4
MDRI countries	9.2	10.0	6.5	11.9	10.0	6.1	5.7	6.4	6.0
Countries with conventional exchange rate pegs	3.6	3.6	1.9	3.5	3.8	2.2	1.7	2.2	2.7
Countries without conventional exchange rate pegs	9.8	11.0	9.3	10.6	10.1	7.4	7.2	7.6	8.1
Sub-Saharan Africa[3]	**8.8**	**9.8**	**8.2**	**9.5**	**9.2**	**6.6**	**6.4**	**6.8**	**7.3**

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**9.8**	**12.2**	**10.9**	**9.6**	**10.6**	**6.9**	**7.2**	**10.5**	**9.5**
Excluding Nigeria	**8.4**	**7.8**	**8.4**	**7.5**	**6.8**	**4.0**	**5.2**	**10.5**	**9.6**
Angola	17.3	14.0	15.3	11.4	9.0	7.7	7.5	13.9	13.0
Cameroon	3.1	0.9	2.6	2.7	2.5	1.7	2.6	2.0	2.1
Chad	3.2	4.7	-2.2	10.8	2.1	0.9	3.7	3.2	3.0
Congo, Rep. of	4.4	2.5	5.4	1.8	7.5	2.1	0.5	1.8	2.2
Equatorial Guinea	4.3	5.0	5.4	4.9	2.6	4.9	4.3	3.5	2.9
Gabon	1.1	0.9	0.7	2.3	2.2	3.3	1.7	1.1	2.5
Nigeria	10.4	13.9	11.7	10.3	12.0	7.9	7.9	10.5	9.5
South Sudan	...	...	...	...	25.2	-8.8	9.9	68.9	53.9
Middle-income countries[1]	**7.4**	**6.4**	**4.4**	**7.7**	**5.6**	**6.1**	**6.5**	**6.1**	**5.7**
Excluding South Africa	**9.7**	**6.5**	**6.1**	**10.5**	**5.5**	**7.4**	**7.6**	**7.2**	**5.7**
Botswana	9.9	5.8	7.4	9.2	7.4	4.1	3.7	4.3	4.4
Cabo Verde	3.5	-0.4	3.4	3.6	4.1	0.1	-0.4	2.0	2.5
Ghana	13.7	9.5	6.9	8.4	8.1	13.5	17.0	12.0	8.0
Kenya	9.0	8.0	5.8	18.9	3.2	7.1	6.0	6.3	5.4
Lesotho	7.2	3.8	3.6	7.2	5.0	5.6	2.6	4.1	5.0
Mauritius	7.3	1.5	6.1	4.9	3.2	4.1	0.2	3.0	3.0
Namibia	6.1	7.9	3.1	7.4	6.4	4.9	4.6	5.2	5.5
Senegal	3.8	-4.5	4.3	2.7	1.1	-0.1	-0.8	3.0	1.4
Seychelles	16.1	-2.5	0.4	5.5	5.8	3.4	0.5	4.9	3.8
South Africa	6.4	6.3	3.5	6.1	5.7	5.4	5.8	5.5	5.7
Swaziland	7.7	4.5	4.5	7.8	8.3	4.4	6.2	6.1	5.4
Zambia	13.4	9.9	7.9	7.2	7.3	7.1	7.9	8.0	7.0
Low-income and fragile countries	**10.2**	**8.4**	**7.4**	**15.8**	**8.2**	**4.6**	**4.3**	**6.4**	**5.2**
Low-income excluding fragile countries	**9.7**	**7.2**	**7.3**	**20.1**	**8.9**	**4.7**	**4.3**	**7.3**	**5.9**
Benin	4.1	-0.5	4.0	1.8	6.8	-1.8	-0.8	2.3	2.4
Burkina Faso	4.1	-1.8	-0.3	5.1	1.7	0.1	-0.1	1.6	1.8
Ethiopia	19.3	7.1	14.6	35.9	15.0	7.7	7.1	12.3	8.2
Mali	3.7	1.7	1.9	5.3	2.4	0.0	1.2	3.1	2.6
Mozambique	9.2	4.2	16.6	5.5	2.2	3.0	1.1	5.5	5.6
Niger	5.3	-3.1	1.4	1.4	0.7	1.1	-0.6	2.6	1.5
Rwanda	11.4	5.7	0.2	8.3	3.9	3.6	2.1	3.5	5.0
Sierra Leone	12.4	10.8	18.4	16.9	12.0	8.5	9.8	12.0	10.3
Tanzania	7.1	12.2	5.6	19.8	12.1	5.6	4.8	6.6	5.4
Uganda	8.4	11.0	3.1	27.0	5.3	4.3	4.9	6.4	6.6
Fragile countries	**10.9**	**10.6**	**7.8**	**8.2**	**6.8**	**4.4**	**4.1**	**4.5**	**3.8**
Burundi	12.5	4.6	4.1	14.9	11.8	9.0	3.7	11.8	4.4
Central African Rep.	4.7	-1.2	2.3	4.3	5.9	5.9	8.4	9.4	2.5
Comoros	4.4	2.2	6.7	4.9	1.0	3.5	0.0	4.0	0.1
Congo, Dem. Rep. of	17.2	53.4	9.8	15.4	2.7	1.0	1.2	0.9	2.5
Côte d'Ivoire	3.9	-1.7	5.1	2.0	3.4	0.4	0.9	2.0	1.8
Eritrea	17.5	22.2	14.2	12.3	12.3	12.3	12.3	12.3	12.3
Gambia, The	5.2	2.7	5.8	4.4	4.9	5.5	6.9	6.0	4.7
Guinea	24.6	7.9	20.8	19.0	12.8	10.5	9.0	9.4	8.0
Guinea-Bissau	4.6	-6.4	5.7	3.4	1.6	-0.1	-0.1	2.0	2.5
Liberia	9.5	9.7	6.6	11.4	7.7	8.5	7.7	8.0	8.5
Madagascar	13.6	8.0	10.2	6.9	5.8	6.3	6.0	8.1	7.2
Malawi	11.6	7.6	6.3	9.8	34.6	23.5	24.2	18.7	9.1
São Tomé & Príncipe	21.9	16.1	12.9	11.9	10.4	7.1	6.4	5.2	4.0
Togo	4.9	0.6	3.8	1.5	2.9	1.8	1.8	2.2	2.3
Zimbabwe[2]	...	-7.7	3.2	4.9	2.9	0.3	-0.8	-0.7	0.5
Sub-Saharan Africa	**8.9**	**9.2**	**7.7**	**10.2**	**8.3**	**6.1**	**6.3**	**8.0**	**7.2**
Median	7.3	4.7	5.4	7.0	5.7	4.3	3.7	5.2	4.4
Excluding Nigeria and South Africa	9.6	7.8	7.3	12.3	7.1	5.2	5.4	7.5	6.3
Oil-importing countries	**8.4**	**7.1**	**5.5**	**10.7**	**6.6**	**5.5**	**5.6**	**6.2**	**5.5**
Excluding South Africa	**10.0**	**7.7**	**6.9**	**13.8**	**7.2**	**5.6**	**5.5**	**6.6**	**5.4**
CFA franc zone	3.6	0.2	2.9	3.5	2.9	1.2	1.4	2.3	2.1
WAEMU	4.0	-1.7	3.3	2.9	2.7	0.1	0.2	2.3	1.9
CEMAC	3.2	2.4	2.4	4.0	3.2	2.4	2.6	2.3	2.4
EAC-5	8.4	9.9	4.8	20.3	6.9	5.9	5.1	6.4	5.6
ECOWAS	9.6	10.8	10.2	9.2	10.2	7.2	7.4	9.3	8.1
SADC	8.4	8.9	6.1	8.4	3.7	5.6	5.6	6.6	6.4
SACU	6.5	6.3	3.6	6.2	5.8	5.3	5.6	5.4	5.6
COMESA (SSA members)	12.5	10.7	7.8	18.6	7.7	6.3	5.8	7.4	6.0
MDRI countries	9.8	8.5	6.9	13.7	7.8	5.6	5.7	7.0	5.5
Countries with conventional exchange rate pegs	4.2	1.1	3.2	4.0	3.4	1.7	1.8	2.7	2.6
Countries without conventional exchange rate pegs	9.8	10.8	8.5	11.3	9.0	7.0	7.0	8.6	7.7
Sub-Saharan Africa[3]	**8.9**	**9.2**	**7.7**	**10.2**	**8.2**	**6.2**	**6.2**	**7.7**	**6.9**

Sources and footnotes on page 80.

Table SA6. Total Investment
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**17.6**	**22.4**	**18.9**	**17.3**	**16.7**	**16.8**	**17.7**	**18.4**	**17.8**
Excluding Nigeria	**19.0**	**24.7**	**23.5**	**20.2**	**21.4**	**22.0**	**22.8**	**21.3**	**21.2**
Angola	12.6	15.2	14.4	12.9	14.9	14.8	15.0	10.4	11.3
Cameroon	16.5	20.6	20.3	20.2	20.7	21.6	22.4	22.7	22.5
Chad	22.6	30.2	34.5	28.5	31.5	27.5	30.5	29.0	28.8
Congo, Rep. of	20.9	22.5	20.5	25.3	26.0	30.9	42.2	41.7	39.0
Equatorial Guinea	38.2	71.3	63.9	55.6	48.0	54.0	47.9	55.2	48.8
Gabon	23.2	29.1	29.8	30.6	23.3	26.5	26.8	31.9	31.5
Nigeria	17.0	21.6	17.3	16.2	14.9	14.9	15.8	17.4	16.5
South Sudan	...	...	...	5.5	10.7	12.5	12.8	13.9	16.8
Middle-income countries[1]	**21.4**	**21.7**	**21.4**	**21.7**	**23.1**	**22.0**	**22.3**	**22.4**	**22.6**
Excluding South Africa	**23.9**	**23.5**	**24.9**	**26.3**	**28.2**	**25.2**	**25.4**	**26.1**	**26.8**
Botswana	30.0	37.3	38.0	37.8	38.5	33.4	31.5	32.8	33.4
Cabo Verde	36.7	36.5	37.7	37.2	40.3	39.6	37.6	40.7	41.6
Ghana	22.0	20.7	25.7	26.6	32.0	23.5	24.8	23.8	25.2
Kenya	18.9	19.3	20.7	21.7	21.5	20.1	21.4	23.8	24.2
Lesotho	25.5	29.5	29.0	35.0	36.7	35.0	33.0	33.3	33.2
Mauritius	25.6	21.3	23.7	26.0	24.8	25.1	22.9	25.4	26.3
Namibia	22.7	27.3	24.1	22.4	26.9	24.9	28.0	29.6	32.7
Senegal	26.3	22.4	22.0	25.6	29.1	27.9	27.9	26.9	27.1
Seychelles	28.6	27.3	36.6	35.0	37.4	37.9	37.3	33.7	34.1
South Africa	20.2	20.7	19.5	19.1	20.1	20.1	20.4	19.9	19.8
Swaziland	22.8	14.4	6.5	4.6	5.5	7.7	9.2	10.1	8.0
Zambia	33.2	30.3	29.9	33.5	34.2	33.6	31.1	30.9	30.7
Low-income and fragile countries	**21.6**	**21.8**	**23.0**	**24.9**	**24.8**	**26.3**	**25.9**	**27.6**	**28.5**
Low-income excluding fragile countries	**24.1**	**23.9**	**26.0**	**30.4**	**29.5**	**31.7**	**31.3**	**33.5**	**33.7**
Benin	18.3	20.9	17.6	18.7	17.6	23.6	18.4	22.5	22.0
Burkina Faso	18.5	17.9	18.0	15.4	14.9	20.2	10.8	13.8	17.0
Ethiopia[2]	22.7	23.3	24.4	31.2	30.8	35.8	36.8	39.5	36.9
Mali	28.4	27.8	35.4	26.3	18.3	18.5	25.0	30.5	32.8
Mozambique	21.8	16.0	17.8	36.8	56.5	58.6	48.4	48.6	51.6
Niger	23.2	32.1	49.5	43.9	40.1	40.6	40.6	43.8	48.1
Rwanda	20.1	23.6	23.2	23.5	25.9	26.5	26.3	25.3	25.4
Sierra Leone	10.2	10.0	31.1	42.1	27.9	12.7	13.3	15.2	15.1
Tanzania	26.3	25.1	27.3	33.2	28.5	30.3	31.0	30.9	31.0
Uganda	29.1	27.6	26.0	29.5	29.5	29.2	30.2	33.4	34.8
Fragile countries	**17.3**	**18.2**	**17.6**	**14.6**	**16.2**	**16.1**	**15.5**	**16.0**	**18.4**
Burundi	18.1	19.0	19.2	19.3	19.5	19.6	19.6	14.7	19.7
Central African Rep.	10.1	13.2	14.3	12.2	15.0	8.7	10.2	14.6	16.3
Comoros	10.7	12.4	15.4	14.9	16.8	20.4	18.6	18.4	20.8
Congo, Dem. Rep. of	12.7	14.8	12.3	12.2	12.7	15.3	15.7	15.6	14.8
Côte d'Ivoire	12.8	11.6	14.9	10.5	16.5	17.0	16.8	18.5	19.1
Eritrea	15.9	9.3	9.3	10.0	9.5	8.8	8.0	7.8	7.6
Gambia, The	21.1	19.6	21.3	18.9	27.8	20.0	24.5	18.0	24.1
Guinea	17.3	10.3	9.4	13.4	24.7	20.4	9.4	12.5	47.3
Guinea-Bissau	6.8	6.0	6.6	5.3	7.3	7.0	10.8	12.4	14.2
Liberia	...	...	...	...	...	...	...	...	...
Madagascar	29.7	35.6	23.4	17.6	17.6	15.9	15.6	16.3	17.6
Malawi	21.5	30.8	28.4	14.8	15.7	15.3	14.1	13.4	13.4
São Tomé & Príncipe	54.9	37.1	54.3	42.9	35.6	31.5	25.7	32.1	26.8
Togo	19.2	22.8	23.9	23.5	23.8	23.6	23.6	24.6	24.6
Zimbabwe[3]	...	15.1	23.9	22.4	13.5	13.0	13.1	12.9	12.8
Sub-Saharan Africa	**19.9**	**22.0**	**20.7**	**20.5**	**20.8**	**20.8**	**21.1**	**21.9**	**21.9**
Median	21.6	21.6	23.4	22.9	24.2	22.5	23.2	23.8	24.9
Excluding Nigeria and South Africa	21.6	23.0	23.7	24.1	25.0	24.9	25.0	25.7	26.3
Oil-importing countries	**21.5**	**21.7**	**22.0**	**22.9**	**23.8**	**23.7**	**23.7**	**24.5**	**25.0**
Excluding South Africa	**22.5**	**22.5**	**23.7**	**25.4**	**26.1**	**25.9**	**25.7**	**27.0**	**27.9**
CFA franc zone	21.1	25.9	26.9	24.8	24.4	25.7	25.8	27.5	27.5
WAEMU	19.4	19.4	22.7	20.0	20.9	22.2	21.2	23.4	24.7
CEMAC	22.9	33.0	31.4	29.8	28.1	29.6	31.0	32.3	30.8
EAC-5	23.4	23.3	24.2	27.4	25.8	25.9	26.8	28.2	28.8
ECOWAS	17.8	21.0	18.8	17.8	17.4	16.8	17.3	18.8	18.9
SADC	20.9	21.4	20.5	20.9	3.7	21.8	21.7	21.1	21.3
SACU	20.7	21.5	20.3	19.9	21.0	20.8	21.0	20.8	20.8
COMESA (SSA members)	23.0	23.1	22.7	24.3	24.0	25.0	25.4	27.0	26.8
MDRI countries	23.0	23.6	24.4	26.8	27.3	27.7	27.9	28.9	29.2
Countries with conventional exchange rate pegs	21.3	25.5	26.1	24.1	24.1	25.2	25.4	27.1	27.2
Countries without conventional exchange rate pegs	19.7	21.5	19.8	20.2	20.4	20.2	20.6	21.2	21.2
Sub-Saharan Africa[4]	**19.9**	**22.0**	**20.7**	**20.7**	**20.8**	**20.8**	**21.2**	**21.9**	**22.0**

Sources and footnotes on page 80.

Table SA7. Gross National Savings
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**29.9**	**23.0**	**21.9**	**21.2**	**20.7**	**19.6**	**16.8**	**14.6**	**14.9**
Excluding Nigeria	**28.0**	**13.3**	**24.2**	**26.3**	**24.7**	**22.4**	**19.1**	**12.1**	**13.8**
Angola	27.3	5.2	23.5	25.5	26.9	21.5	13.5	2.8	5.8
Cameroon	15.5	17.6	17.5	17.5	17.1	17.8	17.8	17.6	17.3
Chad	23.1	21.1	25.5	22.8	22.8	18.3	21.6	18.6	19.6
Congo, Rep. of	18.2	8.4	27.9	29.9	23.6	26.5	32.8	26.5	24.5
Equatorial Guinea	52.7	24.4	22.7	34.4	36.3	29.4	25.3	23.6	24.0
Gabon	39.6	33.8	38.5	43.4	39.2	38.7	35.0	25.3	27.5
Nigeria	30.7	26.6	21.2	19.2	19.3	18.5	16.0	15.6	15.4
South Sudan	...	...	...	23.5	-8.9	11.3	15.4	9.0	13.2
Middle-income countries[1]	**16.3**	**16.7**	**17.3**	**16.8**	**14.4**	**14.4**	**14.5**	**17.2**	**17.1**
Excluding South Africa	**21.8**	**20.5**	**20.0**	**18.1**	**17.2**	**17.0**	**17.6**	**19.5**	**19.7**
Botswana	40.9	29.9	34.6	40.5	39.9	42.3	47.6	35.6	33.6
Cabo Verde	27.2	21.9	25.3	20.9	27.7	34.6	30.0	31.0	35.0
Ghana	14.7	18.4	19.6	19.0	16.8	13.5	15.2	15.4	18.0
Kenya	16.4	14.9	14.8	12.5	13.1	11.2	11.0	14.1	14.5
Lesotho	43.2	33.1	19.2	20.0	26.5	24.4	24.8	26.9	19.2
Mauritius	20.0	15.0	14.3	13.1	18.4	19.7	18.3	20.3	20.8
Namibia	30.1	25.7	20.6	19.3	21.2	20.9	18.0	17.5	16.5
Senegal	16.4	15.6	17.6	17.4	18.3	17.5	19.1	20.8	21.9
Seychelles	14.8	12.4	17.6	13.5	17.5	26.5	16.3	18.6	19.4
South Africa	16.0	18.0	18.0	17.0	15.1	14.4	14.9	15.6	15.3
Swaziland	19.6	2.8	-2.1	-2.2	8.6	12.9	12.2	11.2	5.2
Zambia	32.1	36.2	37.4	38.1	39.7	33.0	29.7	29.5	28.1
Low-income and fragile countries	**16.0**	**13.4**	**16.7**	**17.0**	**16.2**	**15.6**	**16.2**	**16.9**	**18.0**
Low-income excluding fragile countries	**18.5**	**15.9**	**19.5**	**21.7**	**21.1**	**20.5**	**20.8**	**21.5**	**22.4**
Benin	11.0	11.9	8.9	10.9	9.3	13.2	10.4	13.2	12.8
Burkina Faso	8.1	13.2	15.8	13.9	10.4	13.6	4.6	5.9	9.2
Ethiopia[2]	19.7	15.4	24.5	33.1	31.2	29.7	28.8	27.0	27.6
Mali	20.8	20.5	22.8	20.1	15.7	15.1	17.7	27.1	28.7
Mozambique	11.1	5.0	7.1	13.7	14.2	18.5	13.6	10.5	9.5
Niger	14.1	7.7	25.5	21.6	25.5	25.2	25.3	24.8	24.7
Rwanda	18.4	16.4	17.8	16.4	14.7	19.1	14.4	14.7	15.9
Sierra Leone	4.5	-1.7	9.6	-17.0	4.6	2.3	1.4	1.2	3.2
Tanzania	20.9	18.3	21.2	21.6	19.3	15.1	21.9	22.7	23.9
Uganda	24.9	21.2	16.9	18.7	21.5	22.0	20.6	22.8	23.6
Fragile countries	**11.8**	**9.2**	**11.7**	**8.2**	**7.1**	**6.4**	**7.3**	**8.1**	**9.3**
Burundi	12.2	21.7	7.8	6.4	2.7	1.6	2.4	3.7	10.3
Central African Rep.	4.6	4.1	4.1	4.6	10.4	5.7	4.1	2.8	5.1
Comoros	4.4	6.2	15.2	10.0	12.2	11.8	11.6	9.3	9.8
Congo, Dem. Rep. of	8.0	7.1	5.7	4.7	5.8	4.7	6.1	4.3	3.8
Côte d'Ivoire	13.9	18.3	16.8	21.0	15.3	15.7	16.1	17.5	17.2
Eritrea	-19.9	-9.7	-9.3	1.2	5.9	4.0	2.4	1.0	0.6
Gambia, The	12.6	7.1	5.0	6.7	19.9	9.8	11.4	4.5	13.9
Guinea	12.0	2.4	-0.3	-5.4	-4.0	-3.6	-14.9	-4.2	10.5
Guinea-Bissau	5.6	0.8	-2.2	4.9	-2.6	2.6	9.6	8.8	9.4
Liberia	...	...	...	...	...	...	...	...	...
Madagascar	20.4	14.5	13.7	10.8	10.8	10.3	15.3	14.9	15.4
Malawi	14.9	26.9	31.8	6.2	6.4	6.6	6.0	8.9	6.1
São Tomé & Príncipe	27.8	13.8	32.6	17.4	14.3	8.1	-2.0	19.7	11.6
Togo	10.4	17.2	17.6	15.4	16.3	10.5	10.7	12.2	12.5
Zimbabwe[3]	...	-32.0	8.0	-8.5	-11.0	-12.5	-8.9	-10.1	-7.1
Sub-Saharan Africa	**22.2**	**19.4**	**19.7**	**19.2**	**18.5**	**17.5**	**16.6**	**16.0**	**16.4**
Median	16.4	15.4	17.6	17.2	16.0	15.1	15.3	15.5	15.4
Excluding Nigeria and South Africa	20.6	15.3	19.7	20.3	19.7	18.3	17.8	16.5	17.5
Oil-importing countries	**17.2**	**16.8**	**18.1**	**17.7**	**16.9**	**16.0**	**16.4**	**17.1**	**17.4**
Excluding South Africa	**18.2**	**16.0**	**18.2**	**18.2**	**18.0**	**17.0**	**17.3**	**17.9**	**18.6**
CFA franc zone	20.6	18.0	20.7	22.3	20.3	19.9	19.6	19.1	19.6
WAEMU	14.0	15.8	17.4	17.9	15.3	15.8	15.1	17.5	18.2
CEMAC	27.7	20.3	24.2	27.0	25.7	24.4	24.5	21.0	21.2
EAC-5	19.6	17.7	17.4	17.0	16.8	15.0	16.8	18.8	19.7
ECOWAS	26.0	23.7	20.1	18.4	18.1	17.4	15.4	15.6	15.9
SADC	19.0	15.9	19.2	18.4	3.7	16.1	16.1	14.7	14.8
SACU	17.5	18.5	18.5	17.8	16.3	15.8	16.5	16.6	16.0
COMESA (SSA members)	18.5	15.2	18.0	17.8	18.5	17.4	17.1	17.6	17.9
MDRI countries	17.6	16.9	19.6	20.1	19.6	18.3	19.0	19.2	19.9
Countries with conventional exchange rate pegs	20.5	17.6	19.6	21.1	19.9	19.6	19.1	18.7	18.9
Countries without conventional exchange rate pegs	22.5	20.1	19.9	19.1	18.8	17.5	16.5	15.9	16.2
Sub-Saharan Africa[4]	**22.2**	**19.4**	**19.7**	**19.2**	**18.7**	**17.6**	**16.6**	**16.1**	**16.4**

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**5.6**	**-5.4**	**-2.3**	**2.3**	**0.6**	**-2.1**	**-3.1**	**-4.3**	**-3.4**
Excluding Nigeria	**7.3**	**-4.4**	**2.4**	**6.0**	**1.5**	**-1.7**	**-5.8**	**-5.5**	**-3.9**
Angola	4.6	-7.4	3.4	8.7	4.6	-0.3	-6.4	-3.5	-1.4
Cameroon	8.6	0.0	-1.1	-2.6	-1.6	-4.0	-5.2	-5.1	-5.6
Chad	1.2	-9.2	-4.2	2.4	0.5	-2.1	-4.2	-1.1	-0.9
Congo, Rep. of	13.5	4.8	16.1	16.5	6.4	-1.8	-7.7	-9.4	-2.6
Equatorial Guinea	18.4	-9.5	-5.8	1.0	-9.0	-7.5	-6.8	-5.9	-3.2
Gabon	8.5	6.8	2.7	2.5	1.6	1.8	2.7	-3.6	-2.5
Nigeria	4.9	-6.0	-4.2	0.4	0.3	-2.3	-2.0	-3.9	-3.2
South Sudan	...	...	...	5.4	-11.3	-5.9	-11.4	-24.5	-23.7
Middle-income countries[1]	**-0.3**	**-4.8**	**-5.0**	**-4.1**	**-4.4**	**-4.7**	**-4.5**	**-4.9**	**-4.4**
Excluding South Africa	**-1.1**	**-5.0**	**-5.7**	**-4.5**	**-5.2**	**-5.8**	**-5.9**	**-6.2**	**-5.6**
Botswana	4.5	-13.6	-7.8	-0.1	0.8	5.3	4.3	-0.5	0.4
Cabo Verde	-3.3	-5.9	-10.7	-7.7	-10.3	-8.9	-7.4	-4.1	-3.5
Ghana	-4.9	-7.0	-9.4	-7.3	-12.2	-11.1	-10.9	-5.9	-4.3
Kenya	-1.9	-4.3	-4.4	-4.1	-5.0	-5.7	-7.2	-8.1	-7.3
Lesotho	9.0	-4.0	-4.2	-10.6	5.0	-2.5	0.6	-3.2	-10.4
Mauritius	-3.9	-3.6	-3.2	-3.2	-1.8	-3.5	-3.2	-5.0	-3.9
Namibia	2.0	-0.1	-4.5	-6.7	-2.3	-3.4	-3.7	-5.9	-7.4
Senegal	-3.8	-4.9	-5.2	-6.1	-5.2	-5.5	-4.9	-4.7	-4.2
Seychelles	-0.7	4.8	0.5	3.3	2.7	0.3	3.5	1.1	2.5
South Africa	0.0	-4.7	-4.8	-3.9	-4.1	-4.1	-3.8	-4.1	-3.7
Swaziland	1.4	-2.9	-8.8	-3.6	4.2	0.5	-1.6	-4.4	-6.7
Zambia	2.1	-2.1	-2.4	-1.8	-2.9	-6.5	-6.1	-7.8	-6.5
Low-income and fragile countries	**-1.4**	**-2.6**	**-2.4**	**-2.9**	**-2.3**	**-2.5**	**-3.0**	**-3.2**	**-3.1**
Low-income excluding fragile countries	**-1.1**	**-3.0**	**-3.3**	**-2.7**	**-2.6**	**-3.0**	**-3.8**	**-3.7**	**-3.7**
Benin	-0.7	-3.3	-0.4	-1.4	-0.3	-2.1	-2.5	-2.6	-3.5
Burkina Faso	-0.8	-4.7	-3.0	-1.4	-3.1	-3.9	-1.9	-2.5	-3.0
Ethiopia[2]	-3.4	-0.9	-1.3	-1.6	-1.2	-1.9	-2.6	-2.8	-2.8
Mali	4.0	-4.2	-2.9	-4.2	-1.1	-2.8	-3.5	-3.2	-4.0
Mozambique	-2.9	-5.0	-3.9	-4.8	-3.9	-2.7	-10.3	-6.5	-5.1
Niger	7.1	-5.3	-2.4	-1.5	-1.1	-2.6	-8.3	-8.0	-5.3
Rwanda	0.2	0.3	0.4	-1.8	-1.6	-2.6	-3.6	-3.2	-3.1
Sierra Leone	2.2	-2.3	-5.0	-4.6	-5.2	-2.4	-3.6	-4.0	-5.2
Tanzania	-2.5	-4.5	-4.8	-3.6	-4.1	-3.9	-3.2	-4.0	-3.9
Uganda	-0.8	-2.1	-5.7	-2.7	-3.0	-4.0	-3.5	-3.6	-4.2
Fragile countries	**-1.7**	**-2.0**	**-1.3**	**-3.1**	**-1.8**	**-1.7**	**-1.8**	**-2.5**	**-2.0**
Burundi	-2.7	-5.1	-3.6	-3.9	-3.5	-1.7	-3.4	-6.0	-4.8
Central African Rep.	0.5	-0.6	-1.5	-2.4	0.0	-6.3	3.0	-4.9	-3.4
Comoros	-1.7	0.6	7.0	1.4	3.3	17.8	-0.5	0.6	-2.5
Congo, Dem. Rep. of	-0.3	1.3	2.4	-0.5	1.8	3.0	1.3	1.9	1.2
Côte d'Ivoire	-1.0	-1.4	-1.8	-5.4	-3.1	-2.2	-2.3	-3.2	-3.2
Eritrea	-17.9	-14.7	-16.0	-16.2	-15.3	-15.2	-14.5	-14.5	-14.4
Gambia, The	-3.2	-2.7	-4.7	-4.7	-4.4	-8.5	-10.0	-6.3	-3.0
Guinea	-1.5	-7.1	-14.0	-1.3	-3.3	-5.2	-4.1	-6.7	-3.3
Guinea-Bissau	-4.0	4.1	1.6	-0.8	-2.2	-1.8	-1.4	-0.9	-2.3
Liberia	-0.5	-10.1	-5.7	-3.1	-1.6	-4.7	-3.5	-10.2	-6.9
Madagascar	-2.6	-2.5	-0.9	-2.4	-2.6	-4.0	-2.3	-4.4	-2.8
Malawi	-2.3	-3.6	2.1	-3.9	-1.9	-6.4	-4.0	-6.4	-3.2
São Tomé & Príncipe	24.9	-18.1	-11.1	-11.7	-10.9	1.9	-5.5	-8.8	-2.3
Togo	-1.4	-3.9	-2.5	-4.0	-7.2	-4.6	-4.9	-6.3	-6.0
Zimbabwe[3]	-3.5	-2.1	0.7	-1.3	-0.6	-1.9	-1.5	-1.3	-0.5
Sub-Saharan Africa	**1.7**	**-4.6**	**-3.4**	**-1.1**	**-1.8**	**-3.1**	**-3.5**	**-4.3**	**-3.6**
Median	-0.7	-3.7	-3.4	-2.6	-2.2	-2.8	-3.6	-4.4	-3.5
Excluding Nigeria and South Africa	1.2	-3.8	-1.9	-0.3	-1.8	-3.1	-4.6	-4.6	-3.9
Oil-importing countries	**-0.6**	**-4.1**	**-4.3**	**-3.7**	**-3.7**	**-3.9**	**-4.0**	**-4.2**	**-3.9**
Excluding South Africa	**-1.3**	**-3.5**	**-3.8**	**-3.6**	**-3.4**	**-3.8**	**-4.1**	**-4.3**	**-4.0**
CFA franc zone	4.8	-2.1	-0.7	-0.4	-1.9	-3.1	-3.7	-4.3	-3.7
WAEMU	-0.3	-3.3	-2.6	-4.0	-3.0	-3.2	-3.5	-3.8	-3.7
CEMAC	9.7	-0.8	1.1	2.8	-0.9	-3.0	-4.0	-4.8	-3.5
EAC-5	-1.8	-3.7	-4.5	-3.5	-4.1	-4.5	-4.9	-5.7	-5.4
ECOWAS	3.0	-5.5	-4.5	-0.9	-1.2	-3.1	-2.7	-4.0	-3.3
SADC	0.2	-4.8	-3.2	-1.7	3.7	-2.8	-3.9	-3.7	-3.1
SACU	0.3	-4.9	-4.9	-3.8	-3.7	-3.6	-3.4	-4.0	-3.8
COMESA (SSA members)	-1.6	-2.2	-2.3	-2.6	-2.2	-3.2	-3.7	-4.2	-3.9
MDRI countries	0.1	-2.6	-2.3	-2.4	-3.1	-4.0	-4.4	-4.0	-3.6
Countries with conventional exchange rate pegs	4.3	-2.2	-1.5	-1.3	-2.0	-3.2	-3.9	-4.6	-4.3
Countries without conventional exchange rate pegs	1.3	-5.0	-3.8	-1.2	-1.7	-3.0	-3.4	-4.0	-3.4
Sub-Saharan Africa[4]	**1.7**	**-4.6**	**-3.4**	**-1.2**	**-1.7**	**-3.1**	**-3.5**	**-4.1**	**-3.5**

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**5.2**	**-5.5**	**-2.3**	**2.1**	**0.5**	**-2.3**	**-3.2**	**-4.5**	**-3.6**
Excluding Nigeria	**5.9**	**-4.7**	**2.2**	**5.5**	**1.0**	**-2.3**	**-6.4**	**-6.2**	**-4.9**
Angola	4.4	-7.4	3.4	8.7	4.6	-0.3	-6.5	-3.5	-1.4
Cameroon	2.3	-0.8	-1.7	-3.1	-2.0	-4.3	-5.5	-5.2	-5.8
Chad	-0.7	-11.9	-5.5	0.8	-2.2	-4.3	-6.2	-4.2	-3.2
Congo, Rep. of	13.2	4.5	16.0	15.9	6.3	-2.2	-8.2	-10.0	-3.0
Equatorial Guinea	18.4	-9.5	-5.8	1.0	-9.0	-7.5	-6.8	-5.9	-3.2
Gabon	8.5	6.8	2.7	2.5	1.6	1.8	2.7	-3.6	-2.5
Nigeria	4.9	-6.0	-4.2	0.4	0.3	-2.3	-2.0	-3.9	-3.2
South Sudan	...	...	...	1.9	-15.9	-11.7	-17.1	-31.7	-33.9
Middle-income countries[1]	**-1.0**	**-5.3**	**-5.4**	**-4.4**	**-4.8**	**-4.9**	**-4.8**	**-5.2**	**-4.7**
Excluding South Africa	**-3.4**	**-6.8**	**-7.0**	**-5.7**	**-6.3**	**-6.6**	**-6.7**	**-7.2**	**-6.4**
Botswana	3.8	-14.6	-8.2	-0.6	0.7	5.1	4.0	-0.7	0.2
Cabo Verde	-9.0	-11.0	-17.0	-10.6	-13.1	-11.4	-9.1	-7.0	-5.5
Ghana	-8.3	-10.0	-11.7	-9.4	-13.7	-11.5	-11.6	-7.4	-5.6
Kenya	-2.9	-5.0	-5.0	-4.6	-5.5	-6.2	-7.8	-8.6	-7.7
Lesotho	7.3	-7.0	-11.5	-18.4	-3.6	-7.3	-1.4	-6.9	-14.0
Mauritius	-4.2	-5.2	-3.9	-3.9	-2.5	-3.9	-3.4	-5.6	-4.1
Namibia	1.9	-0.4	-4.6	-6.8	-2.4	-3.6	-3.8	-5.9	-7.4
Senegal	-5.8	-7.9	-7.7	-8.3	-8.0	-8.0	-8.2	-7.6	-7.2
Seychelles	-1.8	0.8	-0.3	0.9	-1.8	-3.7	0.5	-1.4	0.5
South Africa	0.0	-4.7	-4.8	-3.9	-4.1	-4.1	-3.8	-4.1	-3.7
Swaziland	0.9	-3.4	-8.8	-3.7	4.1	0.0	-3.2	-5.0	-7.2
Zambia	-5.7	-4.5	-3.9	-2.4	-4.6	-8.0	-6.9	-8.6	-7.3
Low-income and fragile countries	**-6.2**	**-6.6**	**-6.6**	**-6.3**	**-5.1**	**-5.2**	**-5.4**	**-5.8**	**-5.3**
Low-income excluding fragile countries	**-7.3**	**-7.6**	**-7.3**	**-6.7**	**-5.6**	**-5.9**	**-6.1**	**-6.2**	**-5.8**
Benin	-3.0	-6.5	-1.9	-4.0	-2.3	-3.1	-3.6	-5.2	-5.9
Burkina Faso	-10.2	-10.6	-7.5	-6.4	-8.0	-9.3	-6.1	-7.5	-7.7
Ethiopia[2]	-7.5	-5.2	-4.5	-4.8	-2.9	-3.5	-3.8	-4.1	-3.8
Mali	-6.9	-8.8	-5.8	-8.0	-1.4	-6.2	-6.2	-7.6	-6.7
Mozambique	-9.8	-13.5	-12.1	-12.2	-9.0	-8.0	-15.3	-11.4	-8.6
Niger	-7.6	-9.7	-7.0	-5.2	-7.2	-10.9	-13.9	-12.9	-9.8
Rwanda	-10.0	-11.2	-12.9	-12.6	-10.9	-11.2	-11.0	-10.6	-8.7
Sierra Leone	-7.5	-8.4	-10.3	-10.1	-9.0	-5.0	-7.9	-9.3	-8.7
Tanzania	-7.2	-8.1	-8.2	-6.9	-7.0	-6.3	-4.8	-5.4	-5.4
Uganda	-5.3	-4.5	-8.2	-4.4	-4.9	-5.1	-4.6	-5.0	-5.5
Fragile countries	**-4.7**	**-5.0**	**-5.4**	**-5.7**	**-4.3**	**-4.1**	**-4.2**	**-5.0**	**-4.6**
Burundi	-18.7	-24.0	-26.3	-24.5	-20.4	-18.1	-16.4	-18.0	-16.4
Central African Rep.	-5.5	-5.9	-7.0	-4.9	-4.9	-9.1	-7.7	-9.5	-8.1
Comoros	-7.8	-9.1	-7.8	-6.0	-6.0	-9.7	-9.9	-8.2	-10.3
Congo, Dem. Rep. of	-1.9	-3.2	-5.7	-3.9	-1.1	0.6	0.1	-0.5	-1.6
Côte d'Ivoire	-2.0	-1.9	-2.3	-5.8	-3.7	-3.6	-4.6	-5.2	-5.1
Eritrea	-24.8	-17.3	-21.3	-19.4	-16.5	-15.7	-14.9	-14.9	-14.7
Gambia, The	-4.8	-6.9	-8.7	-9.9	-13.3	-10.8	-13.7	-10.4	-6.8
Guinea	-2.5	-7.5	-14.4	-4.7	-6.0	-6.7	-8.2	-9.7	-5.9
Guinea-Bissau	-12.7	-11.8	-7.9	-7.4	-4.6	-5.3	-10.4	-7.0	-8.2
Liberia	-0.7	-12.6	-7.5	-4.7	-4.1	-7.8	-8.7	-18.2	-15.9
Madagascar	-9.2	-4.2	-2.8	-4.3	-3.8	-5.3	-4.6	-6.4	-4.8
Malawi	-12.3	-11.1	-8.0	-7.4	-10.7	-13.1	-7.4	-9.8	-6.5
São Tomé & Príncipe	-15.0	-32.5	-29.7	-29.6	-28.6	-11.0	-15.9	-23.9	-18.9
Togo	-2.7	-5.4	-4.5	-7.2	-8.8	-7.6	-6.9	-8.5	-8.4
Zimbabwe[3]	-3.5	-2.6	0.7	-1.3	-0.6	-1.9	-1.5	-1.3	-0.5
Sub-Saharan Africa	**0.4**	**-5.7**	**-4.3**	**-1.9**	**-2.5**	**-3.8**	**-4.2**	**-5.0**	**-4.4**
Median	-4.5	-7.2	-7.0	-4.8	-4.6	-6.2	-6.8	-7.0	-6.5
Excluding Nigeria and South Africa	-2.0	-6.1	-4.1	-2.1	-3.5	-4.7	-6.0	-6.3	-5.5
Oil-importing countries	**-2.4**	**-5.8**	**-5.8**	**-4.9**	**-4.9**	**-5.0**	**-5.0**	**-5.4**	**-5.0**
Excluding South Africa	**-5.1**	**-6.7**	**-6.8**	**-6.0**	**-5.6**	**-5.8**	**-5.9**	**-6.3**	**-5.7**
CFA franc zone	1.3	-4.0	-2.1	-1.8	-3.3	-4.8	-5.5	-6.3	-5.5
WAEMU	-4.9	-6.2	-4.9	-6.5	-5.2	-6.2	-6.4	-7.0	-6.6
CEMAC	7.2	-1.7	0.6	2.3	-1.5	-3.5	-4.7	-5.5	-4.2
EAC-5	-5.4	-6.6	-7.6	-6.2	-6.5	-6.5	-6.6	-7.3	-6.9
ECOWAS	1.8	-6.4	-5.0	-1.5	-1.6	-3.6	-3.2	-4.7	-3.9
SADC	-0.6	-5.6	-4.0	-2.3	3.7	-3.4	-4.3	-4.3	-3.6
SACU	0.2	-4.9	-5.0	-3.9	-3.8	-3.7	-3.4	-4.0	-3.8
COMESA (SSA members)	-5.3	-5.3	-5.6	-4.8	-4.2	-4.9	-5.0	-5.7	-5.3
MDRI countries	-5.1	-6.4	-6.0	-5.3	-5.7	-6.3	-6.4	-6.3	-5.6
Countries with conventional exchange rate pegs	1.0	-4.1	-3.0	-2.8	-3.4	-4.9	-5.6	-6.5	-6.0
Countries without conventional exchange rate pegs	0.3	-6.0	-4.6	-1.8	-2.3	-3.5	-3.9	-4.6	-3.9
Sub-Saharan Africa[4]	**0.4**	**-5.7**	**-4.3**	**-2.0**	**-2.4**	**-3.7**	**-4.1**	**-4.8**	**-4.1**

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**25.9**	**17.8**	**19.0**	**24.6**	**21.3**	**17.9**	**16.3**	**12.1**	**12.3**
Excluding Nigeria	**34.7**	**30.3**	**34.8**	**38.2**	**36.6**	**33.5**	**30.3**	**24.3**	**24.2**
Angola	45.5	34.5	43.5	48.8	45.9	40.4	34.6	27.4	27.6
Cameroon	18.2	16.7	16.0	17.5	17.5	17.6	18.0	17.2	16.3
Chad	14.1	12.3	18.9	23.2	21.8	18.5	15.9	13.4	15.1
Congo, Rep. of	39.6	29.1	37.5	42.0	42.5	46.5	41.9	40.6	42.4
Equatorial Guinea	38.3	49.1	34.2	35.0	34.7	31.8	33.6	30.2	27.9
Gabon	28.7	29.4	25.8	29.0	30.1	30.2	26.1	21.5	23.4
Nigeria	21.8	11.2	12.4	17.7	14.3	11.0	10.5	7.5	7.6
South Sudan	...	...	...	26.7	8.2	14.7	22.9	11.8	10.8
Middle-income countries[1]	**25.4**	**25.0**	**24.8**	**25.4**	**25.5**	**25.4**	**26.2**	**26.5**	**26.5**
Excluding South Africa	**21.6**	**20.3**	**20.1**	**21.3**	**21.6**	**21.3**	**22.4**	**21.9**	**21.8**
Botswana	41.4	36.8	33.6	35.0	35.8	37.2	39.4	34.1	32.5
Cabo Verde	22.7	21.9	21.7	22.7	21.6	22.2	21.3	22.5	23.7
Ghana	13.6	13.4	14.4	17.1	17.0	16.3	17.7	18.3	19.3
Kenya	18.7	18.1	19.2	19.0	18.7	19.3	19.2	19.9	21.0
Lesotho	57.0	60.4	44.7	44.4	57.9	55.6	58.5	56.5	47.2
Mauritius	19.4	21.2	21.2	20.7	20.8	21.0	20.5	21.8	21.4
Namibia	28.5	30.8	27.8	29.8	31.2	31.0	33.2	32.6	29.5
Senegal	19.5	18.6	19.3	20.5	20.5	19.9	21.0	20.8	21.2
Seychelles	36.5	32.9	34.2	35.6	34.2	31.9	32.4	31.6	31.4
South Africa	26.8	27.0	26.7	27.0	27.2	27.6	28.2	29.1	29.5
Swaziland	30.5	29.3	20.5	20.1	29.7	28.7	28.7	26.8	21.9
Zambia	15.2	13.3	14.2	16.9	17.4	16.9	18.5	17.1	16.0
Low-income and fragile countries	**13.0**	**13.5**	**14.7**	**15.1**	**15.7**	**16.0**	**16.1**	**16.3**	**16.5**
Low-income excluding fragile countries	**12.8**	**13.0**	**13.7**	**14.3**	**14.7**	**15.5**	**15.5**	**15.9**	**16.2**
Benin	18.2	18.5	18.6	17.6	18.8	19.4	18.2	18.7	18.8
Burkina Faso	13.1	13.6	15.3	15.7	17.5	18.5	17.3	17.3	17.9
Ethiopia[2]	13.9	11.9	14.0	13.4	13.8	14.3	14.0	14.7	14.5
Mali	16.9	17.1	17.2	17.0	17.1	17.3	17.6	19.0	19.3
Mozambique	12.9	15.8	17.9	19.7	22.4	26.9	27.8	25.5	25.7
Niger	13.7	14.3	13.6	14.2	15.2	17.0	18.0	18.7	19.1
Rwanda	12.7	12.6	13.0	13.8	15.0	16.4	16.7	15.2	15.3
Sierra Leone	8.8	9.1	9.9	11.5	11.4	10.7	9.9	9.4	9.9
Tanzania	10.8	12.1	12.0	12.3	12.7	13.1	13.2	13.7	14.5
Uganda	10.9	10.8	10.6	12.8	11.6	11.7	12.5	13.7	14.0
Fragile countries	**13.3**	**14.3**	**16.2**	**16.4**	**17.4**	**16.9**	**17.0**	**17.0**	**17.1**
Burundi	13.9	13.9	14.5	15.3	14.5	13.3	13.7	12.4	13.0
Central African Rep.	9.4	10.8	11.6	10.8	11.5	5.7	4.9	6.7	7.5
Comoros	14.1	13.9	14.3	16.1	19.3	15.5	14.5	17.1	17.1
Congo, Dem. Rep. of	8.6	10.7	12.1	11.8	14.4	12.9	13.3	13.6	13.9
Côte d'Ivoire	17.5	18.0	17.7	18.8	18.4	18.5	18.6	17.5	17.9
Eritrea	22.3	13.3	13.3	14.2	14.2	14.1	14.2	14.1	14.0
Gambia, The	15.8	16.2	14.9	16.1	16.4	16.3	18.7	19.6	20.6
Guinea	14.1	16.2	15.3	16.8	20.1	18.4	17.9	20.3	20.8
Guinea-Bissau	9.4	9.1	10.8	10.1	9.1	8.1	12.0	12.6	13.9
Liberia	15.1	20.6	25.0	24.3	26.0	25.0	23.5	22.7	23.5
Madagascar	11.7	9.9	11.2	9.7	9.6	9.6	10.1	10.3	10.6
Malawi	16.4	19.4	21.8	18.4	18.3	21.6	21.8	21.2	21.2
São Tomé & Príncipe	27.7	16.3	17.5	18.4	16.3	20.6	15.6	16.7	17.2
Togo	16.3	15.8	18.0	16.7	17.6	18.0	17.7	18.2	18.6
Zimbabwe[3]	6.1	11.4	23.3	26.7	28.0	27.7	27.3	28.1	27.0
Sub-Saharan Africa	**23.4**	**19.8**	**20.7**	**23.3**	**21.9**	**20.2**	**19.4**	**17.8**	**18.1**
Median	16.4	16.2	17.6	17.7	18.3	18.5	18.2	18.7	19.1
Excluding Nigeria and South Africa	21.8	20.3	22.2	24.6	24.0	23.0	22.1	19.9	19.9
Oil-importing countries	**21.9**	**21.2**	**21.8**	**22.4**	**22.3**	**22.2**	**22.4**	**22.5**	**22.5**
Excluding South Africa	**16.5**	**16.1**	**16.9**	**17.7**	**18.1**	**18.1**	**18.4**	**18.3**	**18.4**
CFA franc zone	21.5	20.9	21.0	23.0	23.1	22.6	21.7	19.9	20.2
WAEMU	16.9	17.0	17.3	17.7	18.1	18.4	18.5	18.4	18.8
CEMAC	25.9	25.0	24.6	27.6	27.6	26.8	25.0	21.7	21.8
EAC-5	14.2	14.3	14.7	15.2	15.1	15.5	15.7	16.5	17.3
ECOWAS	20.0	12.6	13.4	17.7	15.1	12.5	12.1	9.9	10.3
SADC	26.7	25.7	26.9	28.4	3.7	27.8	27.2	25.9	25.9
SACU	27.6	27.6	27.0	27.4	27.8	28.3	29.0	29.6	29.6
COMESA (SSA members)	14.8	14.4	15.8	16.2	16.6	16.7	16.8	17.1	17.1
MDRI countries	14.8	14.2	15.4	16.5	16.7	16.9	17.0	16.7	17.0
Countries with conventional exchange rate pegs	22.6	22.0	21.7	23.5	24.0	23.5	22.8	21.2	21.0
Countries without conventional exchange rate pegs	23.6	19.5	20.5	23.2	21.6	19.7	18.8	17.3	17.6
Sub-Saharan Africa[4]	**23.4**	**19.8**	**20.7**	**23.3**	**22.0**	**20.2**	**19.4**	**17.8**	**18.1**

Sources and footnotes on page 80.

Table SA11. Government Expenditure
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**20.7**	**23.3**	**21.3**	**22.5**	**20.8**	**20.2**	**19.5**	**16.6**	**15.9**
Excluding Nigeria	**28.8**	**35.0**	**32.6**	**32.7**	**35.6**	**35.8**	**36.6**	**30.5**	**29.0**
Angola	41.1	41.9	40.0	40.2	41.3	40.8	41.1	30.9	29.0
Cameroon	15.9	17.5	17.7	20.5	19.5	21.9	23.5	22.4	22.1
Chad	14.9	24.2	24.4	22.4	23.9	22.9	22.1	17.6	18.3
Congo, Rep. of	26.4	24.7	21.4	26.1	36.2	48.7	50.1	50.6	45.5
Equatorial Guinea	20.0	58.6	40.0	34.0	43.8	39.3	40.4	36.1	31.1
Gabon	20.2	22.6	23.1	26.5	28.5	28.4	23.5	25.1	25.9
Nigeria	16.9	17.2	16.7	17.3	14.0	13.4	12.5	11.3	10.7
South Sudan	...	...	...	24.8	24.1	26.4	40.0	43.5	44.6
Middle-income countries[1]	**26.3**	**30.3**	**30.3**	**29.8**	**30.3**	**30.4**	**31.0**	**31.7**	**31.3**
Excluding South Africa	**25.1**	**27.0**	**27.1**	**27.0**	**28.0**	**27.9**	**29.1**	**29.1**	**28.2**
Botswana	37.6	51.4	41.8	35.6	35.1	32.1	35.4	34.8	32.2
Cabo Verde	31.7	32.8	38.7	33.3	34.7	33.6	30.3	29.6	29.2
Ghana	21.8	23.5	26.1	26.5	30.7	27.8	29.3	25.6	24.9
Kenya	21.6	23.1	24.2	23.6	24.2	25.5	27.0	28.5	28.7
Lesotho	49.8	67.4	56.2	62.8	61.5	62.9	59.9	63.4	61.2
Mauritius	23.7	26.3	25.1	24.6	23.3	24.9	23.9	27.4	25.5
Namibia	26.6	31.1	32.4	36.7	33.7	34.6	37.1	38.5	37.0
Senegal	25.3	26.5	27.1	28.8	28.5	27.9	29.2	28.4	28.4
Seychelles	38.3	32.1	34.6	34.7	36.1	35.6	31.9	33.1	30.9
South Africa	26.8	31.7	31.5	30.9	31.3	31.7	32.0	33.2	33.2
Swaziland	29.6	32.7	29.4	23.8	25.6	28.6	31.9	31.7	29.1
Zambia	21.0	17.8	18.1	19.3	22.0	24.9	25.4	25.7	23.3
Low-income and fragile countries	**19.2**	**20.1**	**21.3**	**21.4**	**20.8**	**21.3**	**21.5**	**22.0**	**21.8**
Low-income excluding fragile countries	**20.1**	**20.7**	**21.1**	**21.0**	**20.3**	**21.5**	**21.7**	**22.1**	**21.9**
Benin	21.2	25.0	20.4	21.6	21.0	22.4	21.8	23.8	24.8
Burkina Faso	23.3	24.2	22.8	22.1	25.5	27.8	23.3	24.8	25.6
Ethiopia[2]	21.5	17.1	18.5	18.2	16.6	17.8	17.7	18.8	18.4
Mali	23.8	25.9	23.0	25.0	18.5	23.5	23.8	26.5	26.0
Mozambique	22.7	29.4	30.0	31.9	31.4	34.9	43.2	36.9	34.3
Niger	21.3	23.9	20.6	19.4	22.3	27.8	31.9	31.6	29.0
Rwanda	22.7	23.9	25.9	26.5	25.9	27.6	27.7	25.7	24.0
Sierra Leone	16.4	17.5	20.2	21.6	20.4	15.6	17.9	18.7	18.6
Tanzania	18.0	20.2	20.2	19.1	19.8	19.4	18.0	19.1	19.9
Uganda	16.2	15.3	18.8	17.2	16.5	16.8	17.1	18.7	19.5
Fragile countries	**18.0**	**19.3**	**21.6**	**22.1**	**21.7**	**20.9**	**21.2**	**21.9**	**21.7**
Burundi	32.6	38.0	40.8	39.8	34.9	31.4	30.1	30.3	29.4
Central African Rep.	14.9	16.6	18.6	15.7	16.4	14.7	12.6	16.2	15.6
Comoros	21.9	23.0	22.1	22.1	25.3	25.2	24.4	25.3	27.4
Congo, Dem. Rep. of	10.6	13.9	17.7	15.7	15.4	12.2	13.3	14.2	15.5
Côte d'Ivoire	19.5	19.9	20.0	24.6	22.1	22.1	23.2	22.7	22.9
Eritrea	47.1	30.6	34.6	33.6	30.7	29.8	29.1	29.0	28.7
Gambia, The	20.6	23.1	23.6	26.0	29.7	27.1	32.4	30.0	27.4
Guinea	16.5	23.7	29.7	21.5	26.1	25.1	26.1	30.0	26.7
Guinea-Bissau	22.1	20.9	18.7	17.5	13.7	13.4	22.4	19.6	22.1
Liberia	15.8	33.2	32.5	29.0	30.1	32.8	32.3	40.9	39.4
Madagascar	20.9	14.1	14.0	14.1	13.4	14.9	14.7	16.7	15.4
Malawi	28.6	30.5	29.8	25.8	29.0	34.7	29.2	31.0	27.7
São Tomé & Príncipe	42.6	48.8	47.3	48.0	44.9	31.6	31.5	40.6	36.2
Togo	19.0	21.2	22.5	23.8	26.4	25.5	24.6	26.7	27.0
Zimbabwe[3]	9.6	14.0	22.6	27.9	28.6	29.7	28.7	29.3	27.5
Sub-Saharan Africa	**23.0**	**25.5**	**25.0**	**25.2**	**24.4**	**23.9**	**23.6**	**22.8**	**22.4**
Median	21.7	24.1	23.9	24.8	25.9	27.6	27.7	28.4	27.4
Excluding Nigeria and South Africa	23.8	26.3	26.3	26.8	27.5	27.7	28.2	26.2	25.4
Oil-importing countries	**24.3**	**26.9**	**27.6**	**27.3**	**27.2**	**27.2**	**27.4**	**27.9**	**27.5**
Excluding South Africa	**21.6**	**22.7**	**23.6**	**23.7**	**23.7**	**23.9**	**24.3**	**24.6**	**24.1**
CFA franc zone	20.3	24.9	23.1	24.8	26.3	27.5	27.3	26.2	25.7
WAEMU	21.8	23.2	22.2	24.2	23.2	24.6	24.9	25.3	25.4
CEMAC	18.7	26.7	24.0	25.3	29.2	30.3	29.7	27.2	26.0
EAC-5	19.6	20.9	22.3	21.4	21.6	22.1	22.3	23.7	24.2
ECOWAS	18.2	19.0	18.4	19.1	16.7	16.1	15.3	14.5	14.3
SADC	27.4	31.3	30.9	30.6	3.7	31.2	31.5	30.2	29.5
SACU	27.3	32.5	32.0	31.3	31.6	31.9	32.5	33.6	33.4
COMESA (SSA members)	20.1	19.7	21.5	21.0	20.9	21.6	21.8	22.8	22.4
MDRI countries	20.0	20.6	21.4	21.8	22.4	23.1	23.4	23.0	22.6
Countries with conventional exchange rate pegs	21.7	26.1	24.7	26.2	27.4	28.4	28.4	27.7	27.0
Countries without conventional exchange rate pegs	23.3	25.5	25.1	25.0	23.9	23.2	22.7	21.8	21.5
Sub-Saharan Africa[4]	**23.0**	**25.5**	**25.0**	**25.2**	**24.4**	**23.9**	**23.5**	**22.6**	**22.2**

Sources and footnotes on page 80.

Table SA12. Government Debt
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**21.7**	**19.1**	**15.0**	**14.4**	**14.4**	**16.1**	**17.5**	**21.7**	**22.6**
Excluding Nigeria	**34.2**	**37.3**	**28.2**	**22.9**	**23.1**	**28.9**	**34.6**	**47.4**	**45.3**
Angola	28.2	49.9	38.8	31.4	28.7	36.2	42.2	57.4	53.0
Cameroon	30.1	10.1	11.5	13.2	15.4	18.7	25.4	32.2	35.1
Chad	24.8	31.7	20.7	20.7	17.9	18.7	24.6	25.2	23.8
Congo, Rep. of	114.4	61.6	22.9	33.1	34.1	38.2	41.8	57.5	54.1
Equatorial Guinea	2.1	6.4	10.1	7.4	9.1	7.9	12.0	16.1	15.7
Gabon	41.2	23.1	20.5	17.9	19.9	29.2	28.9	38.7	41.7
Nigeria	16.0	9.6	9.6	10.2	10.4	10.5	10.5	11.9	13.7
South Sudan	...	...	...	0.0	4.5	12.4	20.3	49.4	51.7
Middle-income countries[1]	**31.2**	**31.5**	**34.9**	**37.2**	**39.9**	**43.0**	**46.9**	**49.8**	**51.0**
Excluding South Africa	**35.1**	**34.1**	**36.3**	**36.2**	**38.7**	**42.3**	**48.5**	**52.1**	**52.9**
Botswana	8.0	18.1	20.4	19.6	18.9	17.5	14.5	12.4	11.3
Cabo Verde	73.8	65.2	72.4	78.8	91.1	100.7	114.0	124.7	123.3
Ghana	39.3	36.1	46.3	42.6	49.1	56.2	69.0	72.8	70.5
Kenya	45.2	41.1	44.4	43.0	41.7	44.2	52.6	56.2	55.9
Lesotho	57.5	37.6	35.2	38.0	40.3	43.4	47.8	53.4	55.8
Mauritius	49.5	52.1	51.9	52.1	51.5	53.9	56.2	56.0	54.3
Namibia	23.0	15.9	15.5	23.3	24.1	23.8	24.7	25.8	26.1
Senegal	32.5	34.0	35.5	40.7	42.8	46.6	53.1	55.0	61.9
Seychelles	140.1	121.3	81.9	73.9	77.1	64.1	65.3	64.5	59.5
South Africa	29.8	30.3	34.4	37.6	40.5	43.3	46.0	48.4	49.8
Swaziland	14.6	10.3	13.5	13.9	14.4	14.8	13.6	17.6	21.5
Zambia	20.4	20.5	18.9	20.6	25.5	28.6	35.2	41.9	44.9
Low-income and fragile countries	**61.7**	**43.1**	**37.5**	**38.7**	**32.1**	**33.2**	**34.9**	**37.5**	**37.5**
Low-income excluding fragile countries	**41.3**	**26.2**	**28.4**	**28.3**	**27.0**	**29.5**	**32.4**	**35.3**	**36.2**
Benin	26.8	27.3	30.2	31.9	29.2	29.8	34.0	35.2	36.1
Burkina Faso	32.6	28.5	29.3	29.8	28.3	28.7	28.5	33.2	32.2
Ethiopia[2]	57.1	24.9	27.4	25.7	20.9	21.6	22.3	22.6	23.5
Mali	32.5	23.9	28.8	30.5	29.8	30.6	36.7	42.5	41.7
Mozambique	50.2	42.5	43.1	37.6	40.8	52.2	57.5	61.0	59.6
Niger	43.3	27.7	24.3	27.7	26.5	27.9	32.2	43.7	45.9
Rwanda	47.1	22.4	22.6	23.1	20.1	27.6	30.2	32.7	34.8
Sierra Leone	94.1	48.1	46.8	44.9	36.9	35.0	37.7	47.2	49.5
Tanzania	33.5	24.4	27.3	27.8	29.2	30.9	35.2	40.2	41.8
Uganda	34.8	19.2	22.9	23.6	24.2	27.6	31.4	35.0	37.9
Fragile countries	**89.5**	**69.3**	**50.9**	**53.8**	**40.2**	**39.1**	**39.0**	**41.2**	**39.7**
Burundi	134.4	25.7	40.3	36.9	37.1	32.8	30.5	33.7	29.6
Central African Rep.	86.6	32.5	32.3	32.9	33.1	52.3	47.6	42.1	37.1
Comoros	65.1	53.5	50.3	46.1	42.5	18.1	24.5	24.7	25.7
Congo, Dem. Rep. of	96.6	89.8	27.0	22.3	19.9	18.3	19.0	20.5	21.5
Côte d'Ivoire	76.6	64.2	63.0	93.3	44.8	39.9	36.6	34.7	33.4
Eritrea	145.2	144.6	143.8	133.0	127.6	130.4	132.1	137.6	136.9
Gambia, The	107.3	62.6	69.6	77.3	77.0	83.3	101.1	107.7	101.7
Guinea	117.9	89.3	99.6	77.8	35.4	39.5	41.1	40.9	36.3
Guinea-Bissau	197.4	159.2	67.5	49.5	52.1	53.2	54.3	52.2	47.6
Liberia	548.8	173.9	33.4	29.6	27.0	27.5	33.5	41.2	46.1
Madagascar	56.8	33.4	31.9	32.4	33.7	34.0	34.7	35.4	43.6
Malawi	62.9	35.6	29.6	30.6	43.9	59.4	62.2	62.5	57.8
São Tomé & Príncipe	207.2	68.0	75.3	71.7	78.3	71.4	69.0	91.2	90.1
Togo	97.4	73.4	50.0	44.5	46.1	50.1	58.7	61.1	60.2
Zimbabwe[3]	50.6	68.3	63.2	51.8	56.7	54.2	53.4	69.3	57.5
Sub-Saharan Africa	**32.7**	**28.9**	**27.1**	**27.6**	**27.2**	**28.6**	**30.4**	**34.5**	**35.6**
Median	49.8	34.8	32.9	32.4	33.7	34.0	36.6	42.1	44.9
Excluding Nigeria and South Africa	46.0	39.0	34.4	32.7	31.0	34.3	38.3	44.1	43.7
Oil-importing countries	**39.7**	**35.3**	**35.7**	**37.7**	**37.4**	**39.5**	**42.4**	**45.0**	**45.6**
Excluding South Africa	**50.9**	**39.7**	**37.0**	**37.7**	**34.7**	**36.8**	**40.0**	**42.8**	**43.1**
CFA franc zone	46.3	34.1	29.6	34.2	27.6	29.5	32.8	37.5	38.3
WAEMU	53.2	44.6	42.9	53.0	37.5	37.1	38.9	40.9	41.5
CEMAC	39.9	23.0	16.6	17.7	18.6	22.1	26.5	33.4	34.3
EAC-5	41.2	30.0	33.3	33.0	32.9	35.5	41.3	45.7	46.7
ECOWAS	28.2	20.0	18.4	19.9	17.5	18.1	18.3	20.6	22.6
SADC	32.8	35.7	33.9	34.6	3.7	39.0	42.0	46.8	46.7
SACU	28.8	29.4	33.2	36.4	39.0	41.4	43.6	45.9	47.2
COMESA (SSA members)	53.5	40.5	34.5	32.9	32.6	34.1	37.4	40.1	40.4
MDRI countries	51.4	34.0	29.1	29.3	30.1	33.1	36.7	39.9	41.0
Countries with conventional exchange rate pegs	45.5	34.3	30.2	34.9	29.5	31.3	34.5	39.5	40.4
Countries without conventional exchange rate pegs	30.3	27.6	26.3	26.7	26.8	28.2	29.7	33.2	34.5
Sub-Saharan Africa[4]	**32.7**	**28.9**	**27.1**	**28.0**	**27.4**	**28.8**	**30.5**	**34.3**	**35.4**

Sources and footnotes on page 80.

Table SA13. Broad Money
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**16.9**	**28.0**	**22.4**	**21.0**	**23.1**	**21.9**	**23.7**	**25.1**	**25.0**
Excluding Nigeria	**17.9**	**30.3**	**27.1**	**26.6**	**27.8**	**28.9**	**31.4**	**36.5**	**36.4**
Angola	21.9	42.5	35.3	37.6	35.0	36.7	40.3	46.7	45.6
Cameroon	19.4	22.3	23.4	24.2	22.7	23.3	24.0	24.3	24.4
Chad	9.0	11.1	11.5	12.1	12.4	13.3	15.7	16.2	16.9
Congo, Rep. of	16.0	22.5	23.8	28.0	33.0	34.8	39.2	50.9	48.6
Equatorial Guinea	7.3	15.4	15.8	13.2	18.4	21.4	20.3	22.3	21.6
Gabon	17.0	20.3	19.5	20.5	23.2	24.8	24.4	25.5	26.2
Nigeria	16.5	27.1	20.8	18.8	21.3	19.3	20.9	21.0	20.9
South Sudan	...	...	...	9.5	19.8	14.3	18.6	34.7	44.4
Middle-income countries[1]	**60.5**	**64.4**	**63.4**	**62.1**	**60.6**	**59.4**	**59.7**	**59.7**	**59.5**
Excluding South Africa	**36.2**	**39.1**	**40.5**	**40.0**	**39.8**	**40.0**	**41.4**	**42.0**	**42.2**
Botswana	46.7	52.7	50.1	42.4	45.9	44.5	44.4	44.5	44.7
Cabo Verde	75.1	77.5	80.1	78.5	82.1	90.1	95.8	95.0	99.0
Ghana	22.8	28.0	29.9	30.4	30.0	28.8	32.5	33.7	34.1
Kenya	35.7	36.5	40.1	40.6	40.5	42.2	43.5	44.3	45.1
Lesotho	32.6	39.1	39.9	36.2	36.1	39.4	37.4	35.8	36.3
Mauritius	98.5	99.5	100.4	98.9	100.5	99.8	103.0	103.2	98.7
Namibia	44.5	65.8	64.4	67.2	59.7	55.4	51.1	50.5	49.8
Senegal	34.7	36.8	39.7	40.0	39.9	42.3	45.0	45.5	45.2
Seychelles	84.6	55.5	62.1	57.6	48.6	54.9	60.5	60.5	60.5
South Africa	72.5	77.7	75.8	74.6	72.7	71.1	71.0	71.0	71.0
Swaziland	19.8	25.4	25.0	24.4	23.9	25.4	24.3	24.1	24.4
Zambia	18.0	17.8	18.4	18.9	20.0	21.4	21.4	21.7	22.5
Low-income and fragile countries	**22.0**	**23.2**	**25.3**	**25.9**	**25.2**	**25.8**	**27.0**	**27.8**	**28.6**
Low-income excluding fragile countries	**23.9**	**23.9**	**25.8**	**25.9**	**25.5**	**26.4**	**28.0**	**29.2**	**30.2**
Benin	33.2	41.7	44.5	45.8	44.7	49.1	54.9	60.6	66.3
Burkina Faso	23.9	28.0	29.7	29.7	30.5	31.9	35.1	37.8	40.3
Ethiopia[2]	34.6	24.8	27.0	27.6	25.3	27.1	28.4	29.2	30.5
Mali	28.8	28.1	27.7	29.6	32.2	33.6	33.1	34.7	35.8
Mozambique	17.2	24.6	24.7	27.5	31.3	34.2	39.0	40.6	41.0
Niger	15.6	18.5	20.3	20.2	22.4	23.9	28.0	26.5	26.1
Rwanda	16.7	17.5	18.5	20.3	20.1	21.1	22.7	23.7	23.9
Sierra Leone	16.7	22.6	23.5	23.2	22.0	19.8	22.0	24.8	24.6
Tanzania	20.9	23.3	25.1	24.7	23.8	22.7	23.4	24.2	24.7
Uganda	16.5	17.9	21.7	19.8	19.7	20.1	21.3	21.7	22.6
Fragile countries	**19.1**	**22.0**	**24.4**	**25.9**	**24.7**	**24.7**	**25.1**	**25.2**	**25.4**
Burundi	22.3	24.3	25.3	22.5	20.6	19.7	18.9	18.9	18.9
Central African Rep.	15.9	16.1	17.8	19.2	18.3	28.1	28.7	28.8	28.8
Comoros	25.6	30.4	34.1	34.9	38.3	36.9	38.4	38.4	38.4
Congo, Dem. Rep. of	6.6	10.2	10.5	10.7	11.6	11.5	11.9	11.6	11.6
Côte d'Ivoire	11.3	14.1	15.7	18.9	15.1	15.0	15.7	16.6	17.3
Eritrea	130.2	121.6	123.2	114.7	114.1	120.4	123.4	126.3	125.5
Gambia, The	39.0	48.7	49.9	55.7	54.5	56.6	59.2	59.2	61.4
Guinea	20.2	26.9	38.2	33.6	28.9	30.4	30.7	33.3	33.3
Guinea-Bissau	19.1	24.6	29.7	33.2	32.0	36.9	44.6	44.6	45.8
Liberia	19.5	31.4	35.5	42.0	36.3	34.8	34.6	34.7	34.7
Madagascar	23.6	24.5	24.7	26.1	25.7	25.2	25.4	23.2	23.5
Malawi	15.8	19.8	22.1	25.1	25.7	26.0	24.5	25.2	26.1
São Tomé & Príncipe	33.2	34.9	36.6	34.9	38.0	38.3	40.1	40.1	41.2
Togo	33.3	41.3	45.6	46.9	45.3	46.5	48.4	49.5	50.6
Zimbabwe[3]	10.7	16.9	24.7	28.3	29.6	28.8	31.6	33.1	34.1
Sub-Saharan Africa	**35.2**	**40.3**	**37.8**	**36.7**	**36.8**	**35.9**	**36.8**	**37.4**	**37.4**
Median	21.4	26.1	27.4	28.3	30.0	30.4	32.5	34.7	34.7
Excluding Nigeria and South Africa	25.1	29.3	30.0	30.0	29.9	30.5	32.1	33.8	34.2
Oil-importing countries	**46.8**	**49.1**	**49.0**	**48.4**	**46.9**	**46.2**	**46.5**	**46.6**	**46.6**
Excluding South Africa	**27.3**	**29.0**	**30.9**	**31.2**	**30.6**	**31.0**	**32.3**	**32.9**	**33.5**
CFA franc zone	18.8	22.6	23.9	25.2	25.4	26.9	28.4	30.3	30.9
WAEMU	22.6	26.0	27.9	29.7	28.7	29.9	31.9	33.2	34.3
CEMAC	14.8	19.0	19.6	20.4	21.9	23.5	24.5	26.9	26.8
EAC-5	25.6	26.7	29.6	29.2	28.8	29.2	30.2	30.9	31.6
ECOWAS	18.4	27.2	23.0	21.8	23.5	22.1	23.8	24.3	24.5
SADC	53.3	58.6	56.6	55.8	3.7	53.1	53.2	53.8	53.3
SACU	69.8	75.5	73.5	72.1	70.3	68.6	68.3	68.3	68.2
COMESA (SSA members)	29.7	28.5	30.7	30.9	30.5	31.3	32.2	32.5	33.0
MDRI countries	22.1	23.7	25.4	25.9	25.8	26.4	27.9	29.0	29.6
Countries with conventional exchange rate pegs	23.0	27.3	28.4	29.6	29.4	30.7	31.8	33.4	33.8
Countries without conventional exchange rate pegs	37.7	42.7	39.5	38.3	38.2	37.0	37.7	38.1	37.9
Sub-Saharan Africa[4]	**35.2**	**40.3**	**37.8**	**37.0**	**36.9**	**36.0**	**36.9**	**37.4**	**37.3**

Sources and footnotes on page 80.

Table SA14. Broad Money Growth
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**36.8**	**16.3**	**8.7**	**9.3**	**24.3**	**3.3**	**18.1**	**9.3**	**12.7**
Excluding Nigeria	**36.3**	**14.4**	**13.9**	**26.0**	**12.2**	**9.9**	**12.3**	**8.6**	**12.8**
Angola	64.6	21.5	5.3	37.1	4.9	14.1	16.5	11.5	16.9
Cameroon	10.5	6.9	11.3	10.6	1.4	10.8	10.5	8.6	7.7
Chad	23.6	-4.6	25.3	14.2	13.4	8.6	26.5	3.5	14.0
Congo, Rep. of	28.7	5.0	38.9	34.5	21.1	0.7	13.1	1.4	4.8
Equatorial Guinea	30.7	29.9	33.5	7.7	57.8	7.3	-14.1	-15.2	-1.5
Gabon	14.2	2.2	19.2	26.5	15.7	6.1	1.6	-5.2	5.3
Nigeria	37.2	17.1	6.9	4.0	29.1	1.0	20.4	9.6	12.7
South Sudan	...	...	...	...	33.9	-1.6	21.2	67.9	37.5
Middle-income countries[1]	**19.1**	**5.8**	**11.9**	**11.8**	**8.8**	**9.3**	**11.4**	**9.3**	**9.6**
Excluding South Africa	**19.7**	**13.8**	**21.6**	**18.2**	**15.2**	**15.1**	**18.4**	**14.3**	**13.3**
Botswana	17.4	-1.3	12.4	4.3	13.9	8.3	12.5	7.7	9.0
Cabo Verde	12.5	3.5	5.4	4.6	6.3	11.4	7.4	4.7	10.7
Ghana	31.3	26.0	34.4	32.2	24.3	19.1	36.8	22.5	16.7
Kenya	14.9	16.0	21.6	19.1	14.1	15.6	16.7	15.6	15.7
Lesotho	16.8	17.7	14.5	1.6	7.0	21.2	4.0	3.1	8.7
Mauritius	13.0	2.4	6.9	6.4	8.2	5.8	8.7	5.2	2.2
Namibia	30.4	7.0	7.5	13.8	5.3	8.6	7.7	9.8	9.7
Senegal	9.5	10.9	14.1	6.7	6.8	8.0	11.4	7.7	7.7
Seychelles	7.9	7.0	13.5	4.5	-0.6	23.7	17.5	5.7	6.6
South Africa	18.9	1.8	6.9	8.3	5.2	5.9	7.3	6.3	7.2
Swaziland	15.7	26.8	7.9	5.5	10.0	15.9	3.9	7.4	6.9
Zambia	25.6	7.7	29.9	21.7	17.9	20.8	12.6	13.4	15.2
Low-income and fragile countries	**18.5**	**26.1**	**25.8**	**20.8**	**15.6**	**14.1**	**17.2**	**15.0**	**14.9**
Low-income excluding fragile countries	**17.9**	**18.5**	**24.6**	**20.9**	**20.1**	**15.0**	**19.2**	**17.2**	**16.5**
Benin	15.6	6.2	11.6	9.1	9.0	17.3	16.7	17.1	17.6
Burkina Faso	6.9	18.2	19.1	13.8	15.9	10.6	12.4	14.5	15.1
Ethiopia[2]	18.0	19.9	24.4	36.5	32.9	24.2	26.9	24.2	22.0
Mali	5.6	16.0	9.0	15.3	15.2	7.4	7.1	13.2	11.6
Mozambique	22.2	34.6	17.6	23.9	25.6	21.2	27.4	17.1	15.4
Niger	15.7	18.3	22.0	6.2	31.2	10.1	25.7	0.3	5.6
Rwanda	23.6	13.0	16.9	26.7	14.0	15.5	19.0	15.8	13.2
Sierra Leone	24.5	31.3	28.5	22.6	22.5	16.7	16.6	10.5	12.2
Tanzania	22.4	17.7	25.4	18.2	12.5	10.0	15.6	16.2	14.7
Uganda	19.1	16.6	41.5	10.5	14.9	9.5	15.2	13.3	15.4
Fragile countries	**19.7**	**40.1**	**27.9**	**20.5**	**7.8**	**12.7**	**13.5**	**10.9**	**12.0**
Burundi	21.1	19.8	19.4	6.1	10.9	11.9	8.7	0.0	11.5
Central African Rep.	7.5	11.7	16.1	13.8	1.6	5.6	14.6	12.5	12.7
Comoros	8.1	13.3	19.4	9.6	16.0	2.8	8.1	2.9	5.9
Congo, Dem. Rep. of	52.5	50.4	30.8	23.2	21.1	18.1	14.2	6.7	8.5
Côte d'Ivoire	12.0	24.4	19.3	17.2	-7.6	9.7	13.8	17.4	13.9
Eritrea	11.2	15.7	15.6	14.6	17.9	17.5	14.8	12.9	12.2
Gambia, The	16.5	19.4	13.7	11.0	7.8	15.1	11.2	11.0	15.0
Guinea	35.5	25.9	74.4	9.4	1.0	14.1	12.2	15.7	13.3
Guinea-Bissau	25.7	4.4	29.6	39.1	-6.0	14.8	31.0	11.3	10.1
Liberia	33.6	30.6	28.0	41.3	-2.1	7.6	2.1	0.4	4.7
Madagascar	17.2	10.2	9.6	16.4	6.9	5.3	11.1	1.7	14.2
Malawi	27.6	23.9	33.9	35.7	22.9	35.1	20.7	27.8	22.2
São Tomé & Príncipe	29.8	8.2	25.1	10.4	20.3	13.9	16.8	15.1	11.4
Togo	15.7	16.2	16.3	15.9	8.9	10.3	9.8	10.5	10.6
Zimbabwe[3]	1.4	340.0	68.6	33.1	19.1	5.3	12.6	5.1	5.8
Sub-Saharan Africa	**25.5**	**14.3**	**13.4**	**12.6**	**16.7**	**7.8**	**15.6**	**10.6**	**12.2**
Median	17.7	16.1	19.2	14.0	13.9	10.6	13.1	10.5	11.6
Excluding Nigeria and South Africa	22.8	19.7	21.7	21.2	14.7	13.3	16.3	13.2	14.0
Oil-importing countries	**18.9**	**12.9**	**16.9**	**15.1**	**11.4**	**11.2**	**13.7**	**11.6**	**11.8**
Excluding South Africa	**18.9**	**21.4**	**24.2**	**19.8**	**15.5**	**14.5**	**17.7**	**14.7**	**14.3**
CFA franc zone	14.4	12.8	19.2	14.8	11.1	8.8	10.7	7.2	9.7
WAEMU	10.8	17.2	16.4	13.1	6.1	10.1	13.6	13.0	12.2
CEMAC	18.4	8.3	22.3	16.5	16.7	7.5	7.5	0.9	6.7
EAC-5	18.7	16.7	26.7	16.9	13.6	12.2	15.9	15.0	15.1
ECOWAS	31.3	17.9	10.9	7.5	24.4	4.0	20.3	11.1	12.9
SADC	23.8	11.2	11.6	14.7	3.7	9.4	10.7	8.7	10.2
SACU	19.0	2.2	7.2	8.2	5.7	6.3	7.5	6.4	7.4
COMESA (SSA members)	19.1	24.6	26.2	22.0	18.7	16.5	17.1	14.5	15.2
MDRI countries	20.8	18.1	24.5	21.3	17.5	14.8	18.7	14.7	14.4
Countries with conventional exchange rate pegs	15.0	12.9	18.0	14.2	10.8	9.3	10.3	7.4	9.6
Countries without conventional exchange rate pegs	27.9	13.3	12.3	12.2	17.5	7.6	16.4	10.9	12.5
Sub-Saharan Africa[4]	**25.5**	**14.3**	**13.4**	**12.6**	**16.6**	**7.8**	**15.6**	**10.3**	**12.1**

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

	2004-08	2009	2010	2011	2012	2013	2014
Oil-exporting countries	**44.1**	**24.8**	**0.4**	**7.6**	**10.5**	**11.7**	**16.1**
Excluding Nigeria	**37.8**	**32.7**	**19.4**	**21.6**	**21.8**	**18.2**	**11.1**
Angola	71.9	60.5	19.2	28.8	24.2	15.0	1.1
Cameroon	8.2	9.1	8.2	28.3	2.6	14.9	14.4
Chad	17.3	21.0	30.2	24.4	32.1	6.1	37.8
Congo, Rep. of	26.6	30.4	49.3	42.3	44.3	17.0	25.6
Equatorial Guinea	50.1	13.8	30.6	30.7	-13.6	34.3	18.4
Gabon	10.0	-7.9	1.9	42.0	24.1	23.6	-2.0
Nigeria	47.0	22.0	-5.6	2.6	6.6	9.4	18.0
South Sudan	...	...	...	-34.0	125.7	45.4	49.8
Middle-income countries[1]	**20.5**	**5.1**	**8.1**	**12.5**	**13.3**	**11.1**	**12.9**
Excluding South Africa	**26.3**	**9.2**	**17.4**	**25.5**	**20.6**	**19.0**	**22.8**
Botswana	21.2	10.3	11.1	21.8	21.9	13.4	14.0
Cabo Verde	20.4	11.8	9.0	13.3	-0.6	2.0	-0.9
Ghana	44.1	16.2	24.8	29.0	32.9	29.0	42.0
Kenya	19.9	13.9	20.3	30.9	10.4	20.1	22.2
Lesotho	29.2	20.7	26.9	25.1	42.2	10.3	6.0
Mauritius	15.4	0.5	12.5	12.3	17.4	14.2	-2.2
Namibia	16.9	10.0	11.1	9.3	16.9	14.5	16.5
Senegal	13.1	3.8	10.1	19.0	10.0	12.6	6.4
Seychelles	21.9	-9.2	23.6	5.2	8.5	4.5	25.2
South Africa	17.8	3.0	3.3	5.7	9.3	6.6	7.2
Swaziland	21.4	13.1	-0.5	26.0	-1.7	20.2	9.8
Zambia	43.2	-5.7	15.4	28.2	37.0	12.6	26.4
Low-income and fragile countries	**24.6**	**22.2**	**25.0**	**23.3**	**19.3**	**14.3**	**17.6**
Low-income excluding fragile countries	**26.2**	**15.2**	**23.5**	**24.7**	**21.3**	**12.3**	**17.3**
Benin	16.4	11.9	8.5	11.5	9.4	10.6	6.0
Burkina Faso	14.4	1.7	14.7	23.5	24.1	26.3	18.9
Ethiopia[2]	24.9	14.5	28.1	25.0	37.7	10.8	19.9
Mali	7.2	11.0	13.5	24.1	4.8	11.7	18.7
Mozambique	27.5	58.6	18.3	19.4	16.0	17.5	18.2
Niger	26.1	18.4	11.7	16.0	24.2	4.0	10.4
Rwanda	30.2	5.7	9.9	27.6	35.0	11.1	19.6
Sierra Leone	35.5	45.4	31.5	21.8	-6.9	11.9	5.4
Tanzania	36.6	9.6	20.0	27.2	18.2	15.3	19.4
Uganda	27.5	17.3	41.8	28.3	11.8	6.2	14.1
Fragile countries	**22.7**	**35.4**	**27.6**	**20.9**	**15.7**	**18.1**	**18.0**
Burundi	8.4	25.5	30.2	39.3	12.4	8.3	8.8
Central African Rep.	8.7	8.7	30.2	19.2	31.0	-18.1	5.4
Comoros	11.4	44.1	25.9	8.9	22.4	12.6	7.6
Congo, Dem. Rep. of	91.1	41.1	19.0	16.7	25.6	26.5	22.8
Côte d'Ivoire	9.3	10.8	8.7	0.4	12.2	22.9	21.7
Eritrea	6.3	1.2	1.6	14.6	-1.5	2.7	4.0
Gambia, The	13.2	10.3	14.8	8.8	4.3	20.5	-7.6
Guinea	19.2	15.8	43.8	93.4	-3.2	35.0	44.0
Guinea-Bissau	50.9	24.9	58.2	46.7	27.2	3.6	-8.2
Liberia	36.0	31.5	40.1	32.4	11.2	27.2	5.6
Madagascar	24.8	6.5	11.2	7.0	4.8	16.2	18.4
Malawi	41.2	39.5	52.4	20.5	25.4	14.4	20.0
São Tomé & Príncipe	53.5	39.3	35.8	15.4	11.0	-3.3	-1.4
Togo	8.4	21.3	21.6	41.1	18.9	13.5	11.6
Zimbabwe[3]	5.8	388.2	143.3	62.8	30.0	2.7	4.1
Sub-Saharan Africa	**29.9**	**16.6**	**8.2**	**12.6**	**13.4**	**12.1**	**15.3**
Median	21.3	13.8	19.1	23.5	16.9	13.4	14.1
Excluding Nigeria and South Africa	28.1	20.9	21.5	23.5	20.3	16.6	17.4
Oil-importing countries	**21.9**	**11.2**	**14.2**	**16.5**	**15.6**	**12.4**	**14.8**
Excluding South Africa	**25.2**	**17.3**	**22.1**	**24.1**	**19.8**	**16.0**	**19.4**
CFA franc zone	15.0	10.5	15.6	22.7	13.2	17.0	15.8
WAEMU	12.3	9.7	11.7	14.5	13.6	16.6	15.0
CEMAC	18.1	11.3	19.9	32.1	12.8	17.5	16.7
EAC-5	26.8	13.0	24.3	29.1	14.6	14.7	19.1
ECOWAS	39.0	19.6	-0.3	7.1	9.2	12.2	19.2
SADC	26.4	15.2	11.0	13.7	3.7	10.6	9.7
SACU	18.0	3.7	3.9	6.8	10.0	7.4	7.8
COMESA (SSA members)	26.9	20.7	26.6	25.8	21.5	13.8	18.3
MDRI countries	29.2	15.0	22.0	24.9	21.8	15.4	20.1
Countries with conventional exchange rate pegs	15.2	10.6	14.8	21.8	13.0	16.5	15.2
Countries without conventional exchange rate pegs	33.5	16.3	6.4	11.7	12.8	11.3	15.2
Sub-Saharan Africa[4]	**29.9**	**16.6**	**8.2**	**13.4**	**13.0**	**11.9**	**15.1**

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

	2004-08	2009	2010	2011	2012	2013	2014
Oil-exporting countries	**10.9**	**21.1**	**15.4**	**13.9**	**13.8**	**13.9**	**14.6**
Excluding Nigeria	**7.3**	**14.7**	**14.0**	**13.1**	**15.0**	**16.4**	**16.6**
Angola	8.5	21.5	20.2	20.2	22.3	23.5	22.4
Cameroon	9.5	10.8	11.0	13.1	12.5	13.3	14.2
Chad	2.6	3.9	4.2	4.8	5.8	6.1	7.8
Congo, Rep. of	2.6	4.8	5.5	6.8	9.6	11.7	14.6
Equatorial Guinea	3.1	8.6	8.6	8.7	6.6	9.7	12.6
Gabon	9.1	10.1	8.3	9.8	11.9	14.8	14.0
Nigeria	12.4	23.5	15.9	14.2	13.3	13.0	13.8
South Sudan	...	...	...	0.2	0.6	0.7	1.0
Middle-income countries[1]	**55.6**	**58.0**	**55.0**	**53.3**	**53.9**	**53.4**	**53.6**
Excluding South Africa	**23.5**	**26.2**	**26.9**	**28.2**	**29.0**	**30.4**	**31.7**
Botswana	22.1	28.9	27.2	26.8	31.1	31.6	32.0
Cabo Verde	41.4	58.0	61.9	65.7	64.3	64.6	63.4
Ghana	11.7	15.5	15.4	15.3	16.1	16.8	19.7
Kenya	23.5	25.8	28.0	31.2	30.1	32.6	35.2
Lesotho	9.4	12.5	14.1	15.8	20.9	20.8	20.1
Mauritius	75.1	82.7	87.9	91.4	100.8	108.1	100.3
Namibia	48.6	48.7	49.2	49.3	48.7	47.6	47.5
Senegal	22.5	24.6	25.6	28.8	29.5	32.7	33.2
Seychelles	25.1	20.1	24.4	22.8	21.0	20.1	23.6
South Africa	71.4	74.6	70.4	67.6	68.4	67.4	67.2
Swaziland	18.7	20.6	18.7	21.7	19.1	21.0	21.2
Zambia	8.8	10.0	9.2	9.9	12.2	12.2	13.6
Low-income and fragile countries	**10.6**	**12.5**	**13.5**	**14.4**	**14.5**	**14.8**	**15.6**
Low-income excluding fragile countries	**11.4**	**13.2**	**14.0**	**14.6**	**14.6**	**14.9**	**15.7**
Benin	17.8	22.5	23.3	24.5	24.0	24.9	25.3
Burkina Faso	16.7	17.0	17.3	18.8	20.7	24.8	28.7
Ethiopia[2]	11.5	9.3	10.4	9.8	9.3	8.9	8.8
Mali	17.9	17.6	18.1	20.8	20.6	22.4	24.4
Mozambique	12.6	24.2	24.5	26.2	27.6	29.2	30.9
Niger	8.4	12.2	12.3	13.3	14.0	14.0	14.5
Rwanda	10.0	11.9	11.9	13.1	15.3	15.6	16.8
Sierra Leone	4.0	7.2	7.7	7.5	5.4	4.7	4.7
Tanzania	10.0	13.2	13.7	14.4	14.7	14.6	15.6
Uganda	8.2	10.6	12.9	13.7	13.2	13.0	13.7
Fragile countries	**9.5**	**11.2**	**12.6**	**13.9**	**14.2**	**14.7**	**15.6**
Burundi	14.1	13.7	15.5	18.1	16.8	15.6	15.0
Central African Rep.	6.9	7.2	8.9	10.1	12.3	14.7	13.8
Comoros	8.9	14.8	17.5	17.8	20.6	21.7	22.5
Congo, Dem. Rep. of	2.1	4.4	4.2	4.0	4.5	4.8	5.4
Côte d'Ivoire	14.3	16.4	16.6	17.1	16.6	18.4	20.6
Eritrea	24.5	16.6	14.8	13.7	11.4	10.5	9.8
Gambia, The	12.6	15.4	15.9	17.4	16.5	17.9	15.6
Guinea	5.8	5.2	6.0	9.4	7.8	9.6	12.5
Guinea-Bissau	2.3	5.6	8.2	9.7	12.6	13.1	11.1
Liberia	6.9	12.0	14.8	16.4	16.1	18.3	18.8
Madagascar	10.1	11.3	11.5	11.2	10.8	11.7	12.6
Malawi	6.7	10.9	13.8	13.9	14.6	12.5	11.7
São Tomé & Príncipe	24.9	32.8	37.4	37.3	37.4	32.1	28.3
Togo	18.0	19.8	22.8	28.6	30.1	31.8	33.6
Zimbabwe[3]	3.8	8.4	17.6	24.7	28.3	26.8	27.2
Sub-Saharan Africa	**28.5**	**32.8**	**29.3**	**28.0**	**28.1**	**27.9**	**28.1**
Median	10.8	14.2	15.5	15.8	16.1	16.8	16.8
Excluding Nigeria and South Africa	13.5	16.8	17.4	17.9	18.7	19.6	20.3
Oil-importing countries	**39.6**	**41.0**	**39.4**	**38.5**	**38.7**	**38.3**	**38.3**
Excluding South Africa	**15.4**	**17.5**	**18.4**	**19.5**	**19.9**	**20.6**	**21.5**
CFA franc zone	11.5	13.5	13.8	15.3	15.6	17.6	19.2
WAEMU	16.3	18.3	18.9	20.7	20.9	23.0	24.7
CEMAC	6.3	8.4	8.3	9.6	10.0	11.7	13.0
EAC-5	15.0	17.2	18.8	20.5	20.1	21.0	22.4
ECOWAS	13.0	21.8	16.3	15.3	14.7	14.9	15.9
SADC	48.1	50.8	48.2	46.6	3.7	46.7	46.1
SACU	67.8	71.0	67.0	64.4	65.3	64.3	64.1
COMESA (SSA members)	15.5	16.6	18.1	19.2	19.5	19.9	20.3
MDRI countries	10.6	12.7	13.2	14.0	14.4	14.8	15.9
Countries with conventional exchange rate pegs	14.0	15.9	16.1	17.6	17.8	19.5	20.9
Countries without conventional exchange rate pegs	31.4	35.8	31.5	30.1	30.0	29.5	29.5
Sub-Saharan Africa[4]	**28.5**	**32.8**	**29.3**	**28.4**	**28.3**	**28.1**	**28.3**

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**40.3**	**31.9**	**32.3**	**36.8**	**32.7**	**29.7**	**24.4**	**17.9**	**18.8**
Excluding Nigeria	**64.5**	**51.9**	**57.9**	**62.6**	**58.2**	**53.5**	**47.9**	**38.7**	**40.0**
Angola	77.3	54.9	62.4	65.4	62.3	56.0	46.8	37.6	40.1
Cameroon	27.8	22.4	24.4	28.3	27.9	26.6	25.3	23.4	22.8
Chad	45.7	35.4	37.9	40.7	38.3	33.5	31.5	29.7	31.5
Congo, Rep. of	79.1	67.4	76.7	81.4	78.5	75.8	73.3	66.1	74.5
Equatorial Guinea	94.5	97.4	94.6	93.4	96.8	92.6	95.6	97.1	96.1
Gabon	59.1	52.0	54.3	58.4	67.1	63.0	56.8	44.8	43.8
Nigeria	29.0	21.6	21.7	23.8	21.0	19.2	14.7	10.0	10.4
South Sudan	...	...	...	72.4	9.3	27.3	36.7	18.3	16.5
Middle-income countries[1]	**30.6**	**28.7**	**29.8**	**32.0**	**31.7**	**32.4**	**32.7**	**33.3**	**32.5**
Excluding South Africa	**33.8**	**30.5**	**32.9**	**35.9**	**36.0**	**35.1**	**35.4**	**32.9**	**31.8**
Botswana	50.9	34.6	38.4	44.3	42.4	61.2	62.4	54.7	51.1
Cabo Verde	35.8	33.2	38.3	42.2	45.0	47.3	49.1	50.1	52.0
Ghana	23.8	29.3	29.3	36.9	40.1	33.9	39.5	34.3	34.1
Kenya	23.5	19.9	22.5	23.6	21.9	19.6	18.2	18.1	17.7
Lesotho	52.1	46.8	43.8	44.5	41.9	37.1	37.7	39.0	39.8
Mauritius	55.6	47.0	50.9	51.8	52.9	47.3	50.0	54.2	54.5
Namibia	38.5	42.8	41.7	41.4	42.0	43.1	41.6	41.4	41.3
Senegal	26.3	24.3	24.9	26.4	27.9	28.1	27.4	26.0	25.2
Seychelles	85.8	108.0	93.8	95.8	92.8	85.5	83.1	78.6	78.1
South Africa	29.6	27.9	28.6	30.4	29.7	31.0	31.3	33.6	33.0
Swaziland	59.9	49.4	45.4	44.4	44.1	45.8	49.8	43.6	43.0
Zambia	35.1	32.0	39.7	39.7	42.1	43.2	41.6	40.5	37.6
Low-income and fragile countries	**24.3**	**22.4**	**26.5**	**28.5**	**26.2**	**25.2**	**24.2**	**23.6**	**24.2**
Low-income excluding fragile countries	**17.7**	**16.6**	**19.4**	**21.6**	**20.9**	**20.3**	**18.4**	**18.0**	**18.4**
Benin	14.9	15.5	19.0	17.1	15.0	17.8	17.7	19.9	20.0
Burkina Faso	11.1	12.5	20.7	26.2	26.2	24.3	21.9	21.2	20.7
Ethiopia[2]	14.6	10.6	15.5	18.2	13.9	12.5	11.7	9.6	9.9
Mali	27.2	23.7	25.8	26.2	32.1	29.7	25.8	25.5	24.2
Mozambique	29.3	25.0	28.5	29.2	33.3	30.3	27.7	31.0	32.7
Niger	17.6	20.3	22.2	20.9	21.7	23.2	20.0	19.3	19.5
Rwanda	11.4	11.2	10.9	14.2	14.1	15.6	16.5	16.1	16.2
Sierra Leone	15.0	15.0	16.2	18.4	35.4	43.9	39.8	21.1	32.1
Tanzania	18.2	18.9	20.6	22.4	20.9	19.4	18.9	20.3	21.2
Uganda	14.6	18.1	17.2	20.4	20.0	20.8	17.1	20.3	19.9
Fragile countries	**33.2**	**31.5**	**36.9**	**38.5**	**34.6**	**33.1**	**33.5**	**32.8**	**33.6**
Burundi	7.8	6.7	8.9	9.5	8.7	8.2	9.4	9.2	8.9
Central African Rep.	13.2	10.7	11.8	13.5	12.5	14.3	12.3	12.2	12.6
Comoros	14.8	14.5	15.7	16.6	14.9	15.6	17.0	16.3	15.6
Congo, Dem. Rep. of	29.5	27.4	43.0	41.6	32.0	32.3	34.3	33.6	35.3
Côte d'Ivoire	48.5	50.7	50.5	53.8	48.4	41.8	42.3	42.5	42.0
Eritrea	5.8	4.5	4.8	14.4	19.1	17.3	18.9	14.8	13.4
Gambia, The	30.6	25.4	23.8	26.5	30.9	29.4	29.6	25.3	33.1
Guinea	33.4	28.5	29.7	32.2	30.6	25.6	23.1	23.2	23.7
Guinea-Bissau	16.0	18.9	20.1	25.6	15.4	18.6	18.5	22.3	22.3
Liberia	57.3	40.2	42.1	46.3	50.0	47.0	38.1	32.6	32.4
Madagascar	26.9	22.4	24.1	26.8	29.2	30.3	32.8	34.9	37.9
Malawi	17.1	17.0	19.6	17.6	23.5	29.9	28.8	28.9	33.3
São Tomé & Príncipe	11.2	9.8	11.7	11.6	12.7	16.1	26.2	28.7	28.5
Togo	37.3	37.8	40.9	44.9	44.7	45.7	44.8	45.0	45.6
Zimbabwe[3]	27.3	22.1	36.7	42.8	32.7	29.4	27.9	24.8	23.8
Sub-Saharan Africa	**33.0**	**28.7**	**30.3**	**33.5**	**31.1**	**29.8**	**27.1**	**24.3**	**24.7**
Median	28.4	24.6	27.1	29.2	30.9	29.9	29.6	28.7	32.1
Excluding Nigeria and South Africa	38.5	33.2	37.6	42.0	39.1	36.8	34.5	30.1	30.3
Oil-importing countries	**28.8**	**26.6**	**28.8**	**31.0**	**29.9**	**29.9**	**29.5**	**29.5**	**29.2**
Excluding South Africa	**28.1**	**25.5**	**29.1**	**31.5**	**30.1**	**29.1**	**28.4**	**27.0**	**27.0**
CFA franc zone	42.9	39.1	42.7	46.2	46.4	42.9	40.6	36.6	36.4
WAEMU	31.2	31.3	33.2	34.6	33.9	31.9	30.9	31.0	30.5
CEMAC	54.0	47.2	51.8	56.4	57.9	53.8	50.4	43.1	43.4
EAC-5	19.1	18.5	19.8	21.7	20.5	19.3	18.0	18.9	18.9
ECOWAS	29.1	24.1	24.0	26.5	24.4	22.3	18.6	14.8	15.5
SADC	35.5	32.3	34.7	37.1	3.7	36.6	35.2	34.4	34.6
SACU	31.0	28.9	29.6	31.5	30.8	32.7	33.1	34.8	34.1
COMESA (SSA members)	26.0	22.0	27.4	29.3	26.4	25.7	24.7	23.7	23.4
MDRI countries	24.9	22.8	27.3	30.2	29.3	28.2	27.2	25.3	25.8
Countries with conventional exchange rate pegs	42.6	39.0	42.0	45.3	45.4	42.4	40.4	36.6	36.4
Countries without conventional exchange rate pegs	31.3	26.9	28.4	31.0	29.2	27.9	24.9	22.6	22.9
Sub-Saharan Africa[4]	**33.0**	**28.7**	**30.3**	**33.0**	**31.3**	**29.8**	**27.0**	**24.4**	**24.7**

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**25.5**	**29.2**	**25.7**	**27.3**	**24.1**	**22.3**	**22.3**	**20.2**	**20.4**
Excluding Nigeria	**41.2**	**50.3**	**43.8**	**40.6**	**40.6**	**39.2**	**39.9**	**38.1**	**37.4**
Angola	48.3	55.4	42.9	42.2	39.7	39.6	39.9	38.1	38.0
Cameroon	28.4	26.9	27.5	30.9	30.8	29.4	29.0	27.4	26.8
Chad	44.4	47.9	49.1	48.0	49.0	43.2	44.1	44.1	43.2
Congo, Rep. of	52.6	69.2	58.6	55.6	54.3	59.6	64.6	66.1	68.3
Equatorial Guinea	44.3	69.6	74.8	48.6	55.7	50.0	54.6	55.9	49.7
Gabon	27.5	34.6	31.9	31.1	33.0	34.2	32.4	35.2	34.0
Nigeria	18.1	18.3	18.1	20.6	16.6	14.8	15.0	13.4	13.7
South Sudan	...	...	...	30.4	34.1	26.5	29.4	25.6	24.0
Middle-income countries[1]	**33.7**	**31.9**	**31.8**	**34.6**	**36.4**	**37.8**	**37.8**	**38.0**	**37.5**
Excluding South Africa	**42.0**	**42.2**	**43.1**	**46.9**	**48.2**	**46.5**	**46.2**	**44.4**	**42.9**
Botswana	40.3	51.6	49.7	51.1	58.0	61.1	55.4	55.5	52.4
Cabo Verde	64.5	63.4	66.8	73.8	68.1	63.2	67.2	69.0	66.9
Ghana	40.0	42.3	43.5	49.3	52.5	47.1	49.8	46.1	43.8
Kenya	31.9	30.5	33.8	39.0	35.5	33.6	33.7	33.0	32.2
Lesotho	117.6	123.3	110.5	104.7	107.3	97.7	95.4	91.8	89.6
Mauritius	64.2	57.5	63.0	65.6	66.0	61.6	62.4	65.5	66.0
Namibia	41.2	56.0	52.1	50.6	55.8	58.5	62.4	62.6	62.8
Senegal	45.1	41.2	40.3	44.7	48.9	48.8	46.3	43.0	41.5
Seychelles	95.4	117.1	108.0	111.4	109.4	92.9	98.2	88.7	87.4
South Africa	30.6	27.5	27.4	29.6	31.0	33.2	33.1	34.3	34.1
Swaziland	69.2	62.9	57.8	56.7	54.4	52.4	55.2	50.8	49.0
Zambia	30.4	26.7	27.6	31.8	37.1	41.0	38.5	37.7	35.4
Low-income and fragile countries	**34.6**	**35.2**	**38.8**	**41.7**	**40.9**	**38.8**	**38.1**	**38.0**	**38.1**
Low-income excluding fragile countries	**30.2**	**30.0**	**33.5**	**38.4**	**38.1**	**36.2**	**34.8**	**35.5**	**35.4**
Benin	27.2	29.1	31.0	27.9	27.8	33.3	30.4	33.7	34.1
Burkina Faso	25.9	23.1	28.0	33.0	34.7	34.2	30.9	32.4	31.3
Ethiopia[2]	36.3	27.9	33.1	36.5	32.8	28.9	29.5	31.0	28.3
Mali	36.1	31.3	39.7	36.0	37.9	47.6	46.4	40.5	39.2
Mozambique	39.1	40.6	44.6	57.4	81.2	76.1	68.0	75.6	80.3
Niger	31.2	46.7	49.0	47.8	39.0	40.0	39.1	41.7	46.2
Rwanda	26.3	29.1	29.0	34.6	34.4	32.5	33.7	31.3	29.7
Sierra Leone	24.4	30.5	43.9	84.7	60.1	47.1	63.8	40.4	49.0
Tanzania	26.8	28.4	29.5	34.2	33.0	30.2	28.4	28.0	27.7
Uganda	24.2	28.1	30.6	35.3	31.5	30.3	28.3	32.3	32.3
Fragile countries	**40.4**	**43.2**	**46.5**	**46.6**	**45.4**	**43.1**	**43.5**	**42.0**	**42.6**
Burundi	34.3	28.2	43.4	41.0	43.4	39.3	37.4	31.3	28.7
Central African Rep.	22.1	23.2	26.5	24.4	23.9	24.7	37.1	33.5	33.7
Comoros	39.5	47.9	49.9	50.3	54.3	52.0	50.5	53.5	52.5
Congo, Dem. Rep. of	34.9	36.9	51.9	48.0	38.6	38.0	41.8	38.2	37.8
Côte d'Ivoire	41.2	39.8	43.2	37.3	44.2	38.8	39.4	40.0	40.2
Eritrea	41.6	23.4	23.3	23.2	22.8	22.1	24.5	21.7	20.5
Gambia, The	45.5	41.9	42.7	41.1	44.3	41.1	49.1	47.5	48.3
Guinea	36.0	30.8	35.3	50.9	57.6	46.7	45.6	40.4	58.9
Guinea-Bissau	27.8	35.3	35.3	30.7	25.5	26.3	28.2	32.6	33.3
Liberia	191.2	135.9	134.7	132.1	119.8	108.3	113.1	116.4	101.5
Madagascar	43.4	46.0	37.5	38.0	38.7	38.7	37.1	38.8	43.2
Malawi	35.0	31.7	34.9	28.0	37.9	42.6	39.3	39.5	44.8
São Tomé & Príncipe	55.2	51.4	57.8	58.0	52.5	63.4	71.4	67.9	71.7
Togo	54.7	53.4	57.6	66.4	58.6	65.8	64.1	63.9	63.8
Zimbabwe[3]	36.5	76.1	61.5	78.4	62.9	59.3	53.9	52.4	48.6
Sub-Saharan Africa	**30.7**	**31.5**	**30.5**	**32.6**	**31.7**	**30.8**	**30.4**	**30.0**	**30.2**
Median	37.8	40.2	43.1	42.2	43.4	41.1	41.8	40.4	43.2
Excluding Nigeria and South Africa	38.6	41.5	41.5	42.8	42.8	41.0	40.7	39.7	39.2
Oil-importing countries	**33.9**	**33.0**	**33.9**	**36.7**	**37.8**	**38.2**	**37.9**	**38.0**	**37.7**
Excluding South Africa	**37.6**	**37.8**	**40.5**	**43.9**	**43.8**	**41.9**	**41.1**	**40.3**	**39.9**
CFA franc zone	37.1	40.3	42.3	39.8	41.8	41.0	40.9	40.1	39.6
WAEMU	38.0	37.1	40.2	39.1	41.4	41.7	40.5	40.2	40.1
CEMAC	36.2	43.7	44.3	40.4	42.1	40.4	41.3	40.1	38.9
EAC-5	28.4	29.3	31.7	36.5	34.0	31.9	31.1	31.1	30.6
ECOWAS	24.3	24.3	23.9	26.5	23.6	21.7	21.3	20.0	20.9
SADC	34.5	35.8	33.7	35.9	3.7	38.4	38.2	38.5	38.5
SACU	32.1	30.0	29.6	31.6	33.4	35.7	35.6	36.6	36.4
COMESA (SSA members)	36.3	35.7	38.8	42.1	39.0	37.5	37.1	36.6	35.4
MDRI countries	34.7	34.6	37.5	40.9	40.9	39.7	39.1	38.2	37.8
Countries with conventional exchange rate pegs	39.5	42.7	44.3	41.9	43.8	42.9	43.1	42.4	41.7
Countries without conventional exchange rate pegs	29.0	29.1	28.0	30.8	29.6	28.7	28.2	28.0	28.3
Sub-Saharan Africa[4]	**30.7**	**31.5**	**30.5**	**32.7**	**31.7**	**30.8**	**30.4**	**30.0**	**30.2**

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**23.0**	**13.4**	**15.3**	**18.3**	**16.5**	**14.3**	**9.0**	**3.8**	**4.3**
Excluding Nigeria	**38.9**	**21.1**	**31.7**	**38.3**	**32.7**	**28.2**	**21.8**	**13.8**	**15.0**
Angola	50.4	24.1	41.1	45.2	41.1	33.7	23.6	15.7	17.5
Cameroon	1.9	-1.4	-0.9	-2.2	-1.0	-0.6	-1.7	-2.2	-2.2
Chad	24.5	4.8	8.0	10.9	7.7	6.6	2.8	0.9	3.0
Congo, Rep. of	49.1	25.7	42.3	47.9	43.5	34.7	27.1	19.7	27.2
Equatorial Guinea	62.7	51.3	39.7	59.6	58.0	58.3	59.8	60.1	63.2
Gabon	41.7	29.8	33.1	37.9	45.4	39.7	34.7	21.3	20.5
Nigeria	15.6	9.4	8.4	8.3	9.1	8.1	3.7	0.0	0.0
South Sudan	...	...	...	49.1	-19.6	4.4	13.7	-2.9	-3.4
Middle-income countries[1]	**-3.0**	**-2.6**	**-1.2**	**-1.9**	**-4.7**	**-5.2**	**-4.9**	**-5.0**	**-5.2**
Excluding South Africa	**-9.3**	**-11.4**	**-9.9**	**-10.7**	**-13.0**	**-11.3**	**-10.6**	**-12.1**	**-11.7**
Botswana	9.5	-12.8	-7.9	-4.6	-13.1	-2.3	3.3	-5.9	-6.5
Cabo Verde	-39.0	-39.6	-40.9	-45.1	-36.6	-33.8	-32.9	-34.6	-32.5
Ghana	-14.9	-8.5	-9.2	-7.7	-10.0	-8.0	-3.6	-8.0	-5.8
Kenya	-12.1	-13.4	-15.6	-20.0	-18.5	-18.6	-18.8	-18.0	-17.5
Lesotho	-43.1	-54.8	-48.4	-43.0	-49.3	-46.2	-44.1	-41.2	-39.1
Mauritius	-15.2	-17.5	-19.5	-20.9	-21.5	-19.0	-17.9	-16.7	-17.4
Namibia	-3.3	-14.1	-9.9	-8.8	-16.5	-15.3	-20.1	-20.3	-20.6
Senegal	-18.4	-15.8	-14.9	-17.5	-20.2	-19.9	-18.3	-15.9	-15.5
Seychelles	-29.8	-37.6	-39.3	-41.1	-41.4	-31.6	-38.1	-35.6	-34.0
South Africa	-0.6	1.1	2.2	1.7	-1.0	-1.9	-1.8	-0.8	-1.2
Swaziland	-3.6	-3.7	-3.3	-0.8	1.6	3.7	4.8	2.7	4.1
Zambia	4.7	6.3	13.7	9.7	6.4	6.1	6.1	4.9	3.8
Low-income and fragile countries	**-6.3**	**-8.8**	**-7.8**	**-8.4**	**-9.8**	**-9.3**	**-9.3**	**-10.1**	**-9.3**
Low-income excluding fragile countries	**-10.5**	**-11.0**	**-11.4**	**-13.1**	**-13.2**	**-12.6**	**-12.9**	**-14.7**	**-14.0**
Benin	-11.7	-10.7	-10.9	-10.6	-12.7	-13.3	-10.2	-11.3	-11.9
Burkina Faso	-9.5	-5.7	-1.5	0.0	-1.4	-3.3	-1.9	-3.6	-4.0
Ethiopia[2]	-20.6	-15.8	-16.3	-16.6	-16.9	-17.6	-19.1	-21.4	-18.8
Mali	-3.0	-2.3	-7.0	-3.1	1.1	-2.3	-4.8	-1.2	-1.7
Mozambique	-5.6	-11.5	-11.3	-17.0	-27.2	-27.9	-24.2	-28.9	-31.3
Niger	-6.9	-14.7	-14.2	-14.4	-6.6	-5.7	-9.7	-13.2	-13.3
Rwanda	-10.3	-14.4	-13.8	-17.4	-19.1	-15.3	-16.1	-14.6	-13.5
Sierra Leone	-7.5	-14.3	-20.2	-57.1	-16.3	7.4	0.1	-15.7	-11.6
Tanzania	-9.8	-10.0	-9.5	-12.2	-13.0	-12.2	-11.2	-10.0	-9.1
Uganda	-8.0	-8.1	-10.9	-11.7	-10.0	-8.4	-8.5	-9.1	-9.5
Fragile countries	**-0.7**	**-5.3**	**-2.5**	**-1.6**	**-4.4**	**-4.1**	**-3.4**	**-2.6**	**-1.5**
Burundi	-16.4	-14.5	-30.2	-27.3	-29.9	-27.6	-25.6	-19.3	-17.8
Central African Rep.	-4.0	-7.8	-8.8	-5.7	-6.2	-7.3	-18.8	-15.8	-16.1
Comoros	-22.9	-28.2	-28.8	-28.6	-33.4	-31.8	-28.7	-31.0	-31.8
Congo, Dem. Rep. of	0.2	-3.2	2.1	2.3	0.6	0.9	0.3	2.4	4.5
Côte d'Ivoire	15.0	17.5	14.5	23.5	11.3	9.6	10.9	10.5	10.7
Eritrea	-33.9	-19.9	-19.6	-10.3	-4.6	-5.5	-6.1	-7.3	-7.3
Gambia, The	-21.3	-22.4	-22.8	-21.2	-22.0	-19.1	-25.7	-23.4	-22.1
Guinea	3.9	3.2	1.1	-8.7	-10.6	-10.8	-14.0	-8.1	-11.8
Guinea-Bissau	-6.0	-9.8	-8.3	-0.2	-5.1	-2.9	-5.0	-4.9	-5.5
Liberia	-33.1	-30.8	-30.1	-33.3	-26.9	-23.5	-29.5	-41.7	-33.0
Madagascar	-13.4	-19.5	-12.3	-10.1	-11.1	-7.7	-5.1	-3.1	-4.0
Malawi	-12.8	-10.3	-10.7	-7.9	-11.1	-8.7	-7.3	-7.3	-7.0
São Tomé & Príncipe	-35.4	-37.3	-40.9	-41.3	-37.2	-38.3	-37.7	-31.4	-39.0
Togo	-14.2	-13.0	-14.1	-22.4	-14.2	-20.5	-19.7	-19.3	-18.6
Zimbabwe[3]	-7.3	-47.1	-20.3	-28.7	-23.3	-23.1	-19.7	-21.1	-18.3
Sub-Saharan Africa	**6.1**	**2.4**	**4.5**	**5.7**	**3.8**	**3.1**	**0.9**	**-2.1**	**-2.0**
Median	-7.7	-11.1	-10.8	-10.1	-11.1	-8.0	-8.5	-9.1	-9.5
Excluding Nigeria and South Africa	5.7	-0.7	3.4	6.7	2.9	2.1	0.1	-4.2	-3.7
Oil-importing countries	**-4.0**	**-4.7**	**-3.2**	**-3.8**	**-6.4**	**-6.6**	**-6.6**	**-7.0**	**-6.8**
Excluding South Africa	**-7.5**	**-9.8**	**-8.6**	**-9.4**	**-11.1**	**-10.1**	**-9.8**	**-10.8**	**-10.2**
CFA franc zone	13.9	7.9	9.6	14.8	13.3	10.5	8.5	4.8	5.2
WAEMU	-1.8	-0.7	-1.6	0.7	-2.3	-3.4	-2.7	-2.4	-2.4
CEMAC	28.9	17.0	20.3	27.2	27.5	24.1	19.8	13.4	14.4
EAC-5	-10.5	-11.4	-12.9	-15.8	-15.3	-14.6	-14.4	-13.7	-13.3
ECOWAS	9.5	5.6	5.2	5.2	5.6	5.0	2.0	-1.3	-1.1
SADC	3.8	1.2	5.2	5.8	3.7	2.4	1.0	-0.7	-0.7
SACU	-0.6	-0.1	1.2	0.9	-2.1	-2.6	-2.4	-1.9	-2.3
COMESA (SSA members)	-9.7	-12.5	-10.0	-11.5	-11.8	-11.3	-11.6	-11.9	-11.1
MDRI countries	-6.3	-7.6	-5.6	-6.1	-7.5	-7.3	-7.5	-9.1	-8.3
Countries with conventional exchange rate pegs	10.4	4.6	6.2	11.1	9.3	7.2	5.3	1.8	2.2
Countries without conventional exchange rate pegs	5.5	2.5	4.5	4.6	3.4	2.7	0.3	-2.5	-2.4
Sub-Saharan Africa[4]	**6.1**	**2.4**	**4.5**	**5.2**	**4.0**	**3.1**	**0.8**	**-2.1**	**-2.0**

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**12.9**	**0.4**	**3.4**	**4.8**	**4.7**	**3.4**	**-0.5**	**-3.4**	**-2.5**
Excluding Nigeria	**9.6**	**-8.8**	**2.4**	**8.5**	**5.4**	**2.9**	**-2.4**	**-7.6**	**-5.9**
Angola	14.7	-10.0	9.1	12.6	12.0	6.7	-1.5	-7.6	-5.6
Cameroon	-1.0	-3.1	-2.8	-2.7	-3.6	-3.8	-4.6	-5.0	-5.2
Chad	0.5	-9.2	-9.0	-5.6	-8.7	-9.2	-8.9	-10.4	-9.3
Congo, Rep. of	-2.9	-14.1	7.5	4.7	-2.4	-4.5	-9.4	-15.2	-14.6
Equatorial Guinea	16.5	-23.1	-34.4	-0.1	-2.2	-4.0	-10.0	-8.7	-3.1
Gabon	17.4	4.7	8.7	12.8	15.9	12.3	8.3	-7.0	-4.2
Nigeria	14.4	5.1	3.9	3.0	4.4	3.6	0.2	-1.8	-1.2
South Sudan	...	...	...	18.4	-19.6	-1.2	2.7	-4.8	-3.6
Middle-income countries[2]	**-3.7**	**-3.3**	**-2.5**	**-3.4**	**-5.5**	**-6.0**	**-5.7**	**-5.2**	**-5.5**
Excluding South Africa	**-2.3**	**-4.5**	**-5.0**	**-6.3**	**-6.6**	**-6.4**	**-6.1**	**-6.8**	**-7.2**
Botswana	10.7	-11.0	-6.4	-0.6	-3.4	8.8	16.1	2.8	0.1
Cabo Verde	-9.5	-14.6	-12.4	-16.3	-12.6	-4.9	-7.6	-9.7	-6.6
Ghana	-8.1	-5.4	-8.6	-9.0	-11.7	-11.9	-9.6	-8.3	-7.2
Kenya	-2.5	-4.6	-5.9	-9.1	-8.4	-8.9	-10.4	-9.6	-9.2
Lesotho	17.3	3.9	-10.0	-14.7	-9.8	-10.3	-7.9	-6.3	-13.9
Mauritius	-6.3	-7.4	-10.3	-13.8	-7.3	-6.3	-5.6	-4.8	-4.8
Namibia	7.3	-1.5	-3.5	-3.0	-5.6	-3.9	-9.9	-12.1	-16.3
Senegal	-9.9	-6.8	-4.4	-8.2	-10.9	-10.4	-8.8	-6.1	-5.2
Seychelles	-13.8	-14.8	-19.1	-21.6	-19.9	-11.5	-21.0	-15.2	-14.7
South Africa	-4.3	-2.7	-1.5	-2.2	-5.0	-5.8	-5.4	-4.3	-4.5
Swaziland	-3.2	-11.6	-8.6	-6.8	3.1	5.2	2.9	1.1	-2.8
Zambia	-1.1	6.0	7.5	4.6	5.5	-0.6	-1.4	-1.4	-2.6
Low-income and fragile countries	**-5.7**	**-8.2**	**-7.3**	**-8.4**	**-10.5**	**-10.4**	**-10.1**	**-11.1**	**-11.3**
Low-income excluding fragile countries	**-7.3**	**-8.2**	**-7.5**	**-10.4**	**-11.8**	**-10.7**	**-11.1**	**-12.9**	**-12.5**
Benin	-7.3	-8.9	-8.7	-7.8	-8.4	-10.4	-8.0	-9.3	-9.1
Burkina Faso	-10.3	-4.5	-2.0	-1.5	-4.5	-6.6	-6.1	-7.9	-7.8
Ethiopia[3]	-8.4	-6.7	-1.4	-2.5	-6.9	-5.9	-8.0	-12.5	-9.3
Mali	-8.0	-7.3	-12.6	-6.1	-2.6	-3.4	-7.3	-3.3	-4.2
Mozambique	-10.7	-11.0	-10.6	-23.1	-42.3	-40.0	-34.7	-41.0	-45.3
Niger	-9.2	-24.4	-19.8	-22.3	-14.6	-15.3	-15.2	-19.1	-23.4
Rwanda	-3.3	-7.1	-7.3	-7.5	-11.4	-7.4	-11.9	-10.6	-9.6
Sierra Leone	-6.9	-13.3	-22.7	-65.3	-22.0	-10.4	-9.7	-11.4	-14.5
Tanzania	-6.5	-7.6	-7.7	-10.8	-11.7	-10.3	-9.3	-8.2	-7.1
Uganda	-4.2	-6.4	-9.1	-10.8	-8.0	-7.2	-9.7	-10.5	-11.3
Fragile countries	**-3.6**	**-8.2**	**-6.9**	**-5.5**	**-8.5**	**-9.8**	**-8.4**	**-8.1**	**-9.3**
Burundi	-7.8	1.7	-12.2	-13.6	-17.3	-18.4	-17.6	-11.3	-9.7
Central African Rep.	-5.5	-9.1	-10.2	-7.6	-4.6	-3.0	-6.1	-11.8	-11.2
Comoros	-12.0	-15.4	-5.8	-14.0	-17.6	-16.2	-11.5	-15.7	-17.0
Congo, Dem. Rep. of	-0.2	-6.1	-10.5	-5.2	-6.2	-10.6	-9.2	-7.6	-8.0
Côte d'Ivoire	1.1	6.6	1.9	10.5	-1.2	-1.4	-0.7	-1.0	-1.9
Eritrea	-3.1	-7.6	-5.6	0.6	2.3	0.3	-0.9	-2.2	-3.0
Gambia, The	-8.5	-12.5	-16.3	-12.3	-7.9	-10.2	-13.1	-13.5	-10.2
Guinea	-5.4	-7.9	-9.7	-18.8	-28.7	-24.0	-24.2	-16.7	-36.8
Guinea-Bissau	-1.2	-5.4	-8.7	-1.5	-8.8	-4.4	-1.2	-3.5	-4.6
Liberia	-14.0	-23.2	-32.0	-27.5	-21.4	-28.2	-28.7	-41.6	-37.1
Madagascar	-12.0	-21.1	-9.7	-6.9	-6.7	-5.6	-0.2	-1.3	-2.2
Malawi	-6.3	-3.9	-1.0	-4.1	-2.4	-1.2	-3.6	-2.6	-2.5
São Tomé & Príncipe	-27.1	-23.2	-21.7	-25.5	-21.3	-23.4	-27.7	-12.4	-15.2
Togo	-8.8	-5.6	-6.3	-8.0	-7.5	-13.0	-12.9	-12.2	-11.5
Zimbabwe[4]	-8.5	-47.1	-16.0	-30.9	-24.6	-25.4	-22.0	-22.9	-21.8
Sub-Saharan Africa	**2.1**	**-2.8**	**-0.9**	**-0.7**	**-1.9**	**-2.4**	**-4.1**	**-5.7**	**-5.5**
Median	-5.9	-7.5	-8.6	-7.5	-7.9	-6.6	-8.8	-8.7	-8.0
Excluding Nigeria and South Africa	-0.3	-7.4	-3.8	-2.1	-4.4	-5.1	-6.7	-9.0	-8.8
Oil-importing countries	**-4.3**	**-4.9**	**-3.9**	**-4.8**	**-7.1**	**-7.5**	**-7.3**	**-7.5**	**-7.8**
Excluding South Africa	**-4.3**	**-6.8**	**-6.3**	**-7.5**	**-9.0**	**-8.8**	**-8.6**	**-9.5**	**-9.8**
CFA franc zone	0.2	-5.3	-5.1	-0.2	-2.8	-4.0	-5.2	-6.8	-6.5
WAEMU	-5.4	-3.4	-4.8	-2.1	-5.7	-6.4	-6.0	-5.8	-6.3
CEMAC	5.4	-7.3	-5.4	1.5	-0.1	-1.6	-4.3	-8.1	-6.7
EAC-5	-4.3	-5.9	-7.3	-10.0	-9.7	-9.2	-10.1	-9.4	-9.0
ECOWAS	8.5	2.3	1.3	0.7	1.3	0.7	-1.5	-3.1	-3.0
SADC	-1.8	-5.5	-1.3	-1.5	3.7	-4.6	-5.6	-6.6	-6.8
SACU	-3.3	-3.0	-1.8	-2.2	-4.9	-5.1	-4.7	-4.3	-4.8
COMESA (SSA members)	-4.5	-7.7	-5.6	-7.2	-6.8	-7.7	-8.4	-9.2	-8.6
MDRI countries	-6.0	-6.9	-5.7	-7.0	-8.7	-9.2	-9.2	-10.0	-9.8
Countries with conventional exchange rate pegs	0.5	-5.3	-5.2	-0.9	-3.0	-3.9	-5.3	-7.0	-7.1
Countries without conventional exchange rate pegs	2.5	-2.0	0.0	-0.6	-1.3	-2.0	-3.8	-5.3	-5.1
Sub-Saharan Africa[5]	**2.1**	**-2.8**	**-0.9**	**-0.9**	**-1.7**	**-2.4**	**-4.1**	**-5.7**	**-5.5**

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**2.5**	**2.8**	**0.6**	**1.1**	**-0.1**	**-0.7**	**-0.1**	**1.1**	**1.3**
Excluding Nigeria	**3.4**	**3.2**	**-1.2**	**-0.6**	**-3.0**	**-4.3**	**-1.6**	**2.7**	**3.2**
Angola	-0.6	2.9	-5.5	-4.9	-8.4	-10.6	-5.8	1.8	2.0
Cameroon	1.8	2.1	1.8	1.8	3.1	2.4	2.4	1.8	1.6
Chad	3.5	2.7	2.0	1.5	3.4	2.8	-3.4	4.7	4.3
Congo, Rep. of	22.8	20.2	18.2	21.1	16.4	18.7	19.6	15.3	20.4
Equatorial Guinea	8.9	-9.5	-5.4	-2.7	-5.5	-4.3	-2.1	-3.2	-3.1
Gabon	4.2	5.2	3.5	4.0	5.1	5.8	5.6	7.6	7.6
Nigeria	2.2	2.6	1.4	1.9	1.2	0.8	0.5	0.4	0.6
South Sudan	...	...	...	-0.4	-0.5	-3.7	-0.2	0.6	2.2
Middle-income countries[1]	**1.5**	**2.6**	**4.0**	**1.8**	**2.6**	**1.8**	**1.5**	**1.6**	**1.8**
Excluding South Africa	**2.9**	**3.7**	**11.7**	**3.7**	**7.5**	**4.5**	**4.8**	**4.8**	**5.0**
Botswana	4.2	1.2	1.1	7.0	0.9	5.3	4.6	4.3	3.9
Cabo Verde	9.4	7.0	6.7	5.6	3.8	3.5	4.0	4.4	4.7
Ghana	2.9	11.1	7.9	8.1	7.9	6.7	8.7	8.2	8.3
Kenya	0.5	0.2	0.4	0.8	0.5	0.9	1.7	2.6	3.1
Lesotho	-2.7	-4.6	-1.7	-2.4	-2.3	-2.2	-2.0	-2.6	-2.5
Mauritius	1.6	2.5	127.6	-9.0	49.5	10.1	4.4	5.4	5.8
Namibia	6.3	5.7	7.0	7.0	8.8	6.3	4.4	6.0	8.4
Senegal	1.6	2.0	2.0	2.0	1.5	1.9	2.0	2.1	2.1
Seychelles	11.8	19.7	16.4	13.2	38.3	10.0	14.1	10.8	9.6
South Africa	1.1	2.1	1.0	1.1	0.4	0.5	-0.4	-0.3	-0.2
Swaziland	1.9	1.6	2.9	2.1	2.0	0.5	-0.6	0.3	0.5
Zambia	5.9	2.8	3.1	4.7	9.8	6.3	9.3	6.8	5.8
Low-income and fragile countries	**2.9**	**3.0**	**4.3**	**5.2**	**6.0**	**5.4**	**4.4**	**5.0**	**5.8**
Low-income excluding fragile countries	**2.7**	**3.8**	**3.9**	**5.7**	**6.2**	**6.6**	**5.4**	**5.9**	**6.2**
Benin	2.3	1.6	3.0	1.4	2.8	3.6	3.7	3.9	4.0
Burkina Faso	1.6	0.8	0.4	0.4	2.3	0.5	0.8	0.5	0.8
Ethiopia[2]	1.4	0.7	1.0	2.0	0.6	2.6	2.7	3.5	4.1
Mali	2.0	8.3	4.2	5.2	3.7	2.7	1.6	2.5	2.5
Mozambique	3.4	8.0	12.8	19.6	35.1	38.0	25.4	28.2	25.7
Niger	2.3	13.4	17.5	16.5	12.0	8.3	9.7	8.1	13.9
Rwanda	1.2	2.2	0.7	1.7	2.2	3.4	3.4	3.3	3.2
Sierra Leone	3.9	4.5	9.2	32.4	6.0	7.3	8.1	7.3	6.5
Tanzania	3.5	3.7	3.2	3.8	4.4	4.2	4.1	4.2	4.0
Uganda	4.2	4.4	2.5	4.3	4.7	4.5	4.2	4.6	5.5
Fragile countries	**3.1**	**1.8**	**5.0**	**4.5**	**5.7**	**3.6**	**2.7**	**3.5**	**5.1**
Burundi	0.1	0.0	0.0	0.1	0.0	2.5	2.3	2.5	2.4
Central African Rep.	3.3	2.1	3.1	1.7	3.2	0.1	0.1	0.3	1.5
Comoros	0.6	2.6	1.5	3.8	1.7	1.4	1.3	1.3	1.3
Congo, Dem. Rep. of	5.3	-1.5	13.3	6.5	10.5	5.2	4.8	4.8	4.8
Côte d'Ivoire	1.8	1.6	1.3	1.1	1.2	1.3	1.9	2.1	2.4
Eritrea	1.4	4.9	4.3	1.5	1.3	1.3	1.2	1.2	1.1
Gambia, The	9.6	8.1	9.0	6.7	11.2	9.5	9.3	5.7	11.5
Guinea	5.1	3.0	2.2	5.6	11.4	2.2	0.9	4.0	32.1
Guinea-Bissau	1.9	2.1	3.3	2.2	0.7	1.9	1.9	3.0	3.4
Liberia	5.8	13.4	22.7	22.8	19.2	22.0	11.2	13.8	13.4
Madagascar	3.6	8.1	3.9	7.8	7.8	5.2	2.9	2.9	3.5
Malawi	1.8	0.9	2.3	0.8	1.4	1.7	1.4	1.5	1.6
São Tomé & Príncipe	16.6	7.6	24.2	12.4	8.3	3.4	6.5	5.1	6.5
Togo	3.1	0.4	1.5	14.3	7.6	4.7	-3.8	4.2	4.2
Zimbabwe[3]	0.7	1.3	1.3	3.4	2.8	2.9	2.2	3.3	3.3
Sub-Saharan Africa	**2.1**	**2.8**	**2.7**	**2.1**	**2.0**	**1.3**	**1.3**	**2.1**	**2.5**
Median	2.6	2.6	2.9	3.4	3.2	2.9	2.4	3.5	3.9
Excluding Nigeria and South Africa	2.9	3.3	4.8	2.8	3.5	2.1	2.6	4.3	4.9
Oil-importing countries	**1.9**	**2.8**	**4.1**	**2.8**	**3.7**	**3.1**	**2.6**	**2.9**	**3.4**
Excluding South Africa	**2.9**	**3.3**	**7.3**	**4.6**	**6.6**	**5.0**	**4.5**	**4.9**	**5.5**
CFA franc zone	4.3	3.4	3.4	4.0	3.5	3.3	3.1	3.4	4.0
WAEMU	1.9	3.3	3.1	3.6	3.1	2.4	2.3	2.7	3.4
CEMAC	6.5	3.6	3.6	4.4	3.8	4.2	3.9	4.3	4.8
EAC-5	2.3	2.2	1.7	2.5	2.6	2.9	3.0	3.5	3.8
ECOWAS	2.3	3.4	2.2	2.9	2.1	1.6	1.3	1.4	2.0
SADC	1.5	2.5	3.2	1.2	1.8	0.5	0.6	2.3	2.4
SACU	1.3	2.2	1.2	1.4	0.7	0.8	0.0	0.1	0.3
COMESA (SSA members)	2.6	1.7	9.8	2.6	6.3	3.6	3.6	3.8	4.1
MDRI countries	3.9	4.5	5.3	6.3	6.9	6.3	5.8	5.7	5.9
Countries with conventional exchange rate pegs	4.3	3.5	3.6	4.1	3.7	3.3	3.0	3.4	4.1
Countries without conventional exchange rate pegs	1.7	2.7	2.5	1.8	1.8	1.0	1.0	1.9	2.3
Sub-Saharan Africa[4]	**2.1**	**2.8**	**2.7**	**2.1**	**2.0**	**1.4**	**1.3**	**2.1**	**2.5**

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014
Oil-exporting countries	**129.1**	**140.7**	**147.5**	**148.4**	**162.1**	**172.2**	**182.6**
Excluding Nigeria	**137.3**	**167.2**	**158.9**	**161.1**	**168.2**	**176.5**	**182.1**
Angola	179.2	249.4	235.1	242.6	268.4	285.6	297.7
Cameroon	110.1	116.0	108.6	108.8	105.0	108.1	109.6
Chad	118.6	133.6	123.6	116.2	125.7	125.8	127.5
Congo, Rep. of	118.4	128.7	124.8	124.0	120.8	129.7	129.2
Equatorial Guinea	153.6	176.0	177.7	187.9	185.5	199.2	208.4
Gabon	106.1	111.5	107.3	105.8	103.5	105.4	110.3
Nigeria	126.2	131.9	143.1	143.6	159.4	170.0	182.0
South Sudan	...	...	...	...	...	...	...
Middle-income countries[2]	**103.6**	**100.1**	**111.1**	**108.5**	**105.5**	**98.7**	**92.4**
Excluding South Africa	**112.3**	**114.3**	**117.9**	**114.8**	**116.9**	**117.9**	**110.3**
Botswana	98.2	100.5	108.8	108.0	104.2	99.6	94.5
Cabo Verde	97.1	101.6	99.0	101.0	98.6	102.0	101.9
Ghana	108.9	99.6	106.2	101.0	94.5	95.2	73.8
Kenya	120.6	133.2	131.4	125.7	142.7	147.6	152.7
Lesotho	65.9	64.1	73.1	73.5	69.2	61.9	57.8
Mauritius	89.1	91.7	94.6	100.5	102.0	101.9	105.0
Namibia	105.0	101.9	114.4	112.5	108.1	98.7	92.9
Senegal	107.3	108.9	102.1	103.2	99.3	101.6	100.8
Seychelles	81.8	60.3	63.0	58.3	57.7	68.0	65.8
South Africa	100.0	94.1	108.6	106.4	100.6	90.0	84.3
Swaziland	106.7	105.3	113.6	113.7	113.7	106.9	102.7
Zambia	149.5	155.6	164.7	160.4	165.6	171.7	164.8
Low-income and fragile countries	**92.0**	**99.7**	**92.5**	**92.7**	**99.8**	**102.6**	**105.1**
Low-income excluding fragile countries	**88.8**	**95.4**	**87.1**	**87.0**	**97.3**	**100.1**	**102.7**
Benin	119.4	123.2	115.2	114.4	112.4	114.1	112.8
Burkina Faso	111.7	120.4	110.3	112.2	111.5	113.4	118.1
Ethiopia	100.1	115.1	98.4	103.4	122.7	124.2	130.0
Mali	109.6	117.5	111.4	111.7	112.4	113.0	115.1
Mozambique	84.4	84.7	71.9	86.3	92.4	91.3	90.0
Niger	111.3	118.1	110.1	110.0	104.2	108.1	107.6
Rwanda	76.9	87.4	85.3	82.2	84.0	83.5	81.1
Sierra Leone	72.3	78.8	76.1	76.5	89.2	96.6	99.6
Tanzania	69.0	72.3	68.5	63.9	74.5	80.3	82.3
Uganda	89.6	93.0	86.6	83.0	94.4	96.0	99.0
Fragile countries	**97.4**	**108.1**	**104.2**	**105.5**	**102.9**	**105.0**	**107.4**
Burundi	71.3	80.4	82.5	82.0	84.3	84.4	87.9
Central African Rep.	112.4	124.3	118.5	117.3	117.5	121.2	151.2
Comoros	119.3	121.4	115.6	115.8	110.4	114.4	113.3
Congo, Dem. Rep. of	...	...	...	...	...	...	...
Côte d'Ivoire	117.2	122.1	115.2	117.5	112.7	117.8	118.9
Eritrea	107.2	164.9	182.4	190.4	211.2	230.1	251.1
Gambia, The	56.2	56.7	55.0	50.9	49.6	45.9	41.9
Guinea	72.9	81.9	75.9	73.3	81.6	91.6	100.2
Guinea-Bissau	112.5	119.3	115.7	118.1	115.3	117.6	116.1
Liberia	85.1	91.4	92.9	92.7	101.2	100.0	100.1
Madagascar	91.1	106.9	106.3	111.9	110.6	114.6	110.8
Malawi	71.6	78.4	73.7	71.3	58.2	49.2	53.6
São Tomé & Príncipe	94.2	117.4	114.2	127.6	134.0	146.6	156.9
Togo	112.2	118.8	111.5	112.2	107.8	110.2	111.5
Zimbabwe	...	...	...	...	...	...	...
Sub-Saharan Africa	**109.5**	**113.6**	**118.7**	**118.1**	**123.2**	**124.2**	**125.1**
Median	106.4	110.2	108.7	109.4	106.4	107.5	108.6
Excluding Nigeria and South Africa	107.4	117.9	113.5	113.1	118.9	122.1	122.0
Oil-importing countries	**99.7**	**100.1**	**104.3**	**102.8**	**103.7**	**100.4**	**97.3**
Excluding South Africa	**99.7**	**105.5**	**102.0**	**101.1**	**106.4**	**108.5**	**107.3**
CFA franc zone	115.1	122.7	116.2	116.7	114.5	118.1	120.0
WAEMU	113.4	118.8	111.4	112.6	109.4	112.4	113.5
CEMAC	117.1	127.2	121.7	121.5	120.2	124.6	127.6
EAC-5	91.2	98.1	94.3	89.6	101.9	106.2	109.1
ECOWAS	119.9	124.3	131.3	131.3	140.9	148.8	153.9
SADC	101.9	103.6	111.8	110.7	3.7	104.5	101.1
SACU	99.8	94.4	108.5	106.4	100.8	90.6	85.0
COMESA (SSA members)	104.0	114.6	109.9	109.4	119.9	121.7	124.4
MDRI countries	97.5	102.9	97.8	97.1	101.7	104.1	102.3
Countries with conventional exchange rate pegs	113.1	120.5	116.1	116.6	114.4	117.0	118.3
Countries without conventional exchange rate pegs	108.7	112.4	119.0	118.1	124.6	125.2	126.1
Sub-Saharan Africa[3]	**109.5**	**113.6**	**118.7**	**118.1**	**123.2**	**124.2**	**125.1**

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014
Oil-exporting countries	**61.1**	**55.3**	**53.1**	**50.5**	**51.1**	**51.6**	**52.2**
Excluding Nigeria	**47.5**	**49.6**	**44.6**	**43.6**	**43.5**	**44.1**	**44.2**
Angola	8.8	9.2	7.7	7.3	7.5	7.5	7.4
Cameroon	110.6	115.3	110.2	111.5	108.1	112.1	113.9
Chad	114.3	119.6	116.1	117.5	114.7	117.0	118.6
Congo, Rep. of	117.5	121.5	115.5	116.8	113.4	117.8	119.5
Equatorial Guinea	122.9	130.1	124.3	126.7	120.4	123.6	123.4
Gabon	109.1	111.2	107.4	107.7	105.0	108.2	109.6
Nigeria	67.4	57.9	56.9	53.5	54.5	55.0	55.7
South Sudan	...	...	...	...	...	...	...
Middle-income countries[2]	**81.0**	**66.0**	**71.6**	**68.2**	**64.1**	**57.8**	**51.8**
Excluding South Africa	**75.7**	**64.0**	**64.1**	**59.9**	**58.7**	**57.0**	**50.8**
Botswana	77.8	64.4	67.3	64.2	59.2	54.8	50.8
Cabo Verde	105.1	105.8	103.3	104.4	102.3	106.2	107.9
Ghana	45.2	29.4	29.1	26.4	23.4	21.6	14.9
Kenya	93.3	89.0	86.9	77.3	84.0	84.7	84.4
Lesotho	99.4	82.9	93.0	91.9	83.6	72.7	65.8
Mauritius	74.2	68.5	70.7	73.0	73.5	72.7	74.1
Namibia	86.3	74.7	82.5	80.5	74.9	66.8	61.3
Senegal	112.0	116.7	111.4	112.9	110.4	114.9	117.8
Seychelles	80.5	36.6	40.1	37.5	35.6	41.1	39.8
South Africa	84.0	67.1	76.1	73.3	67.2	58.0	52.1
Swaziland	90.9	80.6	86.0	84.5	80.8	75.0	70.9
Zambia	65.7	54.8	55.0	52.2	52.1	52.0	47.7
Low-income and fragile countries	**76.4**	**69.8**	**63.1**	**58.0**	**57.7**	**57.3**	**57.5**
Low-income excluding fragile countries	**77.1**	**68.6**	**61.1**	**55.0**	**55.7**	**55.8**	**56.3**
Benin	116.4	118.3	111.8	113.1	107.5	111.4	114.3
Burkina Faso	119.8	134.5	130.1	135.6	135.3	143.6	158.4
Ethiopia	78.7	58.7	48.0	39.3	39.1	37.6	37.6
Mali	112.9	117.9	113.5	114.9	112.7	116.8	120.2
Mozambique	53.6	48.0	37.3	41.9	45.1	44.3	44.5
Niger	115.4	121.4	115.7	116.8	113.5	118.2	121.5
Rwanda	61.1	60.5	59.4	57.7	58.3	56.9	54.6
Sierra Leone	55.6	47.5	39.8	35.0	36.8	37.2	36.1
Tanzania	59.2	53.4	48.8	42.7	44.2	45.3	45.0
Uganda	82.3	72.6	67.0	57.2	59.4	59.2	60.3
Fragile countries	**75.0**	**72.9**	**68.3**	**66.5**	**62.7**	**61.1**	**60.3**
Burundi	57.0	52.1	52.6	50.5	46.2	44.4	45.8
Central African Rep.	108.4	111.3	106.7	107.5	104.3	108.0	109.9
Comoros	115.2	120.8	115.6	119.0	115.7	121.6	123.4
Congo, Dem. Rep. of	...	...	...	...	...	...	...
Côte d'Ivoire	114.8	118.8	113.0	113.7	110.6	115.3	118.3
Eritrea	48.9	49.5	50.4	49.8	51.8	52.5	53.2
Gambia, The	40.7	39.7	37.7	34.6	33.2	29.8	26.2
Guinea	39.6	28.7	23.7	19.5	19.4	19.9	20.2
Guinea-Bissau	117.0	120.0	115.9	116.4	113.9	116.7	118.1
Liberia	56.4	47.5	45.9	43.6	45.8	42.9	39.6
Madagascar	58.9	56.0	52.1	51.9	49.9	49.9	46.3
Malawi	40.3	38.5	34.9	32.9	23.6	15.8	14.4
São Tomé & Príncipe	52.7	38.4	33.6	33.9	33.1	34.1	34.6
Togo	120.6	126.1	120.3	122.3	118.6	123.1	127.9
Zimbabwe	...	...	...	...	...	...	...
Sub-Saharan Africa	**72.1**	**62.7**	**62.3**	**58.8**	**57.8**	**55.8**	**54.0**
Median	83.2	70.5	73.4	73.2	70.3	63.0	60.8
Excluding Nigeria and South Africa	68.7	63.5	59.1	55.4	54.9	54.5	52.7
Oil-importing countries	**79.5**	**67.3**	**68.5**	**64.4**	**61.8**	**57.7**	**53.9**
Excluding South Africa	**76.1**	**67.5**	**63.5**	**58.7**	**58.1**	**57.2**	**54.8**
CFA franc zone	114.5	119.6	114.5	116.0	112.7	117.0	120.0
WAEMU	115.2	120.7	115.4	117.0	114.2	119.1	123.5
CEMAC	113.6	118.3	113.4	114.7	111.1	114.6	116.0
EAC-5	75.7	69.8	66.0	58.2	61.1	61.7	61.6
ECOWAS	72.0	62.6	61.0	57.8	57.9	58.3	57.5
SADC	65.7	55.9	58.1	55.6	3.7	48.0	44.6
SACU	83.9	67.4	76.1	73.3	67.3	58.4	52.6
COMESA (SSA members)	75.5	66.3	61.8	55.4	55.8	54.4	53.5
MDRI countries	75.0	66.4	61.4	57.0	55.8	55.1	52.4
Countries with conventional exchange rate pegs	109.7	112.6	109.2	110.2	106.9	109.5	111.2
Countries without conventional exchange rate pegs	66.3	56.0	55.8	52.2	51.3	49.2	47.1
Sub-Saharan Africa[3]	**72.1**	**62.7**	**62.3**	**58.8**	**57.8**	**55.8**	**54.0**

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**15.4**	**7.4**	**5.9**	**5.9**	**5.9**	**7.1**	**7.7**	**10.2**	**10.4**
Excluding Nigeria	**29.0**	**18.9**	**16.8**	**15.9**	**16.3**	**20.1**	**23.1**	**33.3**	**32.4**
Angola	28.2	20.2	20.6	19.5	18.8	23.7	25.5	38.3	36.4
Cameroon	19.6	5.5	6.2	7.0	9.0	12.1	15.4	21.0	23.1
Chad	23.5	27.5	24.6	20.7	20.5	21.9	28.5	26.1	23.7
Congo, Rep. of	95.5	57.2	20.2	22.2	26.2	33.0	33.8	51.3	49.9
Equatorial Guinea	2.2	6.6	10.2	6.9	9.3	8.2	6.6	9.9	9.6
Gabon	30.2	10.3	9.8	8.8	6.9	8.6	21.2	34.2	37.1
Nigeria	9.1	1.5	1.4	1.4	1.4	1.7	1.7	2.0	2.3
South Sudan	...	...	...	...	...	...	...	...	...
Middle-income countries[1]	**11.5**	**10.5**	**11.8**	**11.7**	**13.6**	**15.9**	**19.1**	**22.6**	**23.5**
Excluding South Africa	**22.0**	**18.1**	**17.4**	**17.4**	**18.4**	**23.4**	**29.9**	**35.7**	**36.6**
Botswana	3.7	13.5	15.3	11.7	12.3	11.7	8.2	7.5	6.9
Cabo Verde	46.0	45.5	51.2	53.2	70.0	79.3	80.3	95.9	93.7
Ghana	24.1	19.3	19.4	19.3	21.8	24.0	36.0	43.2	42.2
Kenya	25.2	20.9	21.5	22.2	18.0	32.4	41.2	48.2	49.0
Lesotho	44.6	39.4	32.8	30.2	33.6	36.9	41.4	47.1	46.7
Mauritius	12.4	10.1	11.8	13.0	13.5	16.1	15.7	15.9	13.7
Namibia	4.7	4.9	4.3	6.4	7.8	6.9	7.2	8.9	10.8
Senegal	28.7	28.1	27.2	27.8	31.2	33.4	41.8	44.3	44.0
Seychelles	62.0	87.6	49.3	46.0	45.1	36.9	35.5	38.6	36.5
South Africa	7.9	7.2	9.6	9.4	11.4	11.9	13.2	14.8	15.4
Swaziland	12.7	9.9	7.9	7.1	6.9	7.5	7.3	7.7	8.4
Zambia	41.6	9.0	7.3	7.9	13.5	13.0	17.5	25.4	29.4
Low-income and fragile countries	**50.6**	**33.1**	**27.3**	**26.4**	**23.1**	**23.2**	**24.2**	**28.2**	**29.3**
Low-income excluding fragile countries	**31.6**	**19.0**	**21.2**	**21.5**	**21.2**	**22.1**	**24.0**	**28.3**	**29.8**
Benin	22.2	16.2	18.1	16.9	16.9	19.0	20.5	22.9	22.8
Burkina Faso	29.4	25.6	26.2	22.8	23.1	22.1	20.2	23.3	23.8
Ethiopia[2]	35.4	16.6	23.3	23.9	21.9	19.1	22.8	24.5	25.4
Mali	30.9	22.6	24.3	24.4	25.9	25.6	27.2	34.0	34.2
Mozambique	46.9	37.3	38.2	33.3	33.7	43.5	45.8	50.4	49.8
Niger	31.2	19.6	16.9	15.5	16.9	18.6	21.1	30.3	31.7
Rwanda	36.8	13.9	13.6	15.7	14.2	19.9	22.6	25.9	27.0
Sierra Leone	71.4	28.2	30.4	32.6	25.9	25.7	25.5	33.2	33.6
Tanzania	26.7	17.4	19.3	21.1	21.7	22.8	24.8	30.0	33.0
Uganda	23.4	11.1	11.7	12.4	12.6	14.1	14.0	20.8	24.4
Fragile countries	**75.6**	**55.0**	**36.3**	**33.6**	**26.2**	**25.0**	**24.5**	**27.8**	**28.4**
Burundi	120.2	21.2	22.4	20.5	20.2	19.8	16.4	15.9	13.4
Central African Rep.	65.3	20.8	20.0	18.3	20.7	34.4	59.5	57.2	46.7
Comoros	73.0	51.9	48.9	44.9	40.7	18.5	22.0	22.0	22.5
Congo, Dem. Rep. of	88.9	74.8	24.2	20.7	18.3	15.0	12.7	14.9	16.0
Côte d'Ivoire	67.1	53.6	46.5	49.5	28.6	27.2	25.9	31.3	30.5
Eritrea	58.9	49.1	45.8	35.8	29.1	25.6	23.2	23.6	21.3
Gambia, The	83.7	41.0	39.7	43.0	41.3	43.8	49.9	53.8	54.4
Guinea	91.4	69.6	64.0	62.7	23.2	24.4	24.4	30.1	35.6
Guinea-Bissau	161.7	128.8	37.8	24.4	27.1	26.2	24.4	27.0	25.0
Liberia	511.9	148.0	10.7	10.7	10.3	11.7	18.1	27.1	33.3
Madagascar	46.2	25.7	23.7	21.8	23.4	22.6	23.5	30.6	34.5
Malawi	42.2	12.9	12.4	11.4	20.1	26.8	29.8	31.6	34.1
São Tomé & Príncipe	207.2	68.0	75.3	71.7	78.3	71.4	69.0	91.2	90.1
Togo	75.9	55.1	19.8	15.2	17.9	20.8	25.1	30.2	30.8
Zimbabwe[3]	56.2	66.5	62.2	52.0	48.4	46.6	46.7	49.0	49.6
Sub-Saharan Africa	**19.6**	**13.8**	**12.1**	**11.8**	**11.9**	**13.2**	**14.7**	**18.3**	**19.2**
Median	39.2	21.9	21.1	20.7	20.6	22.3	23.9	30.1	31.3
Excluding Nigeria and South Africa	36.2	24.9	21.4	20.5	19.7	22.3	25.3	31.5	32.1
Oil-importing countries	**22.5**	**18.0**	**16.4**	**16.0**	**16.6**	**18.4**	**21.0**	**24.8**	**25.8**
Excluding South Africa	**39.0**	**27.4**	**23.3**	**22.7**	**21.2**	**23.3**	**26.3**	**30.9**	**32.0**
CFA franc zone	38.2	27.3	21.9	20.8	19.0	20.5	23.7	29.6	29.9
WAEMU	45.9	36.5	31.5	31.0	25.4	25.6	27.0	31.8	31.6
CEMAC	30.8	17.5	12.7	11.9	13.2	15.5	20.4	27.1	27.8
EAC-5	27.8	17.4	18.4	19.5	17.9	24.8	29.3	35.8	37.9
ECOWAS	20.1	11.0	8.1	7.9	6.7	7.1	7.6	9.4	10.3
SADC	16.6	14.7	13.8	13.4	3.7	16.7	18.2	22.2	22.6
SACU	7.9	7.6	9.8	9.5	11.4	11.8	12.9	14.5	15.0
COMESA (SSA members)	39.5	25.6	20.7	20.0	19.4	22.0	25.0	29.3	30.6
MDRI countries	41.7	24.6	19.1	18.9	20.2	21.3	24.3	29.1	30.4
Countries with conventional exchange rate pegs	36.0	26.3	21.3	20.3	18.9	20.2	23.1	28.4	28.7
Countries without conventional exchange rate pegs	16.3	11.1	10.2	10.0	10.5	11.8	13.1	16.5	17.4
Sub-Saharan Africa[4]	**19.6**	**13.8**	**12.1**	**11.8**	**11.9**	**13.2**	**14.7**	**18.3**	**19.2**

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**133.3**	**126.0**	**143.3**	**165.3**	**166.7**	**166.0**	**158.4**	**114.5**	**114.7**
Excluding Nigeria	**132.6**	**119.9**	**145.3**	**175.8**	**180.9**	**179.4**	**166.0**	**109.3**	**111.0**
Angola	130.7	119.1	142.0	176.2	186.5	183.3	168.4	100.6	101.3
Cameroon	116.8	105.1	113.2	122.2	122.6	118.4	118.6	118.2	117.6
Chad	177.0	189.2	241.5	287.7	281.4	305.0	291.7	170.4	179.1
Congo, Rep. of	125.9	86.3	131.0	149.3	145.4	150.5	137.0	102.4	110.0
Equatorial Guinea	139.6	124.4	159.1	190.9	196.4	195.6	168.7	139.7	138.8
Gabon	131.5	122.6	145.8	183.1	173.4	168.5	154.4	85.7	83.3
Nigeria	133.5	129.1	142.5	160.5	160.5	160.5	155.5	116.3	116.1
South Sudan	...	...	...	...	...	...	...	...	...
Middle-income countries[1]	**117.5**	**134.9**	**148.4**	**155.3**	**148.4**	**141.6**	**134.6**	**135.9**	**134.4**
Excluding South Africa	**115.4**	**127.4**	**148.8**	**161.5**	**154.0**	**149.6**	**136.0**	**133.3**	**134.1**
Botswana	90.5	83.6	86.0	87.7	107.3	113.3	116.3	122.5	124.0
Cabo Verde	141.9	124.8	143.1	151.7	152.4	134.6	126.8	85.2	84.7
Ghana	148.1	202.8	247.1	295.9	291.6	271.4	251.8	227.2	233.1
Kenya	82.7	95.7	94.9	76.7	74.7	75.2	73.3	83.2	86.8
Lesotho	63.8	49.6	49.6	48.7	48.6	47.2	46.6	49.0	51.4
Mauritius	109.7	96.5	101.3	100.8	97.6	96.0	94.1	99.0	98.1
Namibia	104.1	100.0	117.5	125.2	114.4	109.7	111.1	110.5	103.1
Senegal	97.2	109.8	107.7	102.5	100.5	94.1	97.0	102.4	101.1
Seychelles	82.5	81.0	75.7	70.8	70.8	70.7	72.1	82.9	77.9
South Africa	118.2	138.2	148.2	152.7	145.8	137.3	133.8	137.5	134.7
Swaziland	102.8	116.3	102.8	119.6	110.1	125.8	125.7	134.3	136.0
Zambia	184.1	169.7	231.0	245.0	210.2	197.7	191.5	182.5	169.9
Low-income and fragile countries	**145.8**	**146.5**	**173.4**	**177.5**	**167.9**	**161.4**	**169.4**	**179.2**	**180.1**
Low-income excluding fragile countries	**88.1**	**104.0**	**121.3**	**133.2**	**123.5**	**112.5**	**112.9**	**117.3**	**118.4**
Benin	156.2	293.1	374.8	400.1	276.0	233.2	222.2	216.6	211.6
Burkina Faso	63.4	56.0	39.9	35.5	42.1	39.7	35.9	40.3	40.1
Ethiopia[2]	65.9	73.6	109.7	132.6	119.5	103.3	113.0	114.8	118.0
Mali	156.5	180.3	218.7	272.5	308.9	256.7	239.4	276.1	270.7
Mozambique	112.4	107.0	119.4	122.7	115.7	105.3	101.8	101.7	102.4
Niger	122.5	164.5	173.3	174.2	178.9	173.4	155.6	159.7	148.7
Rwanda	94.4	108.4	125.8	126.0	118.3	141.1	136.3	142.3	147.8
Sierra Leone	103.7	98.2	104.9	99.1	103.9	99.4	86.6	74.2	75.1
Tanzania	59.7	83.8	89.6	91.9	92.6	90.0	92.3	99.9	102.4
Uganda	79.9	85.8	83.0	87.4	84.7	82.3	85.5	87.9	86.9
Fragile countries	**223.1**	**212.4**	**250.3**	**242.0**	**239.3**	**239.0**	**260.2**	**279.0**	**280.9**
Burundi	116.0	111.2	168.9	153.9	122.2	109.9	125.3	141.6	144.2
Central African Rep.	66.7	73.5	74.7	74.4	77.2	92.5	106.6	118.1	109.8
Comoros	105.4	91.6	96.8	129.5	138.2	113.4	141.8	147.1	150.9
Congo, Dem. Rep. of	664.6	609.9	729.0	650.1	613.4	574.7	622.4	624.6	616.6
Côte d'Ivoire	89.3	95.7	103.2	108.0	105.2	108.0	117.2	126.7	138.1
Eritrea	50.7	38.1	38.3	38.5	38.6	38.8	38.8	38.8	38.8
Gambia, The	102.8	76.2	65.0	60.9	76.8	89.1	78.0	82.7	93.9
Guinea	87.1	80.9	84.3	72.0	73.8	73.8	78.6	106.4	111.0
Guinea-Bissau	82.3	57.4	71.7	102.5	74.1	55.0	76.3	101.1	103.5
Liberia	159.9	147.4	224.8	247.3	174.2	175.6	155.3	147.0	157.3
Madagascar	142.1	152.5	143.7	145.1	155.7	175.5	198.6	202.0	202.0
Malawi	79.3	92.7	98.9	100.1	85.3	83.1	84.0	85.3	80.1
São Tomé & Príncipe	121.2	84.1	92.0	78.4	120.4	89.5	101.3	141.7	132.3
Togo	72.3	74.0	72.8	86.9	105.7	82.2	83.1	87.8	86.1
Zimbabwe[3]	79.5	96.4	101.3	100.4	103.9	103.1	101.6	106.6	104.1
Sub-Saharan Africa	**128.8**	**133.7**	**150.6**	**163.3**	**160.0**	**156.6**	**152.8**	**135.8**	**136.3**
Median	104.7	99.1	108.7	122.4	117.0	109.8	116.7	112.6	110.5
Excluding Nigeria and South Africa	133.4	133.6	158.1	172.5	168.1	163.6	159.6	148.9	150.6
Oil-importing countries	**125.7**	**138.8**	**155.8**	**161.8**	**154.7**	**148.5**	**147.6**	**152.9**	**152.6**
Excluding South Africa	**133.4**	**139.3**	**163.5**	**170.9**	**162.4**	**156.8**	**156.9**	**162.5**	**163.3**
CFA franc zone	118.1	123.1	143.3	162.2	157.9	151.5	145.3	130.8	132.5
WAEMU	103.8	126.7	139.4	150.3	143.2	129.8	129.3	138.8	140.5
CEMAC	131.6	119.3	147.1	172.7	171.3	172.8	161.6	121.4	123.0
EAC-5	76.2	91.0	94.1	88.4	85.8	85.8	86.2	93.9	96.4
ECOWAS	128.5	132.8	148.2	167.6	166.0	162.8	155.8	125.6	127.1
SADC	136.0	145.5	161.5	168.5	3.7	162.2	162.3	157.8	157.2
SACU	116.4	134.6	144.3	148.8	142.6	134.9	131.7	135.4	132.6
COMESA (SSA members)	167.3	156.2	187.6	186.6	172.3	169.7	177.7	184.2	183.1
MDRI countries	152.2	154.2	187.6	199.1	188.7	180.5	180.6	184.8	184.7
Countries with conventional exchange rate pegs	115.9	119.6	137.8	155.4	150.5	145.0	139.6	126.2	127.2
Countries without conventional exchange rate pegs	131.6	136.6	153.0	165.1	161.9	158.9	155.3	137.5	138.1
Sub-Saharan Africa[4]	**128.8**	**133.7**	**150.6**	**163.3**	**160.0**	**156.6**	**152.8**	**135.8**	**136.3**

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016
Oil-exporting countries	**7.3**	**6.6**	**4.6**	**5.4**	**6.7**	**6.1**	**6.5**	**5.4**	**4.4**
Excluding Nigeria	**3.6**	**4.8**	**4.7**	**6.2**	**6.5**	**6.2**	**7.1**	**5.4**	**4.5**
Angola	3.1	4.4	5.0	7.1	7.7	7.4	8.4	6.7	5.6
Cameroon	3.6	6.9	5.3	4.7	4.6	4.5	4.9	4.1	3.7
Chad	2.0	1.4	1.3	1.9	2.5	2.3	2.5	2.3	1.9
Congo, Rep. of	3.7	6.3	6.7	9.8	8.1	7.0	11.2	6.5	4.8
Equatorial Guinea	5.9	4.1	3.4	3.7	6.2	6.5	6.2	4.7	4.4
Gabon	4.5	5.0	3.7	5.0	4.6	5.9	6.7	4.7	4.5
Nigeria	10.7	7.5	4.5	5.1	6.8	6.0	6.2	5.4	4.4
South Sudan	...	...	...	...	3.9	2.8	1.5	1.0	0.6
Middle-income countries[1]	**3.8**	**4.7**	**4.2**	**4.5**	**4.6**	**4.8**	**5.4**	**5.3**	**5.1**
Excluding South Africa	**4.6**	**4.7**	**3.9**	**3.8**	**3.9**	**4.0**	**4.6**	**4.6**	**4.6**
Botswana	20.8	16.4	11.8	11.2	9.9	11.1	12.3	14.2	14.2
Cabo Verde	3.2	4.1	3.4	3.7	4.0	4.4	5.9	4.6	4.6
Ghana	2.7	2.7	2.9	2.9	2.9	2.9	3.0	3.6	4.1
Kenya	2.9	3.4	2.9	2.8	3.7	3.8	4.6	4.0	4.0
Lesotho	5.0	5.7	4.9	4.4	5.5	5.9	8.0	8.1	7.5
Mauritius	3.8	4.5	4.3	4.5	5.0	5.3	6.1	6.0	6.0
Namibia	2.0	4.2	3.3	2.9	2.8	2.1	1.8	1.6	1.5
Senegal	3.5	4.9	3.8	3.4	3.4	3.7	4.7	4.6	4.4
Seychelles	0.8	2.2	2.6	2.7	2.8	3.7	4.6	4.3	4.2
South Africa	3.5	4.6	4.3	4.8	5.0	5.3	5.8	5.7	5.5
Swaziland	2.5	4.0	2.9	2.3	3.3	3.8	3.8	3.9	3.1
Zambia	1.7	3.8	3.0	2.8	2.7	2.6	3.3	3.5	3.1
Low-income and fragile countries	**3.2**	**3.6**	**3.2**	**3.1**	**2.9**	**2.8**	**2.9**	**2.6**	**2.5**
Low-income excluding fragile countries	**4.3**	**4.3**	**3.6**	**3.5**	**3.2**	**3.2**	**3.2**	**3.1**	**2.8**
Benin	6.5	7.4	7.2	6.9	3.8	3.2	3.2	3.1	2.2
Burkina Faso	4.8	6.1	3.6	3.5	3.3	2.6	2.7	2.2	1.8
Ethiopia[2]	2.3	1.9	2.0	2.6	2.0	1.8	1.5	2.0	1.6
Mali	4.6	5.1	4.2	4.2	3.0	2.8	2.6	2.7	2.6
Mozambique	4.2	5.2	3.3	2.4	2.8	3.4	2.8	2.6	2.6
Niger	3.2	2.8	3.0	2.3	3.1	3.4	4.6	3.5	3.0
Rwanda	3.5	6.5	5.2	6.5	5.6	5.1	4.6	3.9	4.4
Sierra Leone	3.8	3.4	1.6	2.0	2.2	1.8	4.0	3.2	3.1
Tanzania	4.8	4.6	4.1	3.5	3.6	3.9	4.2	4.3	4.4
Uganda	5.6	4.9	3.9	3.7	4.5	4.8	4.8	3.9	3.7
Fragile countries	**1.7**	**2.6**	**2.7**	**2.6**	**2.2**	**2.0**	**2.4**	**2.0**	**2.0**
Burundi	3.6	4.4	4.1	3.3	3.5	3.3	4.1	2.7	3.2
Central African Rep.	4.2	4.6	4.1	4.3	5.4	3.7	6.2	4.9	4.9
Comoros	6.3	6.4	5.7	6.3	6.7	5.7	7.3	5.7	5.5
Congo, Dem. Rep. of	0.3	1.1	1.3	1.5	1.6	1.4	1.3	1.2	1.0
Côte d'Ivoire	2.6	3.6	4.6	3.5	2.5	2.4	3.0	2.6	2.8
Eritrea	1.0	2.2	2.4	2.8	4.2	3.9	4.0	3.1	1.9
Gambia, The	3.7	5.3	5.1	5.1	6.0	4.8	3.7	2.7	3.7
Guinea	0.5	2.4	1.2	3.2	2.7	2.8	3.3	1.9	1.6
Guinea-Bissau	5.3	7.0	5.6	10.4	7.1	6.7	10.8	11.9	13.7
Liberia	0.4	2.2	2.3	2.3	2.2	2.1	2.1	2.5	2.8
Madagascar	2.5	3.6	2.6	3.6	3.1	2.3	2.5	2.5	2.6
Malawi	1.4	0.6	1.5	1.0	1.1	2.0	2.9	2.1	3.3
São Tomé & Príncipe	4.6	6.6	3.9	4.6	3.2	3.2	3.4	3.5	3.8
Togo	3.2	4.6	3.4	4.4	1.8	2.0	2.5	2.2	2.2
Zimbabwe[3]	0.2	0.9	0.6	0.6	0.6	0.5	0.5	0.6	0.6
Sub-Saharan Africa	**5.1**	**5.2**	**4.2**	**4.7**	**5.2**	**5.0**	**5.4**	**4.8**	**4.2**
Median	3.5	4.4	3.6	3.6	3.5	3.7	4.0	3.5	3.7
Excluding Nigeria and South Africa	3.8	4.2	3.9	4.3	4.3	4.2	4.6	3.9	3.6
Oil-importing countries	**3.6**	**4.3**	**3.9**	**4.1**	**4.1**	**4.1**	**4.5**	**4.3**	**4.1**
Excluding South Africa	**3.8**	**4.0**	**3.5**	**3.4**	**3.3**	**3.2**	**3.5**	**3.4**	**3.3**
CFA franc zone	3.9	5.0	4.3	4.5	4.2	4.0	4.7	3.7	3.4
WAEMU	3.7	4.7	4.4	3.9	3.0	2.9	3.4	3.1	3.0
CEMAC	4.0	5.2	4.3	5.0	5.2	5.2	6.0	4.3	3.8
EAC-5	4.1	4.3	3.7	3.4	4.0	4.1	4.5	4.1	4.0
ECOWAS	7.7	6.5	4.3	4.7	6.0	5.3	5.6	4.9	4.2
SADC	3.7	4.6	4.2	4.8	3.7	5.1	5.7	5.2	4.9
SACU	4.0	5.0	4.5	4.9	5.1	5.4	5.9	5.8	5.6
COMESA (SSA members)	2.5	3.0	2.7	2.8	3.0	2.9	3.1	2.9	2.7
MDRI countries	3.4	4.1	3.5	3.6	3.3	3.2	3.5	3.1	3.0
Countries with conventional exchange rate pegs	3.7	4.9	4.2	4.3	4.1	3.9	4.5	3.6	3.3
Countries without conventional exchange rate pegs	5.4	5.3	4.2	4.7	5.5	5.3	5.6	5.0	4.5
Sub-Saharan Africa[4]	**5.1**	**5.2**	**4.2**	**4.6**	**5.3**	**5.0**	**5.5**	**4.8**	**4.3**

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014
Oil-exporting countries	**18.8**	**28.7**	**27.2**	**25.1**	**27.4**	**29.0**	**31.4**
Excluding Nigeria	**17.2**	**26.3**	**26.5**	**24.4**	**27.1**	**28.8**	**31.5**
Angola	27.6	58.4	57.4	57.2	56.4	58.1	59.3
Cameroon	22.7	26.1	28.7	29.7	28.3	29.9	30.4
Chad	7.3	9.4	10.0	10.4	11.1	11.8	14.7
Congo, Rep. of	11.5	16.5	18.8	23.7	28.0	30.8	35.5
Equatorial Guinea	10.2	20.9	20.7	17.5	22.4	25.9	30.2
Gabon	23.6	26.5	23.4	25.5	28.8	32.3	29.9
Nigeria	28.3	43.5	31.2	30.4	29.2	30.1	30.5
South Sudan	...	...	...	6.7	14.7	13.0	20.4
Middle-income countries[1]	**79.5**	**87.3**	**92.3**	**92.7**	**92.2**	**94.9**	**99.2**
Excluding South Africa	**76.1**	**84.2**	**90.1**	**90.7**	**90.2**	**93.4**	**97.8**
Botswana	51.4	64.2	60.8	51.9	56.3	54.3	53.6
Cabo Verde	90.0	98.5	103.0	111.2	120.6	135.4	137.3
Ghana	29.7	40.1	39.5	38.1	37.3	39.6	...
Kenya	57.4	54.1	56.0	57.6	58.1	60.9	64.2
Lesotho	42.7	50.1	50.3	46.4	45.4	53.6	52.6
Mauritius[2]	284.6	316.8	369.9	378.2	377.6	365.3	352.9
Namibia	66.4	94.9	92.1	93.7	87.9	83.8	78.1
Senegal	43.6	47.2	50.5	52.6	53.1	59.4	64.5
Seychelles	118.8	100.0	109.3	108.0	95.4	110.6	109.4
South Africa	116.4	120.9	116.3	115.3	114.8	111.6	113.3
Swaziland	28.1	34.8	33.9	34.3	32.2	34.0	33.2
Zambia	24.9	25.9	25.5	25.5	28.2	30.5	32.5
Low-income and fragile countries	**27.4**	**38.7**	**41.3**	**41.9**	**42.9**	**45.0**	**44.2**
Low-income excluding fragile countries	**24.0**	**33.1**	**35.8**	**36.7**	**38.2**	**41.0**	**45.4**
Benin	36.5	48.2	52.5	56.9	58.9	65.4	71.8
Burkina Faso	28.7	33.4	36.7	38.9	40.1	46.1	52.8
Ethiopia	..	…	…	…	…	…	…
Mali	34.7	38.1	40.0	41.2	40.9	45.9	54.8
Mozambique	33.7	47.3	52.7	53.2	62.2	65.3	72.5
Niger	16.2	20.9	23.3	23.6	24.7	26.9	29.9
Rwanda	…	…	…	…	…	…	…
Sierra Leone	16.2	25.9	24.9	24.6	23.0	21.2	22.9
Tanzania	24.2	27.7	30.0	28.8	29.0	28.8	29.5
Uganda	21.4	23.1	26.6	26.1	26.9	28.2	29.5
Fragile countries	**29.7**	**42.4**	**44.9**	**45.3**	**46.0**	**47.7**	**43.3**
Burundi	28.8	31.5	33.6	31.5	29.0	28.7	29.4
Central African Rep.	12.6	15.8	17.3	19.1	19.2	25.4	25.1
Comoros	25.1	34.4	37.6	41.5	44.5	42.5	43.1
Congo, Dem. Rep. of	6.7	12.3	11.4	12.2	14.0	14.0	14.3
Côte d'Ivoire	25.9	28.7	31.5	37.2	35.8	36.8	41.3
Eritrea	143.7	126.0	124.7	113.2	104.5	112.2	...
Gambia, The	48.3	61.7	66.8	70.5	70.6	73.6	82.0
Guinea	..	…	…	…	…	…	…
Guinea-Bissau	11.8	20.3	24.5	27.2	26.8	29.9	27.7
Liberia	..	…	…	…	…	…	…
Madagascar	23.8	25.6	25.5	26.2	26.3	24.8	25.0
Malawi	15.3	23.5	27.3	29.8	31.8	31.6	30.2
São Tomé & Príncipe	62.7	75.5	76.7	72.2	81.7	81.9	82.0
Togo	41.3	53.4	62.5	63.7	68.0	70.4	75.9
Zimbabwe	…	…	…	…	…	…	…
Sub-Saharan Africa	**40.3**	**51.8**	**54.5**	**53.8**	**54.6**	**56.8**	**57.4**
Median	28.3	34.8	36.7	37.6	36.5	38.2	38.4
Excluding Nigeria and South Africa	38.7	50.2	53.4	52.8	53.7	56.0	56.6

Sources and footnotes on page 80.

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

	2004-08	2009	2010	2011	2012	2013	2014
Oil-exporting countries	**59.0**	**63.4**	**62.9**	**57.3**	**58.3**	**63.2**	**63.2**
Excluding Nigeria	**56.1**	**60.8**	**62.8**	**57.4**	**58.8**	**64.0**	**62.9**
Angola	42.6	55.8	72.5	79.3	89.1	85.8	75.0
Cameroon	69.3	68.3	69.4	70.3	80.1	81.4	82.3
Chad	82.7	85.5	73.4	73.5	77.5	80.2	80.9
Congo, Rep. of	36.4	38.7	39.5	38.3	49.8	59.6	55.3
Equatorial Guinea	43.0	56.6	59.0	68.1	38.0	48.1	54.1
Gabon	62.5	59.6	62.7	62.9	65.1	77.7	81.4
Nigeria	76.3	79.1	64.0	56.2	54.8	57.4	65.3
South Sudan	...	...	...	9.8	11.8	15.2	11.3
Middle-income countries[1]	**70.3**	**68.3**	**67.4**	**70.4**	**72.7**	**72.0**	**73.9**
Excluding South Africa	**65.5**	**63.6**	**62.6**	**66.5**	**68.5**	**67.8**	**69.6**
Botswana	55.8	55.4	55.4	67.5	74.0	79.1	82.5
Cabo Verde	54.8	72.5	74.2	80.2	73.9	64.7	59.2
Ghana	73.3	73.4	65.5	57.9	63.2	69.5	...
Kenya	76.6	72.5	72.6	77.8	76.9	80.5	83.7
Lesotho	26.4	34.9	36.6	37.2	50.9	45.3	47.9
Mauritius	65.5	67.7	68.2	80.9	77.2	72.6	74.9
Namibia	112.3	74.0	75.9	75.5	77.5	82.8	88.8
Senegal	77.3	78.3	76.7	78.4	80.0	79.5	75.1
Seychelles	30.9	30.7	35.9	33.9	34.7	28.9	31.8
South Africa	122.8	120.1	120.7	113.2	119.0	118.7	117.3
Swaziland	96.7	79.6	74.4	85.8	79.8	81.7	86.2
Zambia	50.5	60.1	52.9	56.5	65.2	61.1	65.7
Low-income and fragile countries	**61.1**	**63.2**	**64.6**	**68.7**	**67.0**	**66.1**	**64.7**
Low-income excluding fragile countries	**63.6**	**67.6**	**66.6**	**70.1**	**68.1**	**66.9**	**63.3**
Benin	58.4	54.5	53.3	51.5	48.6	45.6	40.9
Burkina Faso	92.2	78.4	69.0	69.3	71.8	77.4	74.3
Ethiopia	...	...	...	...	...	...	...
Mali	82.0	74.3	71.5	82.0	78.9	72.8	64.6
Mozambique	53.3	67.7	74.4	74.4	71.1	74.4	73.5
Niger	73.1	83.0	78.0	84.3	84.2	76.6	68.9
Rwanda	...	...	...	...	...	...	...
Sierra Leone	38.7	47.2	47.5	46.5	40.5	37.0	34.0
Tanzania	52.0	64.6	62.1	67.1	69.9	71.2	75.6
Uganda	58.8	71.4	77.2	85.5	79.5	80.0	74.6
Fragile countries	**59.1**	**59.6**	**62.9**	**67.7**	**66.2**	**65.4**	**66.0**
Burundi	67.7	59.3	63.5	80.1	81.1	73.8	73.5
Central African Rep.	118.0	98.2	103.7	99.6	109.1	108.3	108.2
Comoros	49.5	54.2	57.6	55.1	56.5	64.7	67.9
Congo, Dem. Rep. of	49.7	58.6	57.5	68.8	68.0	68.7	71.4
Côte d'Ivoire	78.8	80.0	73.3	63.9	63.0	66.6	65.1
Eritrea	24.6	25.3	23.8	24.0	24.7	23.3	...
Gambia, The	38.0	42.1	43.7	40.8	39.9	37.5	30.8
Guinea	...	...	...	...	...	...	...
Guinea-Bissau	30.8	42.7	38.9	66.7	72.9	69.7	56.9
Liberia	...	...	...	...	...	...	...
Madagascar	...	...	...	...	...	...	...
Malawi	...	...	...	...	...	...	...
São Tomé & Príncipe	66.7	74.9	108.3	110.5	82.4	75.4	58.5
Togo	67.5	60.6	59.0	67.1	64.3	66.1	61.8
Zimbabwe	...	...	...	...	...	...	...
Sub-Saharan Africa	**63.7**	**64.9**	**65.2**	**66.8**	**67.0**	**67.3**	**67.2**
Median	62.5	67.7	65.5	68.5	71.5	71.9	70.1
Excluding Nigeria and South Africa	61.6	62.9	63.6	65.8	65.9	66.2	65.8

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