1. Time for a Policy Reset

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

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

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

In close to half of the 45 countries in the region, growth has dropped from their trajectory prior to the advent of the more difficult external environment, in some cases significantly so. This group includes the region's oil exporters (Angola, most CEMAC countries,¹ and Nigeria) and several non-energy-resource exporters (such as Ghana, South Africa, and Zambia). Also in this category are Liberia and Sierra Leone, which had been severely impacted by the recent Ebola epidemic and are now suffering from lower commodity prices, as well as several countries in southern and eastern Africa that are suffering from the drought.

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

- In one-third of countries—all oil-importers and most with limited dependence on commodity exports, growth looks set to remain broadly unchanged relative to recent years.² Indeed, in many of these countries, especially low-income countries, this represents a continuation of the strong growth trend of recent years, stimulated by strong domestic investment and supported by lower oil prices. In a few countries though, this represents a persistence of lackluster growth.
- In a third (much smaller) group of countries growth prospects in 2015–16 have strengthened, reflecting either (1) a rebound from severe shocks or attenuation of conflict (such as in the Central African Republic); or (2) elevated public infrastructure investment, a good agricultural season, and an improved business environment (such as in Côte d'Ivoire and Senegal); and (3) a positive impact from the lower oil prices.

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

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

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





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

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

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

For natural resource exporters, a robust and prompt policy response is needed given the prospect of an extended period of sharply lower commodity prices. To date, the policy response—particularly among oil exporters—to a terms-of-trade decline of historic magnitude (Figure 1.2) has to a large extent been hesitant and insufficient. But with fiscal and foreign exchange reserve buffers limited and financing constrained, the required adjustment will happen, one way or another: the options really are between orderly and disorderly adjustment. And by far the best way to lay the groundwork for a quicker, durable, and inclusive economic recovery lies in an orderly adjustment process. Accordingly, for countries outside monetary unions, exchange rate flexibility coupled with supportive policies should be the first line of defense. As revenue from the extractive sector is expected to be durably reduced, countries need to contain fiscal deficits, with the urgency of adjustment depending on the extent of macroeconomic and debt vulnerabilities, and available external and fiscal buffers. To the extent possible, this adjustment should take

place on the revenue side where there is much scope in many countries (see October 2015 *Regional Economic Outlook: Sub-Saharan Africa*). However, expenditure measures will also be necessary where adjustment needs are urgent and benefits from revenue measures will take time to materialize.

In the region's market access countries, adequate policy recalibration consistent with the more difficult external financing environment is also needed. Mainly playing off the favorable external financing environment of recent years, fiscal and external current account deficits have been elevated in many of the region's frontier markets as they have sought to address extensive infrastructure gaps. However, the external financing environment has now tightened markedly—the increase in financing costs for sub-Saharan African borrowers has been much more pronounced than for most emerging markets (Figure 1.3). Against this backdrop,



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

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

Source: IMF, Commodity Price System.

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

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

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

Looking at more medium-term issues, Chapter 3 finds that financial development in the region has increased significantly over the past decades. However, based on an analysis of sub-Saharan Africa's structural characteristics and a comparison



Figure 1.3. Emerging Market Spreads: 2014–16

Source: Bloomberg, L.P.

Note: Data as of March 25, 2016.

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

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

with other developing regions, the chapter highlights that there is scope for further financial development in the region. Further development of financial institutions and markets could, in turn, boost the region's economic growth and lower its volatility. The chapter identifies sound macroeconomic fundamentals as a major driver of financial development in the region, whereas weak institutions have impeded development in the past.

ANATOMY OF A SLOWDOWN

A world of multiple shocks

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

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



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

Source: IMF, Direction of Trade Statistics.

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





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

notably cross-border bank loans, on which a broader group of countries than just the frontier markets rely, declined significantly from its level in 2014.

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

A severe impact

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

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

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

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

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





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

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

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



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

Fiscal policy has responded, but as yet not sufficiently...

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

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

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

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



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

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

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

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

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

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

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

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



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

1. Sources of Public Debt Increases 2013-151

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

-6

-8

-14

-12

-10

-8

Fiscal balance 2015, percent of GDP

-6

-4

-2

0

S₩Z

-2 0 2

Note: See page 82 for country abbreviations.

-14

-12 -10

-6

-8

¹ Lesotho and South Sudan have been excluded due to data availability. The "Other" category comprises debt relief (Heavily Indebted Poor Country and other), privatization proceeds, recognition of implicit or contingent liabilities, other country-specific factors (such as bank recapitalization), asset valuation changes, and other unidentified debt-creating flows as defined in the IMF-World Bank Debt Sustainability Framework. ² For South Sudan data are average 2012–13 compared with 2015.

³ Excludes Angola and Nigeria as they are no longer classified as a low-income countries. Debt risk ratings for Cabo Verde begin in 2014 and for South Sudan in 2015.

⁴ Data as of March 25, 2016.

⁵ Data as of March 25, 2016. EMBIG = JP Morgan Emerging Market Bond Index Global.

-8

-6

Fiscal balance 2013, percent of GDP

-4

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

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

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

- In some cases, terms-of-trade shocks have been exacerbated by reduced net inflows of capital from official and private sources triggered, for instance, by policy uncertainty (South Africa, Zambia), or delayed monetary tightening (Mozambique).
- In general, countries have allowed their currencies to adjust, but many have tried to smooth the exchange rate depreciation by dipping into already scarce international

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



Source: IMF, World Economic Outlook database.

Note: International reserves are pooled within the WAEMU and within the CEMAC and thus regional reserves are available to all member countries of the respective currency union. However, this chart depicts changes in international reserves for individual WAEMU and CEMAC member countries as this information helps assess individual countries' balance of payments pressures. CEMAC = Economic Community of Central African States; WAEMU = West African Economic and Monetary Union. See page 82 for country abbreviations. reserves (Figure 1.10). In the CEMAC, which maintains a fixed peg to the euro, the decline in international reserves has been substantial, despite the depreciation of the euro against the U.S. dollar.

In addition, the pass-through of nominal exchange rate depreciation and the impact of the drought on food supply (for example, Lesotho, South Africa, Zambia; Box 1.1) have pushed up inflation in some countries. To mitigate these pressures, many monetary authorities have lowered the growth in monetary aggregates (Madagascar did not), or raised their policy rates. Nigeria initially lowered its policy rate but partially reversed this stance in late March (Figures 1.11 and 1.12).









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

Source: IMF, International Financial Statistics.

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

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



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

Source: IMF, International Financial Statistics. Note: See page 82 for country abbreviations. also comes in a broader context of slower financial deepening in some cases and a correction of possibly excessive credit growth in others (Box 1.2).

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

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



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

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



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

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

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

Indeed, most recent data highlight that direct financing from the central bank has increased in many countries (Figure 1.15). In the CEMAC, limits for statutory advances to the government were increased in August 2015 (from 20 percent of fiscal receipts in 2008 to 20 percent of fiscal receipts in 2014, representing increases in individual country limits of up to 1¹/₄ percent of 2015 GDP). Nonetheless, most of the union's countries have already reached their new limits for direct central bank financing (in the case of Chad even with an exceptional increase in the limit). Direct financing by the central bank to the government has also increased in other countries compared to 2014, such as Tanzania (within existing legal limits), Guinea and Sierra Leone (largely due to the Ebola outbreak), and Ethiopia. In The Gambia, overdue advances have been securitized into long-term loans but remain on the central bank's balance sheet. In most cases, direct financing has taken place at below-market rates (for example, Ethiopia, The Gambia, Zambia). Bucking that trend, Ghana eliminated large previous balances in 2015 as part of the government's adjustment program.

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





Source: IMF. International Financial Statistics.

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

OUTLOOK AND RISKS

A subdued macroeconomic outlook ...

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

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

• Growth in oil-exporting countries is expected to decline to 2.2 percent. In particular, growth is forecast to slow further in Angola, given, among other factors, limited foreign exchange supply and lower levels of public spending, and in Nigeria as the adverse impact of lower oil prices is compounded by disruptions to private sector activity through exchange rate restrictions.

In the Republic of Congo though, growth is expected to pick up owing to the planned increase in oil production.

- In a number of large non-oil commodity exporters, growth is also expected to remain depressed. Indeed, activity is expected to further slow in Zambia because of depressed copper prices, electricity shortages, and weak domestic demand, and to halve to just 0.6 percent in South Africa on the back of low investor confidence, tighter policies, the decline in commodity prices, and the incidence of drought. In Ghana, non-oil growth is expected to be stable, albeit at a low level, while total GDP growth is expected to pick up slightly on account of increased oil production.
- Growth in the countries affected by the Ebola epidemic is expected to remain low in 2016. As the epidemic abates, however, growth in Guinea and Liberia is expected to pick up (by more than 3 percentage points in each case, to 4.1 percent and 2.5 percent, respectively), and to reach 5.3 percent in Sierra Leone, after a double-digit contraction in 2015.

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

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

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

Source: IMF, World Economic Outlook database.

¹ Excluding fragile states.

² Includes oil exporters: Angola, Cameroon, Chad, Republic of Congo, Equatorial Guinea, Gabon, Nigeria, South Sudan; and nonrenewable resource exporters: Botswana, Burkina Faso, Central African Republic, Democratic Republic of Congo, Ghana, Guinea, Liberia, Mali, Namibia, Niger, Sierra Leone, South Africa, Tanzania, Zambia, and Zimbabwe.

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

Table 1.2. Sub-Saharan Africa: Other Macroeconomic Indicators

| | 2004–08 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|-----------------------------------|---------------------|------------------|------|------|------|------|------|------|------|------|
| | | (Percent change) | | | | | | | | |
| Inflation, average | 8.8 | 9.8 | 8.2 | 9.5 | 9.3 | 6.6 | 6.4 | 7.0 | 9.0 | 8.3 |
| | (Percent of GDP) | | | | | | | | | |
| Fiscal balance | 1.7 | -4.6 | -3.4 | -1.2 | -1.8 | -3.1 | -3.6 | -4.1 | -4.6 | -4.1 |
| Of which: Excluding oil exporters | -0.6 | -4.1 | -4.3 | -3.7 | -3.7 | -4.0 | -4.1 | -4.1 | -3.9 | -3.5 |
| Current account balance | 21 | -28 | -0.8 | -0.6 | -18 | -24 | _4 1 | -59 | -62 | -55 |
| Of which: Excluding oil exporters | -4.3 | -4.8 | -3.9 | -4.8 | -7.1 | -7.6 | -7.3 | -7.6 | -7.6 | -7.8 |
| 5 | (Months of imports) | | | | | | | | | |
| Reserves coverage | 5.1 | 5.2 | 4.2 | 4.6 | 5.3 | 5.0 | 5.6 | 5.1 | 4.2 | 3.9 |
| | | | | | | | | | | |

Source: IMF, World Economic Outlook database.

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

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

... with significant downside risks

On the external front, uncertainty remains, particularly concerning the path and implications of the Chinese rebalancing, U.S. monetary tightening, growth in advanced markets, and their mutual interactions. Additional difficulties in Europe owing to financial or geopolitical developments could further weaken the external demand for African exports and the supply of capital and development aid.

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

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

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

POLICIES GENERALLY NEED TO ADJUST AT A FASTER PACE

The previous sections highlight a number of worrying trends.

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

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

• For countries that are not members of a currency union, exchange rates should adjust as needed to absorb the shock. Interventions by the central bank should be limited to mitigation of disorderly market movements, and more

generally, administrative measures on foreign exchange should be avoided. Central banks may need to tighten their monetary policy stance when inflationary pressures are persisting as a result of exchange rate depreciation, when drought-related spikes in food-price inflation are having second-round inflationary effects, or if warranted on macroprudential grounds. Such policies are likely to be needed to preserve macroeconomic stability, notwithstanding the adverse effect of tighter monetary policies on private sector activity through higher borrowing costs.

- Fiscal adjustment is urgently needed to safeguard macroeconomic stability, especially in the region's oil-exporting countries. In the CEMAC, the exchange rate tool is not available, and governments are reaching the limit on direct financial support by the central bank. For these countries, although it is appropriate to use international reserves to smooth the shock, the magnitude of the shock and the expectation that the reduction in resource income will persist, renders significant fiscal consolidation unavoidable (IMF 2015b), even at the cost of short-term output losses. More generally, the speed of fiscal consolidation across the region should be guided by countries' available buffers, domestic vulnerabilities, and financing constraints. In their consolidation efforts, countries should aim at mobilizing revenues and preserving priority expenditures, such as social expenditures, also with a view to not setting back their longer-term development goals.
- Several countries that are not significant nonrenewable commodity exporters are more favorably placed to weather the shocks and have so far coped reasonably well. In some of these countries, however, efforts to meet urgent spending needs, in particular to close infrastructure gaps, have led to widening deficits and increasing debt levels. These countries should use their current strength to build buffers and reduce their vulnerability to a sudden worsening of the economic climate.

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

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

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

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

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

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

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

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

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

Box 1.1. (continued)

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

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

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

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

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

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

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

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



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

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

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

Box 1.2. (continued)

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

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

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



Note: See page 82 for country abbreviations.

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

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

Box 1.3. Fiscal Dominance—An Illustrative Exercise

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

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

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

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

for countries at low risk of debt distress:

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

for countries at moderate risk of debt distress:

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

for countries at high risk of debt distress:

 $d_{target} = d_{threshold_moderate}$

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

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

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

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

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

Box 1.3. (continued)

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

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

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

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

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

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

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

Box 1.4. Regional Spillovers Within Sub-Saharan Africa

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

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

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

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

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

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

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

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

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

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

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

Box 1.4. (continued)

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

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



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

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

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

Box 1.5. The Threat of Terrorism

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

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

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

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



Box 1.5. (continued)

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

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