

Africa's Pulse

An analysis of issues shaping Africa's economic future



- ▶ The economic outlook for Sub-Saharan Africa remains robust, but growth is vulnerable to lower commodity prices and a slowdown in capital flows
- ▶ The frequency and strength of growth spurts have increased
- ▶ Growth has shifted the structure of African economies in favor of the resources and services sectors

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THE WORLD BANK

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Summary

- ▶ The economic recovery in high-income countries is lifting global growth, but the pace of recovery in these countries remains uneven.
- ▶ Economic activity was robust in much of Sub-Saharan Africa in 2013, supported by strong domestic demand—notably investment growth.
- ▶ The outlook for Sub-Saharan Africa remains favorable, but prospects are sensitive to downside risks from lower commodity prices and a sharp slowdown in capital flows.
- ▶ The pace of expansion in recent growth spurts in Sub-Saharan Africa has been faster and less volatile than in earlier periods and higher than in takeoffs in other developing countries.
- ▶ Patterns of growth in Sub-Saharan Africa show considerable variation across countries, with resource-rich countries growing at a faster pace than non-resource-rich countries.
- ▶ Growth has shifted sectoral shares, with the resources and services sectors gaining at the expense of agriculture and manufacturing.

Section 1: Recent Developments and Trends

- ▶ Global output growth is projected to strengthen to 3 percent in 2014, with much of the impetus coming from high-income countries.
- ▶ Despite emerging challenges, medium-term growth prospects for Sub-Saharan Africa remain positive, and regional gross domestic product (GDP) growth is projected to rise to 5.2 percent in 2014, and strengthen to 5.4 percent in 2015.

GLOBAL ECONOMY

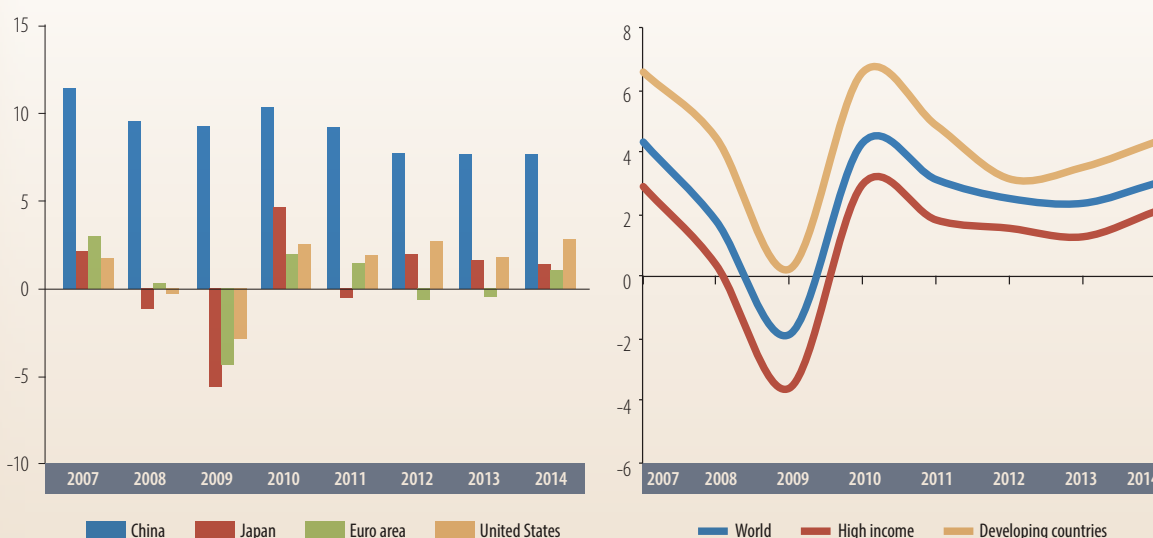
After five years of prolonged weakness, the global economy is finally mending. Global output expanded by 2.4 percent in 2013, and growth is set to rise to 3 percent in 2014 due to the recovery in high-income economies (figure 1).¹ The pace of the recovery in these countries remains uneven, however. In the United States, economic expansion was constrained to 1.9 percent in 2013 as the growth momentum slowed in Q4. Weak retail spending, job growth, and Purchasing Managers Index surveys point to a

¹ Statistical analysis in this report is prior to the rebasing of Nigeria's national accounts.

softening of economic activity in 2014Q1, as severe weather has weighed on consumer spending and business activity in Q1. Nonetheless, the underlying impetus remains solid. With fiscal drags diminishing and reduced policy uncertainty, the recovery is expected to pick up speed, and U.S. output is forecast to grow at 2.7 percent. Activity in the Euro area has continued to firm following a near doubling of growth to 1.1 percent in Q4, supported by strong exports. The region is expected to post growth of over 1 percent in 2014, although significant spare capacity and a continued slide in core inflation are generating concerns about deflation. In Japan, GDP growth was flat at 1 percent in Q4, thanks to weak net exports, and the overall expansion in economic activity came in at 1.5 percent for the year. Industrial output growth rebounded strongly in January, reflecting robust demand. Still, the cyclical recovery could be harder to sustain amid fiscal drags from a sales tax hike in 2014Q2 and if progress on structural reforms remains slow.

FIGURE 1: Global GDP growth

Percent



Global growth is picking up, with much of the impetus coming from high-income countries

Developing countries grew at an overall pace of 4.8 percent in 2013, compared to 4.9 percent in 2012. Trends were mixed across countries, however. China's economy grew by 7.7 percent in 2013 (as in 2012), although growth moderated in Q4 from an annualized 9.3 percent to 7 percent, amid rising uncertainties about investment and corporate debt. Economic activity firmed in developing countries (excluding China) in Q4, with the annualized pace of GDP growth picking up from 4.8 percent to 5.6 percent. Growth in East Asian countries excluding China continued to strengthen, supported by acceleration in exports and robust domestic demand in Indonesia, Malaysia, and the Philippines. Similarly, the Europe and Central Asia region benefited from strengthening Euro area demand. By contrast, weak domestic demand resulted in slowing industrial activity in India and lower Q4 GDP growth in Mexico.

There have been two recent episodes of global financial turbulence—May–August 2013 and early 2014—during which capital flows dropped off, and developing country equities and currencies fell sharply, forcing sharp adjustments on several emerging market countries. The second bout of market volatility followed a string of weaker-than-expected economic data in January and a sharp devaluation of the Argentine peso. Financial market volatility spiked to levels not seen since the summer of 2013. U.S. Treasuries declined by some 20 basis points in the last two weeks of January, while markets in developing countries came under pressure. Between January 22 and February 5, 2014, developing country stock markets sustained losses of 6 percent and their CDS spreads widened by some 100 basis points. The currencies of large middle-income countries with higher current account deficits and external financing needs came under intense pressure. The Turkish lira and South African rand sustained declines of 6.4 and 4.7 percent, respectively, in January, prompting their central banks to raise interest rates.

The outlook is for a gradual strengthening of the global recovery. Global GDP growth is projected to strengthen from 2.4 percent in 2013 to 3 percent in 2014, rising to 3.3 percent in 2015 and to 3.4 percent in 2016, with much of the impetus coming from high-income countries (figure 1). Growth in high-income economies is expected to rise from 1.3 percent in 2013 to 2.1 percent in 2014 and 2.4 percent in 2016, as drags on growth from government and household budget consolidation efforts draw to a close and demand for consumer durables and investment goods firms. Growth in developing countries is expected to rise to 5 percent in 2014 and average 5.5 percent in 2015-16, supported in part by the ongoing recovery in high-income countries.

Increased financial market and capital volatility remains a significant downside risk to the global recovery. Notwithstanding the support from stronger external demand, developing countries face significant risks from the normalization of monetary policy in high-income countries. According to U.S. Congressional Budget Office (CBO) estimates, less than half of the eventual increase in U.S. long-term rates has occurred thus far (the CBO estimates they will rise to 5 percent, compared to just below 3 percent today and 1.6 percent in May 2013). While the baseline is for a gradual tightening of global financial conditions, a rapid and disorderly rise in interest rates or a sharp pullback in capital flows cannot be ruled out. Such developments could lead to lower investments and severe financial disruptions.

Other risks to the global economy include those arising from China's high debt levels, geopolitical tensions, and downside risks from commodity prices. China's commitment to improve resource allocation and increase the role of market forces in the economy has been reflected in major reforms since November 2013. But rebalancing the economy away from investment and export to consumption could be a challenge. Any "hard landing" could have substantial spillovers to economies within the East Asia region, and to commodity exporters in Sub-Saharan Africa. Geo political tensions (as in Crimea) also pose tail risks, and could have substantial confidence impacts that cut into global spending and activity, and cause dislocations in global financial markets.

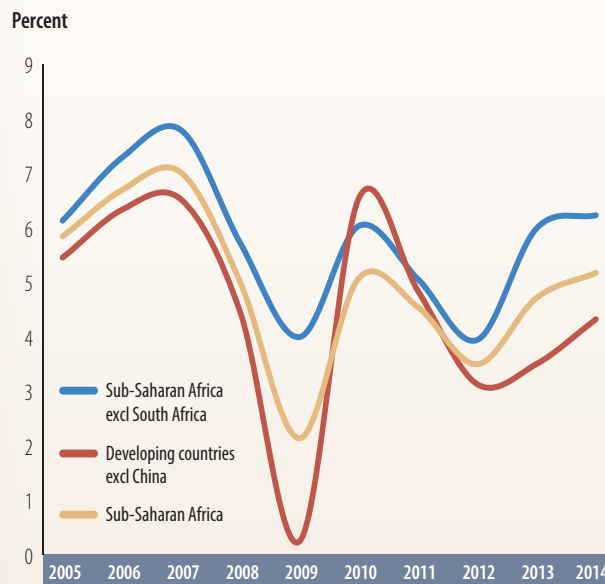
RECENT ECONOMIC DEVELOPMENTS IN SUB-SAHARAN AFRICA

Economic activity remained robust in much of Sub-Saharan Africa in 2013. GDP growth in the region strengthened to 4.7 percent in 2013, up from 3.5 percent in 2012, supported by strong domestic demand (figure 2). In South Africa, growth was slower at 1.9 percent, hurt by structural bottlenecks, tense labor relations, low investor confidence, and weak external demand. Excluding South Africa, average output growth for the rest of the region was 6.1 percent, second only to developing Southeast Asia and Pacific at 7.2 percent and well above the global GDP growth rate at 2.4 percent.

Sub-Saharan countries are among the fastest-growing countries in the world (figure 3). Growth was strong in resource-rich countries, including Sierra Leone and the Democratic Republic of Congo due to higher production in the mining sector. Growth rebounded in the postconflict countries of Côte d'Ivoire and Mali, supported by improvements in political stability and the security situation. Non-resource-rich countries, particularly Ethiopia and Tanzania, also experienced solid economic growth in 2013. Due to conflict, economic activity contracted sharply in the Central African Republic, while the oil economy in South Sudan was disrupted by the civil war that erupted toward the end of the year.

Strong investment demand and robust private consumption were key drivers of growth in the region. Gross fixed capital formation rose an estimated 8 percent in 2013, reaching 23.4 percent of GDP, supporting the expansion of production capacity. Capital flows to Sub-Saharan Africa continued to rise, reaching an estimated 5.3 percent of regional GDP in 2013, significantly above the developing-country

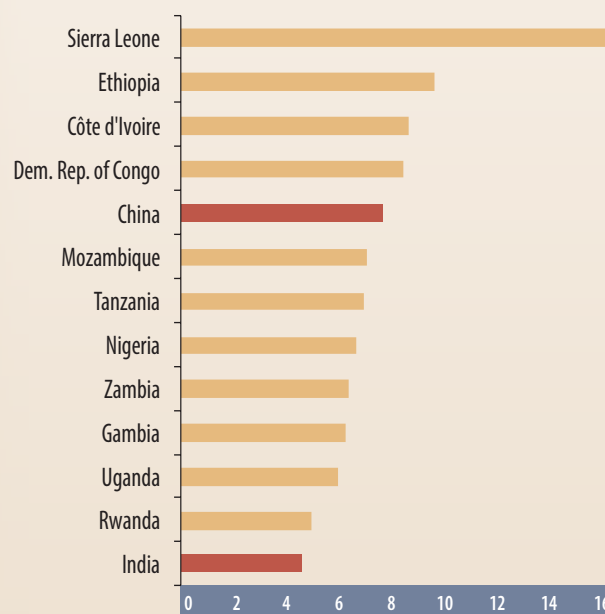
FIGURE 2: Real GDP growth



Source: World Bank.

Real GDP growth picked up in Sub-Saharan Africa in 2013

FIGURE 3: Real GDP Growth in selected countries, 2013

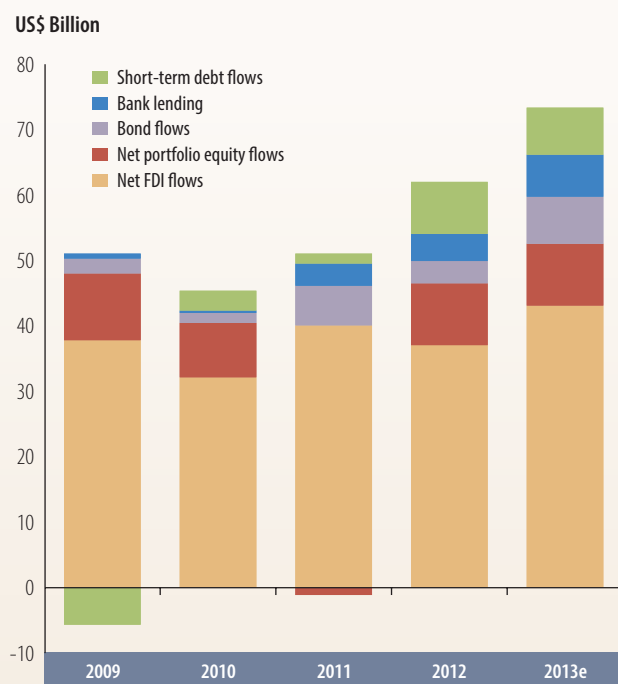


Source: World Bank and WEO 2014.

Both resource-rich and non-resource-rich African countries are among the fastest-growing countries in the world

FDI inflows dominate capital inflows to the region

FIGURE 4: Composition of capital flows to Sub-Saharan Africa



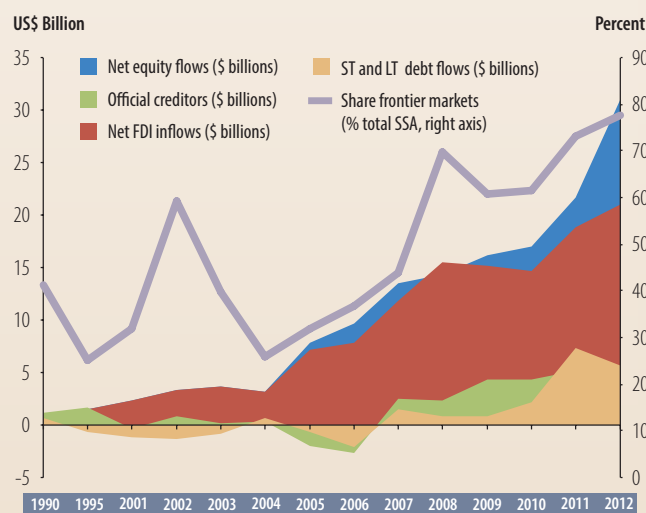
Source: World Bank.
Note: e = estimate.

average of 3.9 percent. Net foreign direct investment (FDI) inflows to the region grew 16 percent to \$43 billion in 2013, boosted by new hydrocarbon discoveries in many countries including Angola, Mozambique, and Tanzania (figure 4). Higher FDI along with rising debt-creating flows helped lift overall net capital flows to the region. While much of the FDI has focused on the region's burgeoning resource sector, some 30 percent of it focused on the domestic market. Consumer-oriented FDI projects in manufacturing and services expanded, including in telecommunication, banking, and transport (box 1).

Frontier markets (Ghana, Kenya, Mauritius, Mozambique, Nigeria, Senegal, Tanzania, Uganda, and Zambia) have attracted much of the net capital flows, particularly foreign direct investment, to the region in recent years. In 2012, FDI inflows to these countries were \$21 billion, nearly seven times the amount of short- and long-term debt flows that these countries received (figure 5). Net portfolio equity inflows to the region are largely concentrated in Nigeria and South Africa. Nigeria has seen an increase in net portfolio equity inflows from a mere \$0.5 billion in 2009 to \$10 billion in 2012.

Frontier markets are attracting an increasing share of net capital flows to the region

FIGURE 5: Capital flows to Sub-Saharan Africa's frontier markets



Source: World Bank.
Note: LT = long term; ST = short term.

Foreign direct investment (FDI) to Sub-Saharan Africa expanded more than 30-fold in the last 20 years, 7.5 times faster than in high-income countries and nearly 10 times faster than global GDP. Two investment trends emerge as central to driving this rapid FDI growth in Africa: (i) the extended commodities boom brought about by the unprecedented scale of development in Asia, and (ii) the massive expansion offshoring in global value chains (GVCs). For host countries in Africa, the new wave of FDI not only delivers investment and employment, but opens up new opportunities through deeper global trade integration. However, the extent to which African countries benefit from FDI depends on whether they are able to capture the productivity-enhancing “spillovers” of knowledge and technology.

Recent research (Farole and Winkler 2014) suggests the experience in Sub-Saharan Africa on achieving FDI spillovers has been largely disappointing. At the heart of the problem is that linkages between foreign investors and local economies—especially through supply chains—have remained limited in Africa. But there are some important differences hidden in the aggregate story.

First, some sectors may have greater potential for integration than others. Survey results indicate that while foreign investors purchase virtually no inputs from domestic suppliers in the apparel sector, local supply relationships are more extensive in mining and (not surprisingly) much more in agribusiness (figure 6). One of the main reasons for differences across sectors (especially between mining and apparel) relates to the sourcing strategies of foreign investors in the context of their global supply and production networks. In the apparel sector, local management in African host countries has very limited power over sourcing decisions, most of which are made by parent companies or by global buyers like Walmart and The Gap, which specify what and from whom to source fabric, buttons, and zippers. In mining, by contrast, most of the decision-making power rests with local management, although here, too, global procurement is increasingly encroaching (figure 7).

One positive feature of these findings is that, even in the apparel sector, foreign investors source the large majority of inputs locally (rather than importing them); it is just that often these are sourced from other foreign investors. This means that while local ownership does not increase, local jobs are still created. It also means there may be scope for local firms to take over these supply relationships in time.

Second, some countries appear to be doing better than others. While the survey sample may be too limited to generalize, the degree of local sourcing (and the use of local skilled labor) is likely to be linked closely to the capacity of local firms (and skilled workers), which is in turn partly a function of the depth of local markets. This suggests a “catch-22” situation, whereby generating productivity-enhancing spillovers is dependent on having

BOX 1:
Is Africa getting the most out of FDI? The challenge of generating productivity spillovers in a world of global value chains

FIGURE 6: Distribution of inputs by sourcing location

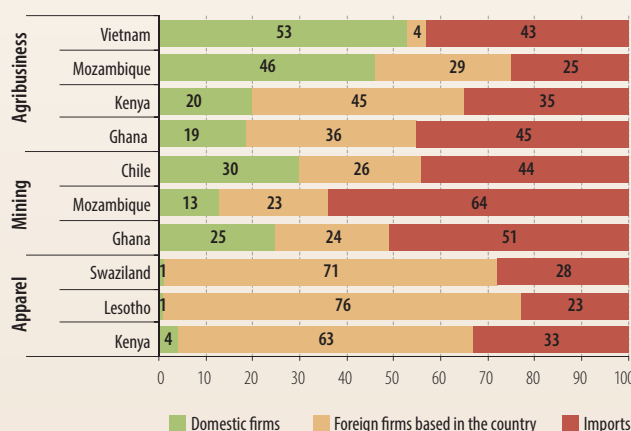
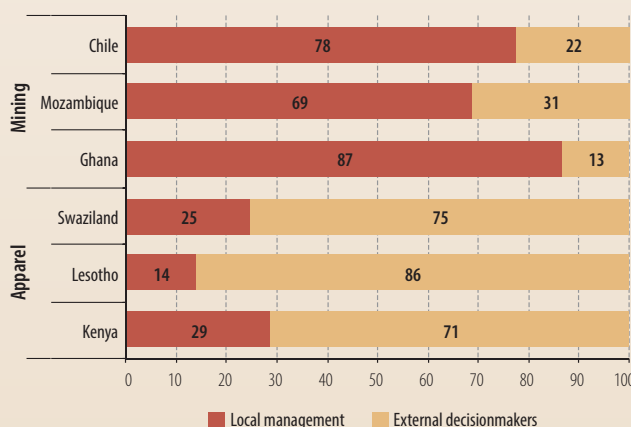


FIGURE 7: Location of sourcing decision making



BOX 1:
Continued

a base of relatively productive firms and workers in the first place. Indeed, this is precisely what the study finds. Results from a large cross-country regression^a show absorptive capacity is the most important factor mediating productivity spillovers from FDI. More specifically, firms that are relatively large, spatially clustered, export oriented, and technologically sophisticated are most likely to be affected by the presence of foreign investors.

Thus, generating spillovers from FDI is not easy, particularly for small economies with limited existing capacity. And in the context of GVC-oriented FDI, the scope for shaping and managing spillovers is increasingly limited. The research suggests, however, that governments have a role to play in facilitating spillovers. Much of this is long term and involves getting the “basics” of policies and institutions right, in particular investing heavily in education and skills development and supporting trade and financial market openness. Beyond this, however, the research suggests there are a number of things governments can do to deepen linkages and support the potential for spillovers in the short to medium term. It is important to note that local context should determine appropriate policies.

First, actions to expand supply chain and labor market linkages may be considered. One possibility is to promote (although not compel) joint ventures; an important finding from the cross-country regressions is that partly foreign-owned firms (joint ventures) are significantly more integrated into domestic markets than fully foreign-owned firms.

Second, governments can help overcome information gaps around local supply capabilities and align fiscal incentives used to attract foreign investors with the goals of building local supply capacity and local technical skills (including some level of conditionality). Governments can also improve the environment for domestic contract enforcement and other barriers to formal contracting with local suppliers. One interesting finding from the survey was that local suppliers that had formal contracts with foreign investors were 56 percent more likely to receive critical technical assistance from investors than those in more ad-hoc supply relationships.

Third, government can create an environment conducive to facilitating translating linkages into spillovers. An example might be incentivizing foreign investors to employ “appropriate technology”—the study productivity spillovers were greater when the technology gap between foreign investors and local firms was not too large. Another example might be promoting the provision of technical assistance, particularly around building quality capabilities of local firms, which was shown clearly to influence the capacity and performance of local suppliers.

Finally, the study suggests that programs to support linkages and spillovers need to take into account the heterogeneity of local firms, and therefore concentrate limited resources (at least initially) on relatively higher capacity, high-potential firms.

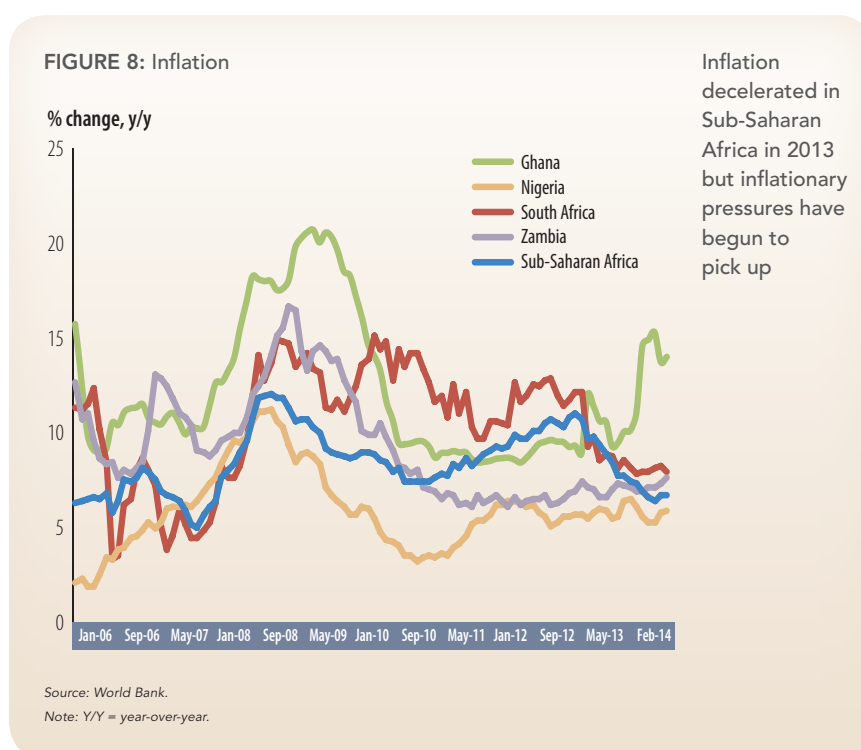
Source: Farole and Winkler 2014.

a. Covering 25,000 domestic manufacturing firms in 78 low- and middle-income countries from the World Bank's Enterprise Surveys over 2006–10.

Lower inflation supported the demand for goods and services. Due in part to lower international food and fuel prices, and to prudent monetary policy, inflation decelerated in the region, growing at an annual rate of 6.3 percent (median rate 7.7 percent) in 2013, compared with 10.7 percent (median rate 10.4) a year ago (figure 8). Some countries, such as Ghana and Malawi, have seen an uptick in inflation because of depreciating currencies. Remittances to the region grew 6.2 percent to \$32 billion in 2013, exceeding the record of \$30 billion reached in 2011. These inflows, combined with lower food prices, boosted household real income and spending.

The region's export performance was adversely affected by the fall in commodity prices. With the exception of energy, all the key commodity price indexes declined significantly in 2013: precious metals

(down almost 17 percent), agriculture (down 7.2 percent), and metals (down 5.5 percent). Crude oil prices (World Bank average), which have been remarkably stable during the last three years, averaged \$104 per barrel during 2013, marginally lower than the \$105 per barrel average of 2012. Reflecting the fall in commodity prices and weak demand, export receipts were depressed in the region, even though, on a volume basis, exports increased in many countries. Meanwhile, imports rose strongly, underpinned by a robust demand for capital goods, as governments across the region ramped up investment projects in infrastructure and construction. As a result, the regional current account deficit widened from 1.6 percent of GDP in 2012 to an estimated 3.1 percent of GDP in 2013, but there is considerable variation across countries.



The tourism sector grew at a robust pace in 2013, helping to support the balance of payments of many countries in the region. Data from the United Nations World Tourism Organization show that international tourist arrivals in Sub-Saharan Africa grew by 5.2 percent in 2013, reaching a record 36 million, up from 34 million in 2012, contributing to government revenue, private incomes, and employment. This increase was above the average world growth of 5 percent but less than the 6.2 percent growth achieved in the region in 2012. Demand was strong throughout the year, with a moderate slowdown in the second quarter. Leading growth in 2013 were destinations in Rwanda (up 13.8 percent), Zimbabwe (up 12.5 percent), the Seychelles (up 10.8 percent), and Cabo Verde (up 5.3 percent). Madagascar and Kenya, two leading destinations in the region, saw significant declines in international tourist arrivals due to domestic events.

Fiscal deficits widened in 2013 and debt-to-GDP ratios rose across the region. The largest deterioration of fiscal balances occurred among oil exporters and low-income countries. In Cameroon and Chad, fiscal deficits as a share of GDP more than doubled in 2013; and in Malawi, the overall fiscal deficit widened to about 15 percent of GDP after rising to 11.3 percent of GDP in 2012. Among middle-income countries, Ghana's fiscal deficit remained high at around 11 percent of GDP in 2013; in Zambia, the fiscal deficit widened sharply in 2013, and in South Africa, the fiscal deficit is forecast to remain unchanged at 4.2 percent of GDP in 2013/14. Ambitious public investment programs and large increases in public wages coupled with weak revenues contributed to the deterioration of fiscal balances in many of these countries. In Zambia, for example, the government increased civil servants' salaries by 27 percent in

2013 (and the wage bill was 9.4 percent of GDP), and in Ghana the wage bill remained over 10 percent of GDP in 2013.

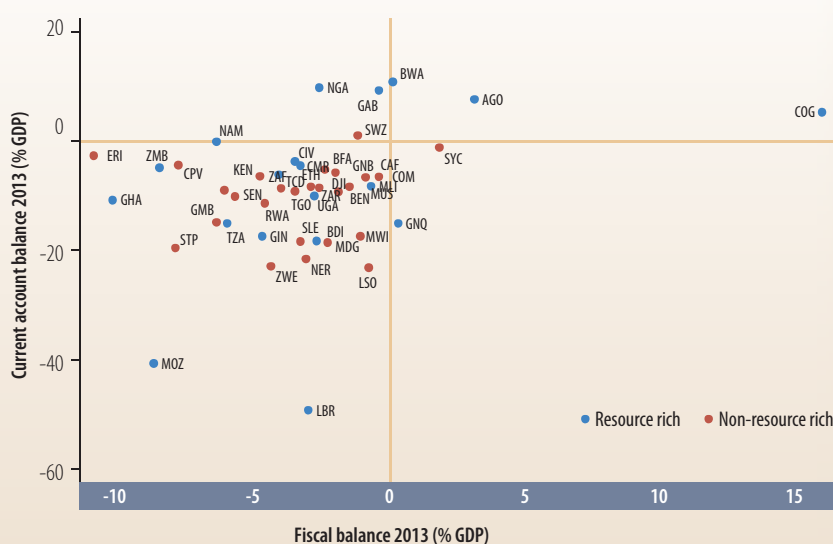
The debt-to-GDP ratio for the region has risen moderately from 29 percent in 2008 to 34 percent in 2013. Overall, Sub-Saharan Africa's debt ratios are lower than those for other developing regions, partly because of debt cancellation under the Heavily Indebted Poor Countries initiative and the Multilateral Debt Relief Initiative. The regional average, however, reflects significant differences across countries. Among low-income countries, the debt-to-GDP ratio rose to an estimated 46 percent of GDP in Senegal and 48 percent of GDP in Mozambique. Among middle-income countries, debt-to-GDP ratios exceeded 50 percent of GDP in Ghana and 90 percent of GDP in Cabo Verde in 2013, raising concerns about debt sustainability going forward.

Fiscal policy has remained expansionary in the region even as growth has returned to precrisis levels in many countries, resulting in depleted fiscal buffers and rising vulnerability to external headwinds. Botswana, where fiscal consolidation has underpinned macroeconomic stability in recent years, remains a notable exception. Reflecting prudent fiscal policy, the budget remained broadly balanced in 2013, allowing the public debt ratio to fall to 16 percent in 2013 from 18 percent in 2012.

Five years after the global financial crisis, more than a third of Sub-Saharan African countries continue to see both fiscal and current account balances that are weaker than at the beginning of the crisis. Resource-rich countries mostly entered the crisis with large current account deficits: The median current account deficit was 9.3 percent of GDP and the fiscal deficit was close to zero percent of GDP. The median value for these deficits in 2013 was 6.2 percent and 3 percent, respectively. Non-resource-rich countries entered the crisis with current account and fiscal deficits at 8 percent and 1.8 percent of GDP, respectively. While there is heterogeneity across countries, many resource-rich and non-resource-rich countries have seen deterioration in their current account and fiscal balances (figure 9). In some countries such as Liberia, the

Current account and fiscal deficits remain large in many Sub-Saharan African countries

FIGURE 9: Current account and fiscal balance, 2013



Source: WEO 2013.

widening of the current account deficit has been driven by FDI: During 2009-12, the current account deficit averaged nearly 33 percent of GDP while net FDI inflows averaged 52 percent of GDP.

Developments since the beginning of 2014, and the global financial turbulence of May–August 2013, have underscored the need for reforms

to reduce fiscal and external imbalances. At the beginning of the year, as the United States began to taper its asset purchase program, the currencies of South Africa and other frontier market economies came under renewed pressure (box 2). The Ghanaian cedi and Zambian kwacha depreciated sharply against the U.S. dollar, and South Africa's central bank hiked interest rates by 50 basis points to prop up the rand. Monetary policy was also tightened in Ghana and Zambia as inflation worries and exchange rate depreciations prompted their central banks to hike interest rates, by 200 basis points in the case of Ghana and 50 basis points in the case of Zambia. In Nigeria, the central bank continued its tight monetary policy, leaving the policy rate unchanged at 12 percent, while foreign reserves fell 11.7 percent to \$37.8 billion in March from \$42.9 billion in December as the government intervened in the foreign exchange market to support the naira.

With global financial conditions tightening, short-term capital inflows have declined significantly, suggesting changing investor sentiment toward the region. Meanwhile, the slowdown of economic growth in China is translating into lower industrial metal prices. For example, the price of copper, a key export for several African countries including Zambia, has decreased by more than a third from its 2011 peak of \$10,190 per ton. Falling commodity prices, an important source of export and government revenue in many countries in the region, could exacerbate fiscal and current account deficits in these countries, leaving their currencies vulnerable to external headwinds.

The summer of 2013 was a turbulent period for many emerging markets, as “tapering talk” roiled these countries, leading to a sharp selloff in their equity and bond markets, and resulting in depreciation of their exchange rates. The impact across emerging markets was not felt uniformly though; some countries were affected more than others. The worst-affected countries, Brazil, India, Indonesia, Turkey and South Africa, since branded the “fragile 5,” saw their exchange rates plunge by an average 12.2 percent, reserves decline by 6.4 percent, and stock prices decline by 5.9 percent.

BOX 2:
Tapering talk:
The Impact
on African
Economies

A recent paper (Eichengreen and Gupta 2014) documented the effect of “tapering talk” on a large set of emerging markets and asked who was hit by the U.S. Federal Reserve’s tapering talk and why.^a Two key points emerged from this study. First, there is little evidence that the countries with stronger macroeconomic fundamentals (smaller budget deficits, lower debts, more reserves, and stronger growth rates in the immediately prior period) were rewarded with smaller falls in exchange rates, foreign reserves, and stock prices. Second, what mattered for the emerging markets was the size of their financial markets.^b Investors seeking to rebalance their portfolios concentrated on emerging markets with relatively large and liquid financial systems. These were perhaps the markets where they could most easily sell without incurring losses, and where there was the most scope for portfolio rebalancing. Their analysis provided an obvious contrast with so-called frontier markets, with smaller and less liquid financial systems. The findings were a reminder that success at growing the financial sector can be a mixed blessing—while easing the financing constraints on developing countries, it can accentuate the impact of financial shocks emanating from outside.

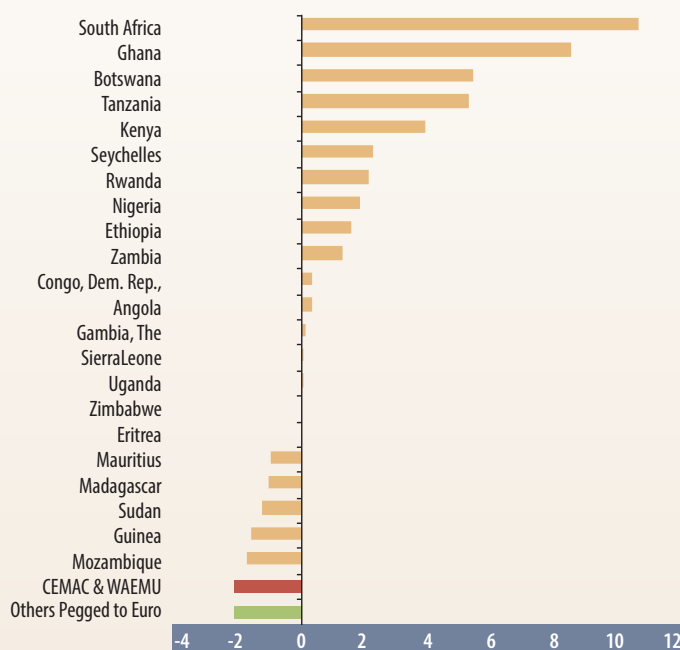
A review of the changes in the nominal exchange rate during April–August 2013 for 40 African countries^c shows considerable heterogeneity in outcomes, with the largest exchange rate depreciation experienced by countries with floating exchange rates (figure 10): South Africa (10.6 percent), Ghana (8.5 percent), Botswana (5.4 percent), Tanzania (5.2 percent) and Kenya (3.9 percent). Overall, the exchange rate changes in African countries were less marked than in the sample of emerging market countries from other regions

BOX 2:
Continued

in Eichengreen and Gupta (2014). Exchange rates depreciated in 55 percent of the emerging markets in other regions, and the proportion of such African countries was much smaller at 37 percent. The extent of depreciation in African countries was smaller, as well, with average depreciation at 2.9 percent compared to nearly 6 percent in emerging markets in other regions.

Exchange rate changes varied across African countries, but were smaller than in other regions

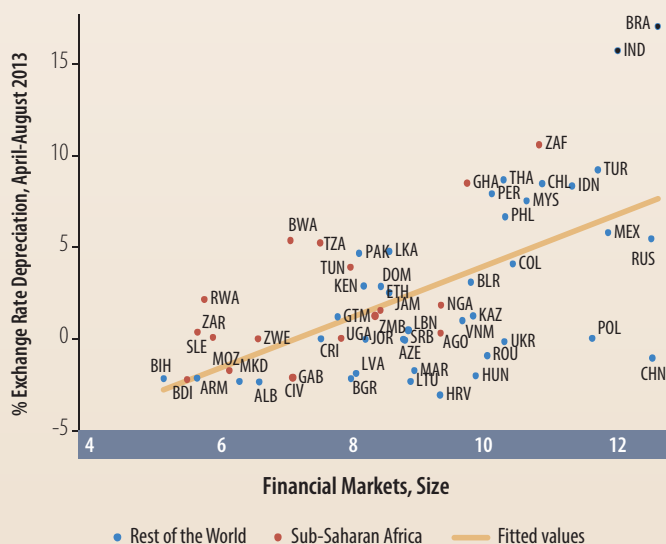
FIGURE 10: Exchange rate depreciation, April–August 2013



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

Size of the financial markets mattered in accentuating the impact of financial shocks emanating from outside

FIGURE 11: Link between exchange rate depreciation and financial market size, April–August 2013



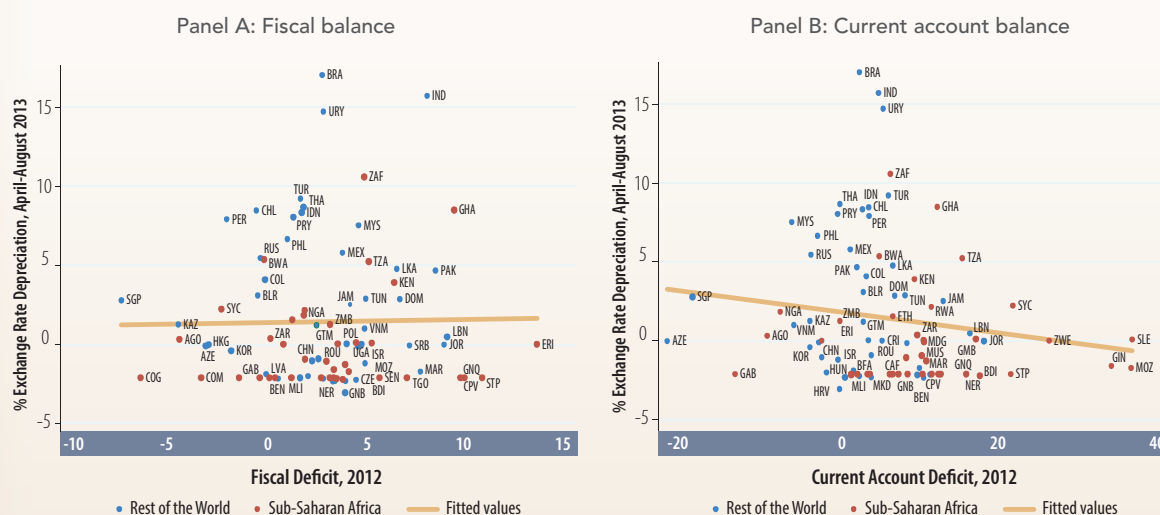
Source: Global Financial Stability 2013

Note: Financial market size is measured by total external private financing—that is, inflows of equity, bonds, and loans during 2010–12 transformed into logs.

The empirical findings in Eichengreen and Gupta (2014) are extrapolated and extended to see why African countries were relatively insulated from the summer turmoil. The answer seems to be that the size of financial markets and the extent of foreign capital are relatively small in African countries. This small size seems to have provided insulation (figure 11). Another relevant factor is the composition of capital that goes to Africa. Empirical evidence in the literature overwhelmingly shows that not all capital flows are alike. FDI flows are considered more stable than portfolio flows, and within portfolio flows, equity flows are considered more stable than debt-creating flows. African countries rely less on fickle-natured portfolio debt flows.

The analysis also shows that factors that were not considered important determinants of the exchange rate effect during summer 2013 by Eichengreen and Gupta continue to be irrelevant for the extended sample, as well. Indeed, economic growth, fiscal deficit, level of current account deficit, and public debt in economies are not associated with the exchange rate depreciation (figure 12).

FIGURE 12: Determinants of exchange rate depreciation during “tapering talk,” April–August 2013



BOX 2:
Continued

Fiscal and current account deficits did not matter for exchange rate changes

The experience of the fragile 5 holds some lessons for African economies. As the frontier African economies attract increasingly larger amounts of capital flows in future, it is imperative for them to keep encouraging the flows that are considered more stable, such as FDI. They need to be aware that with larger capital flows comes the larger responsibility of managing them well. As the reliance of frontier economies on foreign capital increases, they need to implement policy frameworks that can handle the potential volatility in capital flows, which include their firms and banks being able to absorb exchange rate volatility; using a broad array of macroprudential measures to avoid appreciation of the real exchange rate and widening of the current account deficit in response to foreign capital inflows; and maintaining policy buffers in fiscal and monetary policies to respond to shocks emanating from beyond their borders.

Source: Eichengreen and Gupta 2014.

- The analysis by Eichengreen and Gupta focused on about 50 emerging markets with little representation from the Africa region (the only African countries they included were Ghana, Kenya, Mauritius, and South Africa).
- What also mattered was the real exchange rate appreciation or widening of current account deficits in the earlier period, when large amounts of capital were flowing into emerging markets. Financial market size is measured by total external private financing—that is, inflows of equity, bonds, and loans during 2010–12 (see Global Financial Stability Report [IMF 2013]).
- Fourteen countries had pegged their exchange rates to the euro as part of their monetary unions, the Central African Economic and Monetary Community (CEMAC) and the West African Economic and Monetary Union (WAEMU). Another four countries had pegged their currencies to the euro outside these unions; one adopted the U.S. dollar as its legal tender; and the remaining 21 countries had some kind of floating exchange rates.

NEAR-TERM GROWTH PROSPECTS

Despite emerging challenges, medium-term growth prospects for Sub-Saharan Africa remain favorable. GDP growth is projected to rise to 5.2 percent in 2014 from 4.7 percent in 2013, and to strengthen to 5.4 percent in both 2015 and 2016, indicating that Sub-Saharan Africa is expected to remain one of the fastest growing regions.

Robust domestic demand, underpinned by investment in natural resources and infrastructure and household consumption, will continue to drive growth in most countries in the region. External demand will also be supportive of growth in the region in view of the strengthening recovery in high-income countries, which bodes well for export demand and investment flows. As the Federal Reserve continues to taper its asset purchases and financial conditions in the United States and other developed

countries tighten, capital inflows are projected to fall in the region in 2014. Countries with liquid capital markets and large financing requirements, notably South Africa but also frontier market countries, are expected to suffer a tangible impact. However, for most countries in the region, the impact of tighter global financing conditions is likely to be limited. This is partly because foreign direct investment, the dominant type of capital inflows for the region, is less sensitive to global interest rate hikes than short-term portfolio flows. Nevertheless, FDI flows are expected to be lower in 2014 due to weaker commodity prices and slower growth in emerging markets. Still, new discoveries of oil, gas, and metals are expected to attract substantial FDI flows into the region, which should support growth in many countries. Besides FDI, public investment in infrastructure, particularly in energy, roads, and ports, is also expected to continue to expand, especially in fragile countries, which should help boost industrial production and strengthen export capacity.

Private consumption is expected to remain robust in most countries in the region during 2014–16, underpinned by a growing population, improving real per capita incomes, and continued price stability. Adequate rainfalls, improved agricultural production, and stable exchange rates are expected to help contain inflationary pressures in low-income countries, which should keep interest rates low. Although the inflation outlook is expected to remain favorable across the region, prices will trend higher due to droughts in some countries or pass-through from currency depreciations in others, particularly Ghana and South Africa. Combined with steadily rising remittances, these effects should stimulate private consumption and permit a robust expansion of domestic demand.

Government consumption is expected to rise at a moderate pace. Large public sector wage bills, transfers and subsidies, and other recurrent expenditures for social sector projects (as governments strive to achieve better development outcomes) will continue to drive public expenditures in 2014. However, governments in many countries, including Ghana, Senegal, and Zambia, are expected to carry out fiscal consolidation measures in an effort to bring public expenditures down to sustainable levels and restore fiscal buffers.

Net exports are expected to exert a drag on GDP growth in the region over the forecast horizon. Commodity prices are expected to remain subdued over the forecast period due to slowing growth in emerging markets, notably China. In particular, prices of copper, iron ore and oil are expected to remain relatively soft. The weakening of commodity prices will be particularly damaging for countries where output is low, such as among the oil-exporting Central African countries where production is stagnating. Metal-exporting countries, such as Zambia, have maintained or increased output, which should help mitigate the weakness of metal prices. Overall, export earnings are expected to remain depressed. On the import side, the demand for capital goods is projected to remain strong. Reflecting the buoyant growth in import demand, despite sharp currency depreciations in some cases and subdued global commodity prices, the current account deficit in the region is projected to increase from an estimated 3.1 percent of GDP in 2013 to an average of 3.4 percent of GDP in 2014 and 2015.

Regional growth will be broad based, driven by resource-rich countries, low-income countries, and the recovery in fragile countries that are seeing improvements in political stability and security. At the subregional level, growth is expected to be strong in East Africa, supported by strong FDI flows

into offshore natural gas resources in Tanzania, and the onset of oil production in Kenya and Uganda. Ethiopia is expected to be among the fastest-growing countries in the region, with growth underpinned by strong public investment in agriculture and infrastructure. In Southern Africa, tight monetary policy combined with labor strikes and weak electricity supply will keep growth subdued in South Africa; but despite falling copper prices, growth is expected to remain robust in Zambia as the high grades of Zambia's copper reserves keep production profitable and new mines open. In Angola, following a slowdown in 2013, growth is expected to pick up in 2014, supported by a rebound in oil production and infrastructure investment.

Within the major economies in West Africa, growth is expected to remain robust in Nigeria, supported by the continued expansion of the nonoil sector, with growth in manufacturing, communication, transport, and real estate remaining robust, and as agricultural production expands in response to reforms in the sector. However, growth is expected to remain subdued in Ghana as higher domestic interest rates and inflation weigh on demand. In francophone West Africa, growth prospects will be affected by drought in the Sahel, where erratic rainfalls could lower agricultural production and lead to higher food prices. Nevertheless, driven by FDI flows in the natural resource sector, increased production from projects coming onstream, and public investment in infrastructure, growth is expected to remain robust in many of these countries, particularly in Côte d'Ivoire.

Overall, real GDP growth in the region is expected to remain stronger than in many other developing countries, allowing for some relative gains in real per capita incomes. Poor physical infrastructure will, however, continue to limit the region's growth potential. While fixed investment has increased in recent years, a further scaling up of infrastructure spending is needed in most countries in the region if they are to achieve a lasting transformation of their economies. The region's infrastructure deficit is most acute in the energy and road sectors. Across the region, unreliable electricity supply and poor road conditions continue to impose high costs on business, reduce efficiency, and impede intraregional trade.

RISKS TO THE ECONOMIC OUTLOOK

The risks to the region's outlook are mainly on the downside and include lower commodity prices brought on by weaker growth in emerging markets; the reversal of capital flows resulting from tightening of global monetary conditions; and domestic risks from political unrest, security problems, and inflationary pressures.

Lower commodity prices

Weaker demand combined with increased supply could lead to a sharper decline in commodity prices than assumed in the baseline. In particular, if Chinese demand, which accounts for about 45 percent of total copper demand and a large share of global iron ore demand, remains weaker than in recent years and supply continues to grow robustly, copper and iron ore prices could decline more than the baseline presented in the outlook, with significant negative consequences for the metal-producing countries. Monetary risks, including the normalization of monetary policy in high-income countries, should be

less of a concern for metal prices. Over the years, the effect of short-term interest rates on metals has been mixed and modest. The most important impact is likely to come from the weakening of industrial production growth. Markedly weak Purchasing Managers Index and industrial production figures during January–March suggest that China’s economy may be slowing amid the rebalancing of its growth toward more reliance on demand and less on investment. A major slowdown in China’s growth and weaker commodity prices would significantly weaken long-term foreign investment and growth in many countries in the region.

Tighter monetary conditions

Capital flows to developing countries are expected to face headwinds in 2014 as the process of normalization in global financing conditions continues. Financial market and capital flow volatility has already led to sharp policy adjustments in countries in the region. A rapid and disorderly rise in interest rates or pullback in capital flows remains a major concern for these countries. Simulations conducted for the January 2014 Global Economic Prospects Report suggest that a sudden 100-basis-point increase in U.S. bond yields, as observed in summer 2013, could be expected to lower capital inflows to developing countries by about 50 percent for several months, implying a significant increase in the cost of raising capital, which could lead to lower investment and growth.

South Africa, which has strong links with global financial markets, is particularly vulnerable to sudden stops of capital inflows given its reliance on portfolio inflows to finance its current account deficit. In the recent bout of financial volatility the rand depreciated sharply, prompting the central bank to hike interest rates. As the recent episode of market volatility has demonstrated, frontier market countries such as Ghana, Nigeria, and Zambia, which have seen significant portfolio inflows in local securities markets, will also be affected by the reversal of capital flows. Similarly, countries that are planning to tap the international bond markets are likely to face higher coupon rates (box 3). Countries with ongoing political and economic vulnerabilities and where progress in reducing fiscal and external imbalances has been slower are likely to experience greater volatility.

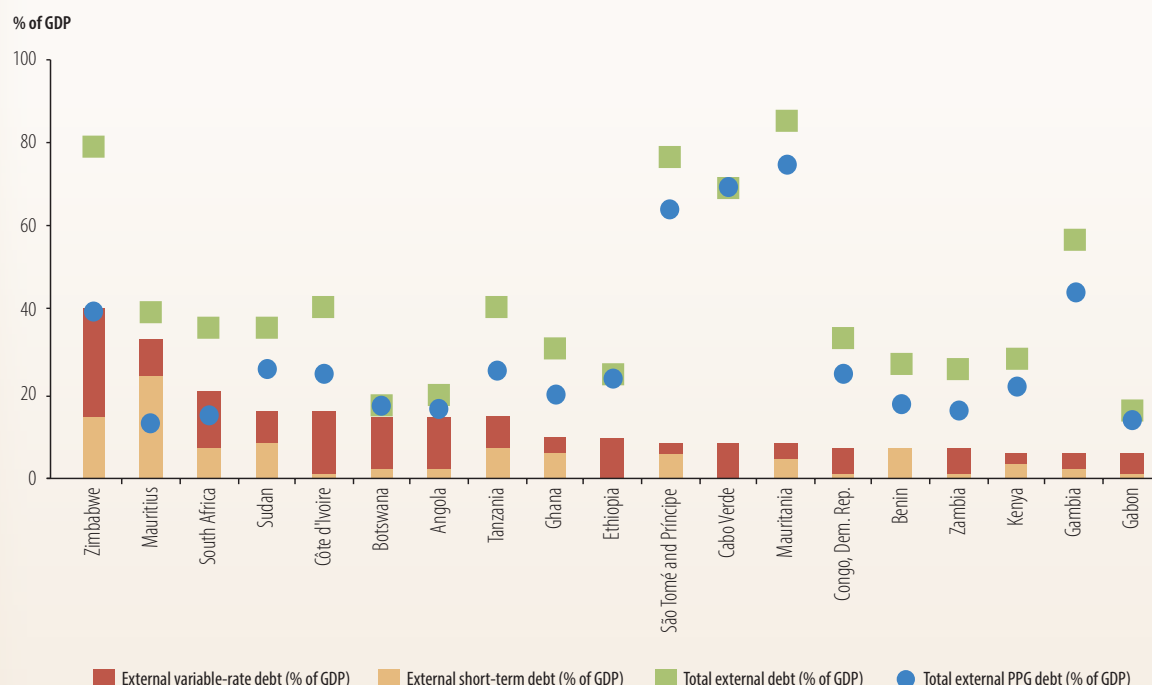
BOX 3:
Global interest
rate shocks
and debt
vulnerability

Rising global interest rates can have an impact on both public and private debt in a country through a number of channels: (i) direct and indirect impact on interest rates on external debt, (ii) indirect impact on interest rates on domestic debt, and (iii) indirectly through valuation effects from exchange rate shocks. Which of these channels are important for African countries depends on the structure of their debt portfolio, their reliance on external or domestic financing, and their resilience to these shocks.

Many African countries borrow primarily on concessional terms from the main multilateral organizations. These loans typically carry fixed interest rates (or predetermined charges), which means that interest rate risk on these instruments is limited.^a Similarly, most loans from bilateral lenders, whether from the Paris Club or not, are typically but not exclusively at fixed interest rates.

Some countries, however, have variable-rate external public and private debt, typically on a fixed spread over a market rate such as the LIBOR.^b This means that any global interest rate shock is immediately transmitted through these loans. Apart from Zimbabwe, which is in a special situation, Angola, Botswana, Côte d’Ivoire, and South Africa have the highest levels of variable-rate external debt (figure 13).

FIGURE 13: Variable-rate and short-term external debt in selected countries



Sources: World Bank International Debt Statistics (debt) and IMF World Economic Outlook (GDP) (as of end-2012).

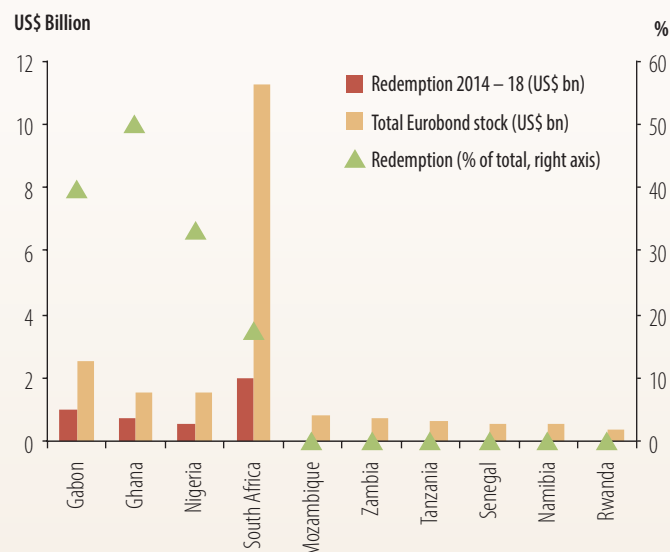
Note: PPG=public and publicly guaranteed.

Short-term external loans may have fixed interest rates, but since they need to be repaid fully within one year by definition, there is always a risk that the loans need to be refinanced at a different, and possibly higher, interest rate. Some of these loans may be trade credit, and secured against the delivery of imports or exports, so that they do not have to be refinanced. However, to the extent that such trade flows display a regular annual pattern, these loans will be contracted annually. The majority of external debt in Mauritius is short-term private sector debt, amounting to 33 percent of GDP. Apart from Sudan and Zimbabwe, short-term external debt is still around 6 to 7 percent of GDP in Benin, Ghana, São Tomé and Príncipe, South Africa, and Tanzania.

Sovereign bonds issued on international capital markets (also called Eurobonds) typically carry a fixed coupon payment, and mostly have a 5- to 10-year maturity. This means that, in principle, interest rate risk is low. However, bonds are fully repaid upon maturity (bullet payment). If the borrower needs to refinance the bond, there is a refinancing risk and an interest rate risk for the entire loan amount. Investors will compare any new bond against safe alternatives (typically U.S. Treasuries or safe Euro area bonds), and may demand a higher credit and liquidity premium. Although around 10 African countries have issued Eurobonds in the last few years, only the bonds of Gabon, Ghana, Nigeria and South Africa mature in the near to medium term (2014 and 2018) (figure 14). Many of the issuers have taken advantage of the favorable market conditions and have issued debt with maturities beyond 2018. For this reason, interest rate shocks do not have an immediate impact, except in countries that need to refinance in the medium term (Ghana) or are expected to issue soon (Kenya).

BOX 3:
Continued

FIGURE 14: Eurobond redemptions by African countries



Source: Aykut 2014, based on Dealogic, Moody's, and Bloomberg.

Attracted by relatively high interest rates compared to global rates, nonresident investors have increasingly entered a number of Sub-Saharan local government bond markets. Not all of these markets can be considered subject to global interest rate shocks though. Here the transmission channel of global interest rates is indirect. If nonresident investors do not reinvest in government securities upon maturity, the government may need to sell its bonds to domestic investors, and may need to offer higher interest rates to attract domestic and new nonresident investors. The speed of adjustment of domestic interest rates depends on the share of domestic debt maturing in the short term (or inversely on average time to maturity of the domestic debt portfolio). That is, the higher the share of debt maturing, the faster interest rates will adjust upward.

Data on nonresident participation in domestic markets in Sub-Saharan Africa are difficult to find, but available data suggest that South Africa has the highest participation (37 percent of outstanding domestic debt as of 2013Q2),^c while in Uganda about 10 percent of domestic debt is held by nonresidents.^d Furthermore, Ghana, Kenya, Nigeria, and Zambia may have significant nonresident participation.^e In these countries, between 30 and 50 percent of domestic debt is rolled over every year.^f

Once a nonresident investor decides not to refinance Eurobonds or domestic bonds due to better alternatives elsewhere, this will amount to a capital outflow, and may lead to pressure on the exchange rate. Any subsequent exchange rate depreciation will increase the domestic currency value of the all public or private loans in foreign currency, and increase the effective interest paid on these loans. The main risk is therefore the total size of external private and public debt relative to GDP.

A country's resilience to absorb interest rate shocks will depend on the extent of policy buffers, such as having relatively low public debt, sufficient fiscal resources, sufficient foreign exchange reserves to repay all external debt maturing in one year, and a well-aligned exchange rate. In addition, it is also important to have structural resilience, such as access to multiple sources of external and domestic financing on favorable terms; good currency match between assets and liabilities on the government, private sector, and household balance sheets; and sound debt management.

Prepared by Ralph Van Doorn:

a. The interest rate risk is not zero. These loans typically have a long amortization (repayment) profile, and in principle each time an amortization takes place, the government must choose whether to repay from the budget or refinance it. At that stage, there is both a risk that these funds are not available (refinancing risk) and a risk that the interest rate may be less favorable than before (interest rate risk). However, since individual amortizations are small relative to the size of the loan, interest rate and refinancing risks are small.

b. London Interbank Offered Rate.

c. Even when compared to other emerging markets. Only Hungary, Latvia, and Peru have higher participation (Arslanalp and Tsuda 2014).

d. World Bank Quarterly Public Sector Debt (QPSD) statistics; <http://go.worldbank.org/9PIAZORON0>.

e. It is known that nonresident investors can legally enter these markets, and there is anecdotal evidence that this is the case, but firm data are not available.

The blog <http://www.brookings.edu/blogs/africa-in-focus/posts/2014/02/07-africa-market-turmoil-sy> quotes numbers obtained from Fitch and national authorities, roughly in line with the numbers for South Africa (IMF data) and Uganda (World Bank data), but they cannot be verified.

f. Data from recent Debt Sustainability Analyses (DSAs).

Domestic risks

Domestic risks associated with social and political unrest, and emerging security problems, remain a major threat to the economic prospects of some countries in the region. In South Sudan, a ceasefire, signed between the conflicting sides on January 23, 2014, remains tenuous, and sporadic violence has continued to disrupt oil production. In the Central African Republic, insecurity and large-scale displacement of persons are severely disrupting economic activity and livelihoods there. Also on the domestic front, upcoming national elections in several countries may slow implementation of much-needed structural reforms.

Inflationary pressures are on the rise in many countries and could weigh down domestic demand. In 2013, inflation eased in most countries in the region due to lower international fuel and food prices and better-than-average harvests as weather conditions remained broadly favorable, which helped boost real income and support domestic demand. Since February 2014, international food prices have risen sharply due to drought in part of South America and tensions in Ukraine. Within Sub-Saharan Africa, strong price pressures have emerged in several countries driven in part by large currency depreciations, as in Ghana and Zambia, and also by unfavorable weather conditions. In francophone West Africa, drought in 2013 resulted in crop losses of up to 50 percent in parts of the Sahel region. Larger currency depreciations and lower local harvests due to intensifying drought conditions could result in higher inflation across the region than assumed in the baseline. This would dampen household consumption which has been an important driver of growth in the region.

Food prices

The World Bank's Food Price Watch reports that domestic grain price trends are mixed in Sub-Saharan Africa. Several factors affect local prices: seasonal patterns, available supplies and prospects of upcoming harvests, currency depreciations, and demand conditions (box 4). In Sudan, increasing demand and currency depreciation pushed up wheat prices by 30 percent (in monitored markets) between October 2013 and January 2014. In Malawi, Mozambique, and South Africa, domestic maize prices were higher by more than 40 percent on tighter supplies, rising fuel prices, and weaker currencies (in Malawi and South Africa). Tanzania also saw a 26 percent increase because of lower national supplies. By contrast, wheat and maize prices declined in Ethiopia, as the recent bumper crop boosted domestic availability. Staple food prices remained high in Somalia and South Sudan as renewed conflict is disrupting markets in those countries.

Fluctuations in food prices have typically exerted pressures on consumer price inflation. A non-negligible proportion of food price volatility is attributed to seasonal factors in the production of these commodities. Box 4 illustrates the relative weight of these seasonal factors in selected Sub-Saharan African countries. On the other hand, food price volatility may also respond to structural factors that may put food security at risk. The report illustrates the role of trade promotion in addressing the structural bottlenecks in the African drylands.

BOX 4:

Not all price volatility is uncertain: Seasonality in food prices

Following the 2007–08 global food crisis, food price volatility has been high on the international policy agenda. Volatility implies uncertainty and reduces a supply response. But not all volatility in food prices is uncertain. Some of it follows the annual production cycle. It is seasonal (and largely deterministic), with prices dropping after the harvest to gradually rise and peak just before the next harvest arrives.

Some seasonality in food prices is unavoidable given storage costs and the opportunity cost of capital. But imperfect capital markets (inducing sell-low, buy-high behavior among liquidity-constrained households), uncompetitive market structures, credit constraints for traders, and high transaction costs (e.g., due to poor infrastructure) may further push up the seasonal price gaps. As domestic food markets became more integrated, the topic of food price seasonality in Sub-Saharan Africa has garnered less attention by researchers and policy makers.

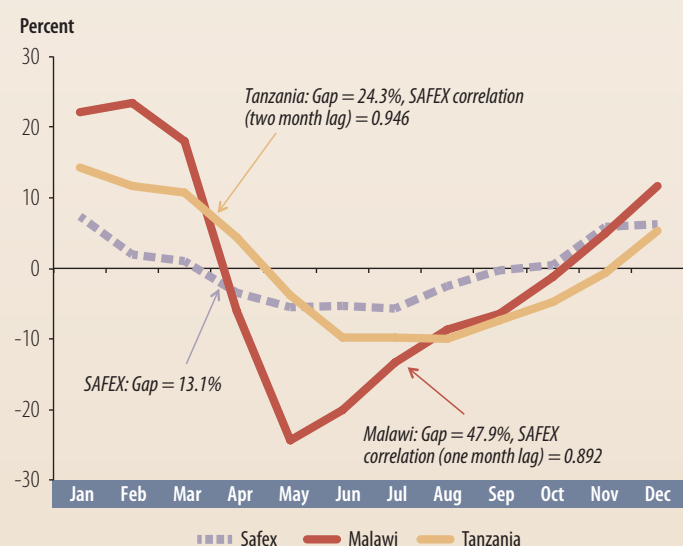
Some emerging evidence, however, points to continuing high seasonality in domestic food prices in the region. Using econometric time series techniques, Kaminski et al. (2014) study the domestic food price evolutions over the last 7 to 12 years (2000–12) across 100 marketplaces in three eastern and southern African countries (Malawi, Tanzania, and Uganda) for a series of food products.^a

Among cereals, the seasonal gap (the difference between the highest and the lowest average monthly price, controlling for annual trends), is largest for wholesale maize (main staple),^b ranging from about 25 percent on average across markets in Uganda and Tanzania to close to 50 percent in Malawi (figure 15). The average gaps are lower for rice, millet, and sorghum (around 15 to 20 percent), consistent with the larger integration in international markets (rice) and better storability (millet/sorghum) (World Bank 2011b). They are generally also somewhat lower for retail prices.

Overall, these seasonal gaps are substantial, and well above what is observed, for example, at the South African Futures Exchange (SAFEX) market in Johannesburg. SAFEX is the main international market for white maize consumed in southern and eastern Africa and, as such, provides a reasonable benchmark. While the seasonal patterns in Tanzania and Malawi closely track the seasonal SAFEX profile (with a two-month and one-month lag, respectively), the gaps in SAFEX prices are only around half those in Tanzania and less than a third of that in Malawi. This suggests substantial scope for reduction in the seasonal gaps.

Seasonal maize gaps far exceed those at SAFEX, the leading futures market for white maize in eastern and southern Africa

FIGURE 15: Seasonal pattern in maize prices



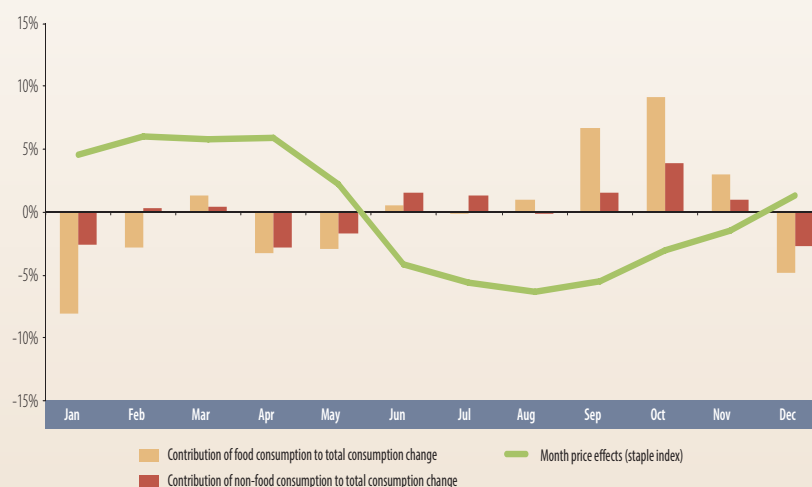
Source: Kaminski, Christiaensen, Gilbert, and Udry 2014.

So, how much of monthly food price volatility in these domestic markets can then be explained by seasonality? Between 20 percent (Tanzania) and 40 percent (Malawi) for wholesale maize, with similar seasonal volatility shares for other food crops in Tanzania (between 15 and 22 percent of month-to-month volatility). Clearly, this emerging evidence suggests that seasonality in food prices is an important part of the food price volatility story.

Seasonality in food prices may also yield significant welfare loss in terms of reduced food consumption in the short term and reduced income-earning potential in the long term^c. Using one survey year for each of the three countries in the study, the authors find

evidence suggestive of a connection between food price seasonality and seasonality in food (and nonfood) consumption. Figure 16 shows the pattern for Tanzania (see Kaminski et al. 2014, for details). Both food and nonfood expenditures are in real terms (expressing quantities), and they track the share-weighted staple prices—when food prices are above the (de-trended) annual average, food (and nonfood) consumption (as a percentage of total consumption) are lower, and when food prices are lower, food (and nonfood) consumption are higher, with the patterns crossing again in December. The joint decline in nonfood and food expenditures suggests some substitution of the latter for the former, but not enough to prevent a decline in food expenditure, the core variable of interest from a welfare perspective. While these juxtapositions are exploratory at best, the findings are suggestive of continuing seasonality in African livelihoods, in prices, and consumption, a topic in need of further documentation and more in-depth understanding, including on its causal drivers.

FIGURE 16: Pattern of food staple price and consumption in Tanzania



Source: Kaminski, Christiaensen, Gilbert, and Udry 2014.

- a. The study is part of a larger project entitled "Agriculture in Africa – Telling Facts from Myths," which revisits the current validity of the conventional wisdom describing agriculture and rural livelihoods in Sub-Saharan Africa.
- b. Maize's share of staple food consumption is 47 percent on average in Tanzania (51 percent in rural areas), 68 percent in Malawi (72 percent in rural areas), and 20 percent in Uganda (also 20 percent in rural areas); in Uganda matooke (cooked banana) and cassava each account for another 22 percent. Rice is more important in urban areas (31 percent of the average urban staple share in Tanzania and 14 percent in Malawi and Uganda) (Kaminski et al. 2014).
- c. See World Bank (2011a) for a more detailed review of the welfare effects of food price volatility.

BOX 4:
Continued

Intra-annual
consumption
pattern tracks
staple price
seasonality in
Tanzania

Using trade to promote resilience in drylands of Africa²

Africa's drylands regions are subject to especially high and volatile food prices, which reduce food security. Improved trade can reduce the wedge between producer and consumer prices, increasing the welfare of consumers in structural deficit areas where food prices are high, and of producers in surplus areas where farm gate prices are relatively low. Furthermore, drylands areas are particularly vulnerable to disasters (climatic and man-made) and food production shocks. Increasing integration with larger regional markets can reduce the magnitude of the price effects from localized shocks, while lower barriers and better trade infrastructure allow faster and more efficient response to localized food shortages due to disasters of all types.

Trade is a necessary ingredient to resolve chronically low agricultural productivity. Technology embodied in imported inputs—seed of improved crop varieties, fertilizer, agricultural machinery, and animal

² See the background paper for the study, "Increasing Resilience in the Drylands of Africa." The background paper draws on a number of sources, but particularly on "Analytical Review of the History, Impact, and Political Economy of Barriers to Food Trade in Sub-Saharan Africa," by Jakob Engel and Marie-Agnes Jouanjean with Akanksha Awal, of the Overseas Development Institute.

vaccines—would pave the way for more intensive production systems with increased productivity and greater sustainability (Jouanjean 2013). In addition, facilitation of trade in crops, livestock, and inputs brings the prospect of a significant number of new jobs in these regions, where unemployment is high. Jobs are created in activities all along the value chain in transporting, distributing, wholesaling, and retailing agricultural inputs and products.

Notwithstanding the benefits of increased integration, markets in many drylands areas remain fragmented, isolated from regional and global markets. One indication of this in West Africa is that cereal prices differ dramatically between net producing and net consuming markets. Prices of food staples are much more volatile between markets on either side of a border than between markets within a country. This pattern of volatility suggests a very low level of trade integration among these countries.

Several factors explain why markets in drylands are so fragmented. First, costs of transporting food are high relative to their low value per ton. Along key trading corridors between Burkina Faso, Ghana, and Benin, costs of moving maize account for approximately 59 percent of final market prices due to monopoly and cartel rents, irregular payments, and poor and scarce infrastructure (USAID 2011). In some localities, poor quality or quantity of infrastructure—for example, failure to make “last mile” connections—creates areas with high natural production potential but low connectivity, reducing opportunities for efficiently and sustainably raising food production and promoting rural development. These “hot spots” merit consideration for future infrastructure investment.

Second, formal direct trade barriers are also a problem. Nontariff measures pose a much more significant problem than tariffs. For example, traders pay as many as 40 different nontariff fees when traveling from Ghana to Nigeria (Keyser 2012). Ad-hoc food trade barriers imposed during times of crisis—especially export bans—have been a particular problem. Such barriers increase the magnitude of food price shocks in neighboring countries and reduce the reliability of regional suppliers. Grain prices in African countries are twice as volatile as in international markets (Minot 2013), largely because of the large-scale and unpredictable interventions in food markets. These policies expose private traders to huge risk, discouraging desirable arbitrage functions such as purchasing, storage, and transporting of grain (Jayne et al. 2010).

Third, regulatory and “behind-the-border” policies create additional indirect trade barriers and impede technology flows. Unnecessary and unreasonable regulatory requirements for imported inputs have created small, highly fragmented markets, which is discouraging international firms from entering, reducing the flow of imported technologies. Instead of reforming regulations that stifle trade in inputs, efforts to expand input use have so far focused mainly on measures to either directly intervene in input marketing or provide heavy, and usually untargeted, subsidies. These measures prevent private sector development in input markets and crowd out more effective programs of public expenditure (see Jayne and Rashid 2013, for an overview).

Several options are available to reduce trade barriers and promote market integration in input and commodity markets of Africa's drylands region. These include reforming regulations to integrate markets and facilitate technology flows; reducing or eliminating nontariff measures; improving national data systems to provide governments with information to make decisions based on transparent rules and evidence; continuing to address trade liberalization through regional economic communities (RECs), but also use other vehicles; understanding and facilitating informal trade; and upgrading roads, reducing border-crossing costs, and increasing border crossings.

Section 2: Patterns of Growth in Sub-Saharan Africa

- ▶ The economies of Sub-Saharan Africa grew at a strong pace of 4.5 percent a year on average during 1995-2013, amid broad-based growth, but per capita income growth was modest at around 2 percent.
- ▶ GDP growth (median annual rate) was nearly four times higher in the region's fast-growing countries than in slow-growing ones. Among best performers, resource-rich and non-resource-rich countries had comparable growth rates.
- ▶ For both fast- and slow-growing countries, economic activity was supported by a robust increase in domestic investment: Gross capital formation (per capita) increased at an annual rate of 6.1 percent among fast-growing countries and 3.1 percent for countries with weak growth.
- ▶ The resources and services sectors have gained output share in the structural change in Sub-Saharan Africa's best performers: The share of the resources sector rose from 9 percent during 1995-99 to 12.5 percent during 2007-11, while that of the services sector grew from 40 percent to 47 percent. The shares of manufacturing and agriculture declined.
- ▶ The contribution of total factor productivity (TFP) to per worker output growth is relatively larger in Sub-Saharan Africa's best performers than in fast-growing developing countries elsewhere; the region's slow-growing countries show negative TFP growth throughout the period.
- ▶ The pace of expansion in recent growth spurts in the region has been faster and less volatile than in earlier periods and higher than in takeoffs in other developing countries; output expansions are larger and more volatile during takeoffs in the region's resource-rich countries than in non-resource-rich ones.
- ▶ Export diversification has been limited, mirroring sectoral shifts in the region's economies, but there has been substantial progress in diversifying trading partners.

ECONOMIC GROWTH TRENDS IN SUB-SAHARAN AFRICA

The recent economic performance in Sub-Saharan Africa (SSA) has been remarkable. Real GDP in the region grew 4.5 percent per year during 1995–2013, and the benefits from this surge were broad based, since they were reaped not only by resource-rich countries but also by non-resource-rich low-income countries. Economic activity grew 4.8 percent in the region in 2013 and is projected to increase at an average annual rate of about 5.4 percent during 2014–16 (see section 1).

The sustained growth in Sub-Saharan Africa since the mid-1990s has raised real income per capita to levels that surpassed the 1976 peak (figure 17).¹ Moreover, income per capita of the region relative to the Euro area appears to have stopped sliding at the start of the 2000s and to have slightly improved over the last decade—most notably, among the region's fast-growing countries (figure 18).² The improved economic performance of Sub-Saharan Africa since 1995 was partly attributed to generally benign external factors and progress in macroeconomic management (see Hostland and Giugale 2013).

¹ It has taken the region nearly three decades to surpass the previous peak in income levels.

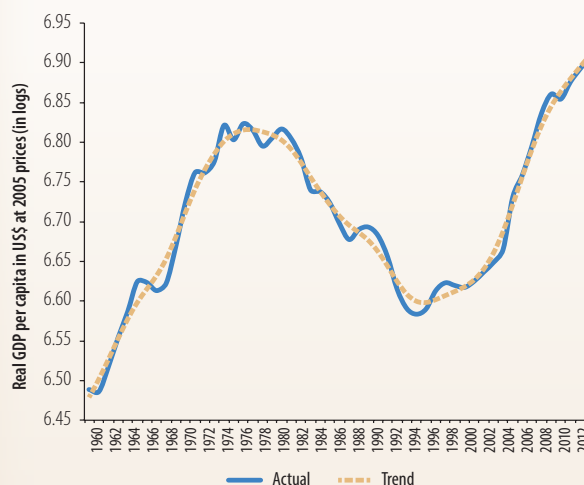
² Growth deceleration has become less frequent in Sub-Saharan Africa, declining from 29 percent during 1975–94 to 12 percent during 1995–2005. The frequency of growth accelerations increased, however, from 14 to 42 percent over the same time period (Arbache and Page 2009).

On the external front, growth performance in the region was boosted by rising commodity prices, the emergence of China as an important trade and investment partner, and the surge of foreign capital into developing countries due to accommodative monetary policies in the advanced world. On the domestic front, improved macroeconomic management in the region has resulted in lower inflation, better fiscal outcomes, and lower growth volatility. More important, crisis volatility was sharply reduced as the region became less susceptible to macroeconomic disasters. For instance, the incidence of sharp declines in real output per capita (peak-to-trough drops that exceeded 10 percent) was reduced from 36 percent during 1974–94 to approximately 18 percent during 1995–2011, and this trend also holds for non-resource-rich countries, resource-rich countries, and fragile countries in the region. Furthermore, the duration and depth of recessions also declined not only for the region as a whole but also in non-resource-rich and resource-rich countries. On average, the duration of recessions across the region dropped from 2.2 years during 1974–94 to 1.9 years during 1995–2011, while the median contraction declined from 9.3 percent during 1974–94 to 5.4 percent during 1995–2012.

Over the last two decades, real economic activity in the region more than doubled. The yearly pace of GDP growth among Sub-Saharan African countries (4.5 percent) has been comparable to that of developing countries outside the region (4.4 percent), and has been outperformed only by East Asia and the Pacific (5.1 percent). The growth surge in the region was broad based: The region's resource-rich countries grew at 5 percent per year during 1995–2012, while non-resource-rich countries grew at an average annual rate of 4 percent (figure 19).

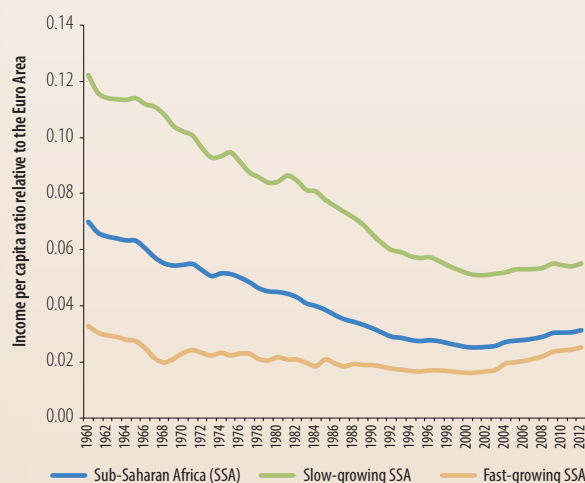
Real GDP growth in Sub-Saharan Africa was supported by robust domestic demand—particularly, higher household consumption and (private and public) investment; in fact, gross capital formation increased at an annual rate of 6.8 percent. Domestic investment in 2012 was nearly triple the 1995 level. In contrast to other developing areas, investment in the region continued growing throughout the 2008–09 crises,

FIGURE 17: Real GDP per capita in Sub-Saharan Africa, 1960–2012



Growth in Sub-Saharan Africa since the mid-1990s has raised real income per capita to levels that surpassed the 1976 peak

FIGURE 18: Real income per capita of Sub-Saharan Africa relative to the Euro area



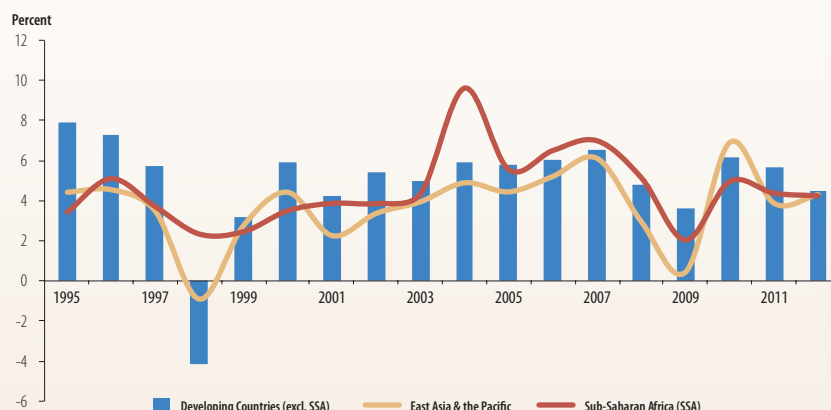
Income per capita relative to the Euro area has slightly improved over the last decade

Source: World Bank.

Note: The data of real GDP for Sub-Saharan Africa and the Euro area are expressed in U.S. dollars at 2005 prices.

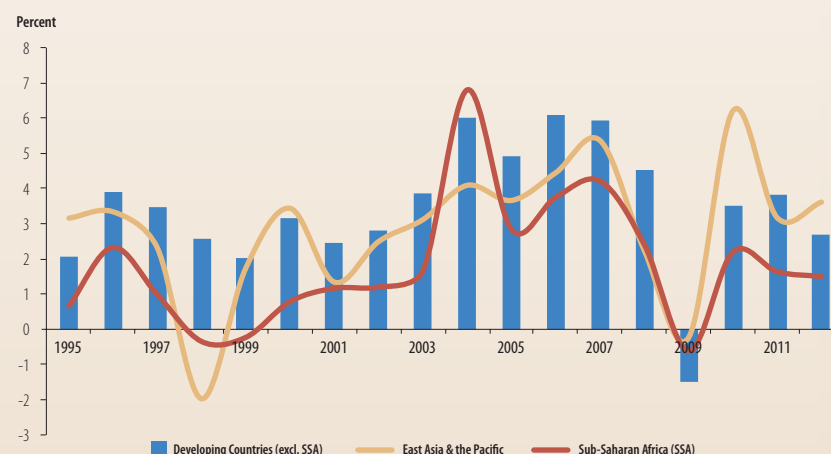
Over the last two decades, real economic activity in the region more than doubled

FIGURE 19: Real GDP growth, 1995–2012



The yearly pace of GDP per capita growth in Sub-Saharan Africa has been comparable to that of developing countries outside the region

FIGURE 20: Real GDP per capita growth, 1995–2012



Source: World Bank.

Note: The data on real GDP and real GDP per capita are expressed in U.S. dollars at 2005 prices.

and it benefited not only resource-intensive countries but also others that are specialized in nonresource sectors. In fact, investment grew faster among resource-rich countries (8.1 percent per year) than among non-resource-rich countries (6.3 percent per year).

Once population dynamics are taken into account, the economic performance of Sub-Saharan African countries does not appear to be as impressive (figure 20). Growth in real output per capita increased from -0.6 percent per year during 1974–94 to 2.1 percent per year during 1995–2012, and this turnaround in economic performance was broad based

throughout the region, although to different degrees. The cumulative growth in output per capita of the region is comparable to that of Latin America and the Caribbean and lags the performance of real GDP per capita of developing countries outside of the region (3.3 percent) or East Asia and the Pacific (3.8 percent). Figure 21 shows that there is heterogeneity in the growth performance of Africa across different subgroups. For instance, median annual expansion of output per capita is faster among resource-rich countries in the region (2.6 percent) when compared to non-resource-rich countries (1.7 percent), and is even slower among fragile countries (1.2 percent).

IDENTIFYING PATTERNS OF GROWTH DURING 1995–2012

The growth of real economic activity in Africa was robust over the last two decades. Yet, it is evident that there are differences in the growth experiences of countries. Output expanded faster in some countries and country groups than in others. Country characteristics associated to the structure of production, advances in structural reforms, the leverage of the country to the world economy, or sound

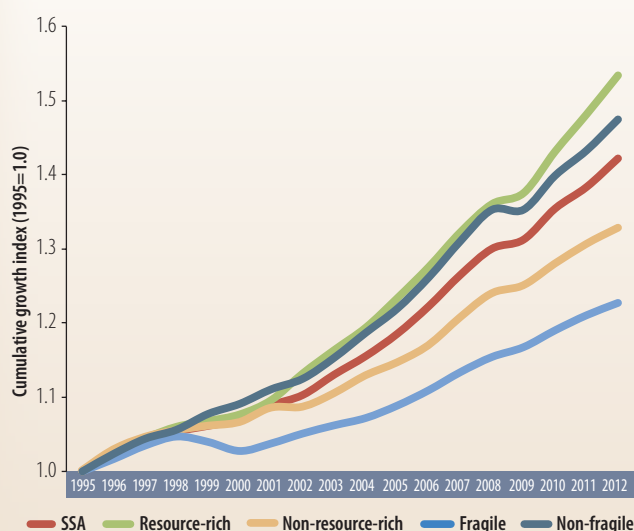
macroeconomic frameworks may have played a role in explaining cross-country differences in performance.

A useful way to examine the growth performance of countries is to distinguish groups of countries by their speed of growth during 1995–2012. This can help identify common characteristics of their growth and broad differences across groups. Fast-growing countries are defined as those that have experienced an expansion in real GDP per capita that has lasted five years or more and where output per capita grew more than 3.5 percent per year.³

The application of this criterion identifies 22 fast-growing countries in the Africa region that were experiencing or starting to experience a surge in economic activity during the last two decades. From this sample, we identify five oil exporters (Angola, Chad, Equatorial Guinea, Nigeria, and Sudan) and eight nonoil resource-abundant countries (Botswana, Ghana, Liberia, Mozambique, Namibia, Sierra Leone, Tanzania, and Zambia). Nine non-resource-rich countries in the region experienced growth spurts (Burkina Faso, Cabo Verde, The Central African Republic, Ethiopia, Lesotho, Malawi, Mauritius, Rwanda, and Uganda). Takeoffs in growth per capita also took place among fragile countries although, as expected, they tend to be relatively shorter in duration (or started later).⁴

Table 1 depicts the median growth rate from 1995 to 2012 for the fast-growing developing countries compared to slow-growing countries. Within each group, the performance of Sub-Saharan Africa compared to developing countries outside the region is benchmarked, and African countries are also distinguished according to their degree of natural resource abundance. The representative fast-growing country in Africa grew at the same pace as that of the median country in the developing world outside the region, but slower than the fast-growing countries in the latter group.⁵ The best performers in Africa registered a median annual growth rate of 3.3 percent per year (lower than the 3.9 percent of the best developing country performers outside Sub-Saharan Africa). In contrast, the slow-growing countries in the region were able to grow at a median annual rate of 0.9 percent during 1995–2012.

FIGURE 21: Growth in GDP per capita in Sub-Saharan Africa by country groups, 1995–2012
(Cumulative median growth index, 1995=1.0)



Source: World Bank.

Note: The index presented in this figure depicts the cumulative growth in real growth per capita from 1995 to 2012 in Sub-Saharan Africa and subgroups. GDP is in U.S. dollars at 2005 prices.

Growth performance in Sub-Saharan Africa is heterogeneous across different subgroups. For instance, annual expansion of output per capita is faster among resource-rich countries and slower among fragile countries

³ It is likely that we may be able to identify two close episodes of rapid growth in one country using this algorithm. We will consider these two episodes as one when (a) the decline in real output per capita between them is lower than 1 percent, (b) the annual average growth in both episodes exceeds 3.5 percent, or (c) the annual average growth in the joint single episode exceeds 3.5 percent. In addition, we have considered countries with long-lasting expansions (more than 10 years) that had growth per capita greater than 3 percent and GDP growth during that period exceeding 5 percent per year.

⁴ The criteria used to distinguish fast-growing from slow-growing nations has also been used in Bluedorn et al. (2013) and IMF (2013). Bluedorn et al. (2013) points out that the threshold of 3.5 percent per year has been used in studies such as Hausmann, Pritchett, and Rodrik (2005) and Johnson, Ostry, and Subramanian (2007), and corresponds to the 60th percentile of growth in output per capita in all emerging market and developing countries over the last two decades. In our sample, the 3.5 percent per year threshold corresponds to the 67th percentile of the distribution of growth per capita among non-high-income countries during 1995–2012.

⁵ Simple averages indicate that Sub-Saharan Africa grew 6.6 percent annually during 1995–2012, with resource-rich countries growing at an average annual rate of 7.4 percent and non-resource-rich countries at 5.5 percent. The larger size of the unweighted average growth (relative to the median and weighted average) denotes the remarkable performance of small (resource and nonresource) countries in the region.

TABLE 1: Real GDP and aggregate demand in Sub-Saharan Africa and the developing world, 1995–2012
(Median annual growth rate over the period)

	Countries	Real GDP	Private Consumption	Domestic Investment	Public Consumption	Exports	Imports
Fast growing countries							
Developing world (excl. SSA)	58	3.93	3.80	5.46	2.83	6.04	6.31
Sub-Saharan Africa (SSA)	22	3.30	3.03	6.15	3.34	6.03	6.07
SSA Resource-Rich Countries	13	3.05	3.77	7.94	3.38	6.36	8.47
SSA Non-Resource-Rich Countries	9	3.27	2.87	5.03	2.88	5.62	3.86
Slow growing countries							
Developing world (excl. SSA)	25	2.03	2.19	2.66	1.88	3.36	3.69
Sub-Saharan Africa (SSA)	22	0.90	1.28	3.11	1.13	0.37	2.13
SSA Resource-Rich Countries	8	1.03	1.37	3.52	1.65	0.76	2.45
SSA Non-Resource-Rich Countries	14	0.90	0.89	1.82	0.89	0.48	1.72

Source: World Bank.

Note: The data on real GDP per capita and the aggregate demand components are expressed in U.S. dollars at 2005 constant prices. All variables are in per capita terms. The criteria used to classify fast-growing countries comprises: a) expansionary episodes of more than 5 years, and b) growth per year that exceeds 3.5 percent in each episode.

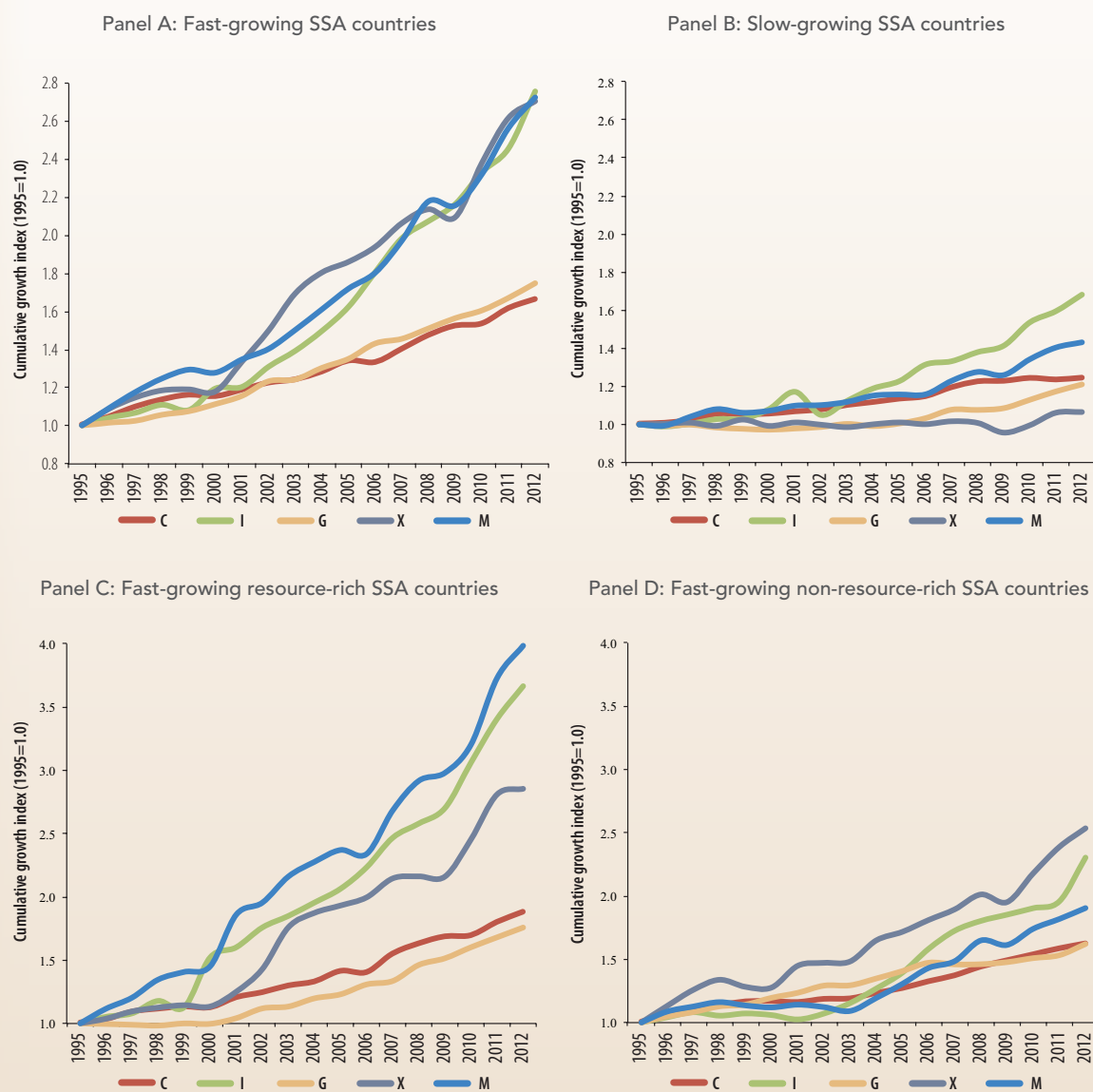
Growth patterns in Sub-Saharan Africa: Domestic-demand driven or outward oriented?

The evolution of aggregate demand components—household consumption, domestic investment, government consumption, exports and imports—during 1995–2012 helps to assess whether growth in Sub-Saharan Africa countries was supported by domestic demand or net exports and how different were the experience of fast and slow growers and of resource-rich and non-resource-rich countries. Figure 22 shows the cumulative growth over the period for African countries with strong and weak growth, and for fast-growing natural-resource-abundant countries and non-resource-rich countries in the region.

Regardless of whether growth was strong or weak among African countries, real economic activity was supported by a robust increase in domestic investment. Gross capital formation (per capita) increased at an annual rate of 6.1 percent among fast-growing countries in the region and 3.1 percent for countries with weak growth per capita. In addition, exports and imports had a predominant role in explaining growth performance of the best performers in the developing world. In most cases, imports tended to outgrow exports, thus, either widening trade deficits or shifting trade surpluses into deficits in most developing countries. For instance, imports grew slightly faster than that of exports during 1995–2012 (6.1 and 6 percent per year, respectively). However, the growth differential between imports and exports was much larger for resource-rich countries (8.5 and 6.4 percent per year, respectively).

FIGURE 22: Expansion in aggregate demand in Sub-Saharan Africa by country groups, 1995–2012
(Cumulative variation since 1995, median growth)

Real economic activity in Sub-Saharan African countries has been supported by a robust increase in domestic investment



Source: World Bank.

Note: The data on the components of aggregate demand (household consumption, investment, government consumption expenditure, exports and imports) are expressed in U.S. dollars at 2005 prices.

Sectoral contribution to growth performance in Sub-Saharan Africa

The behavior of different sectors of economic activity during the last two decades is examined in order to identify the sectors of economic activity that grew faster among Sub-Saharan Africa and the rest of the developing world. This analysis is done at two different levels: first the major sectors of economic activity—agriculture, manufacturing, resources, and services—are reviewed. Then, we look more deeply into the dynamics of both the industry sector—namely, manufacturing, construction, mining and quarrying, and electricity, gas, and water—and the services sector—that is, banking, wholesale and retail trade, and transportation, storage, and telecommunications.

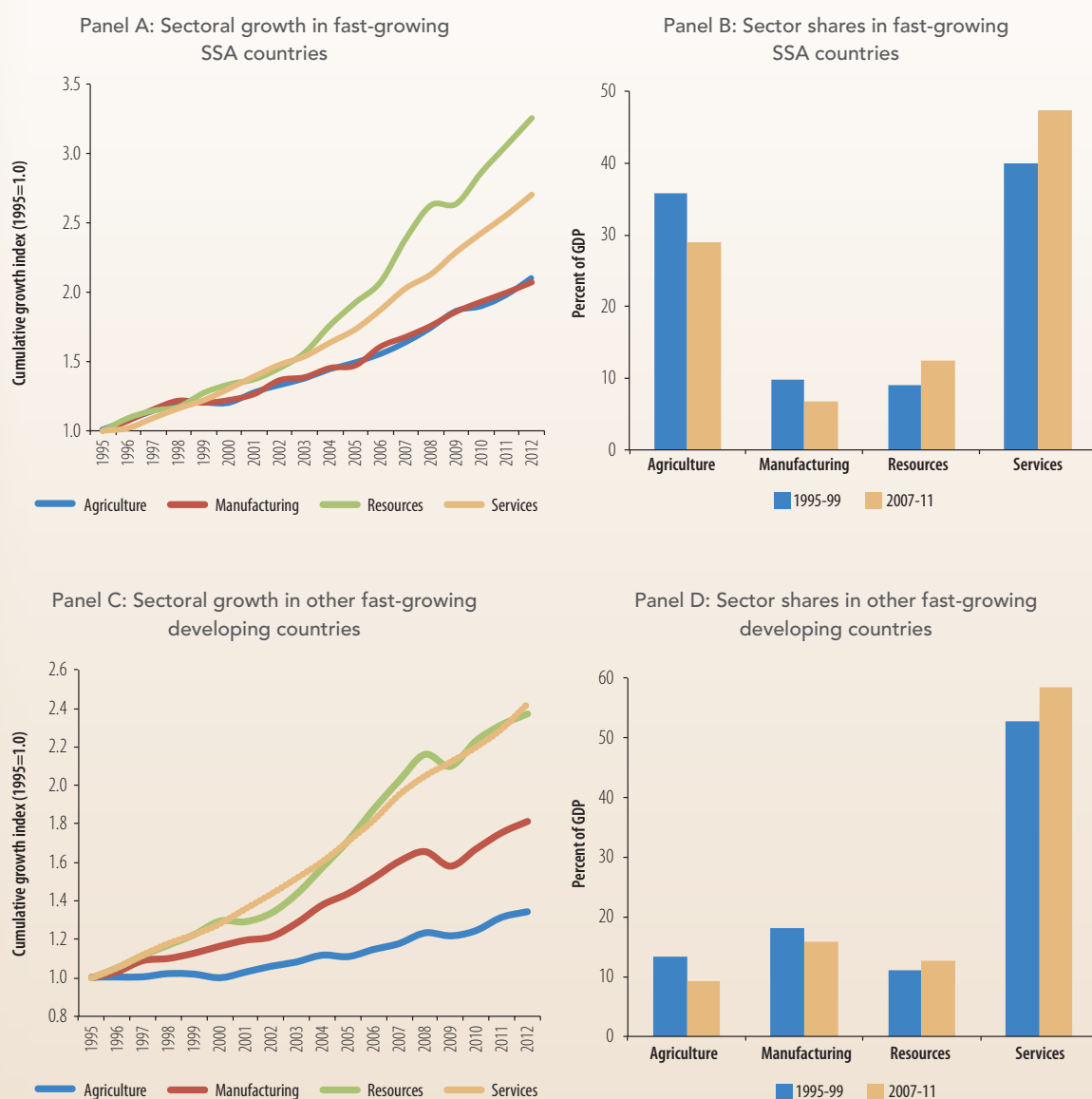
Figure 23 focuses on the output growth of major sectors of economic activity and the evolution of their shares of GDP for fast-growing countries during 1995–2012.⁶ Growth among fast-growing nations (whether they are African or outside the region) was broad based. All types of activity had positive growth, although there are some differences in their pace. For Sub-Saharan African countries, the resources and the services sectors were the best performers—increasing at annual rates of 7.2 and 6 percent per year, respectively. Moreover, those two sectors also experience an increase in their share to GDP over the last two decades: the share of the resources sector went from 9 percent during 1995–99 to 12.5 percent during 2007–11, while the share of the services sector grew from 40 percent during 1995–99 to 47 percent during 2007–11. Correspondingly, the shares of manufacturing and agriculture in the region (sectors with the slowest growth over the last two decades) declined.

For developing countries outside the region, the analysis shows that the resources and services sectors also exhibit the largest median growth rates per year during 1995–2012 (5.2 and 5.3 percent, respectively); however, they increased at a slower pace than that of countries in Sub-Saharan Africa. In contrast to countries in the region, the rest of the developing world has a larger services and manufacturing sector. The former increases its share even more (from 53 percent of GDP during 1995–99 to 58.5 percent of GDP during 2007–11), while the importance of manufacturing in total value added decreases from 18 to 16 percent. In both groups of countries, the share of agriculture in total GDP declines from 13 to 9 percent among fast-growing developing nations and from 36 to 29 percent in Sub-Saharan Africa over the same period.

Figure 24 examines the subsectors within resources and services that may explain the growing share of GDP of these sectors among the fast-growing countries during 1995–2012. Within the resources sector, construction and mining and quarrying vastly outperform gas, electricity, and water (as well as manufacturing). Construction expanded over the period at an annual rate of 8.5 percent, while mining and quarrying grew 7.2 percent per year. Among developing countries outside the region, it is the gas, electricity, and water sector that outperforms all other activities within the resources sector (it grew at an annual rate of 5.1 percent), closely followed by construction (4.9 percent). Finally, the infrastructure sector (transport, storage, and telecommunications) drove the rising participation of the services sector in economic activity among fast-growing developing countries. It grew 7.2 percent per year among fast-growing Sub-Saharan African countries and 6.2 percent per year among fast-growing developing countries outside the region.

⁶ We also conducted our analysis for slow-growing countries. Although we do not report these results, we will describe some of their features if relevant to our discussion.

FIGURE 23: Sectoral growth and the evolution of shares among fast-growing countries, 1995–2012
(Cumulative median variation since 1995 and shares of GDP)



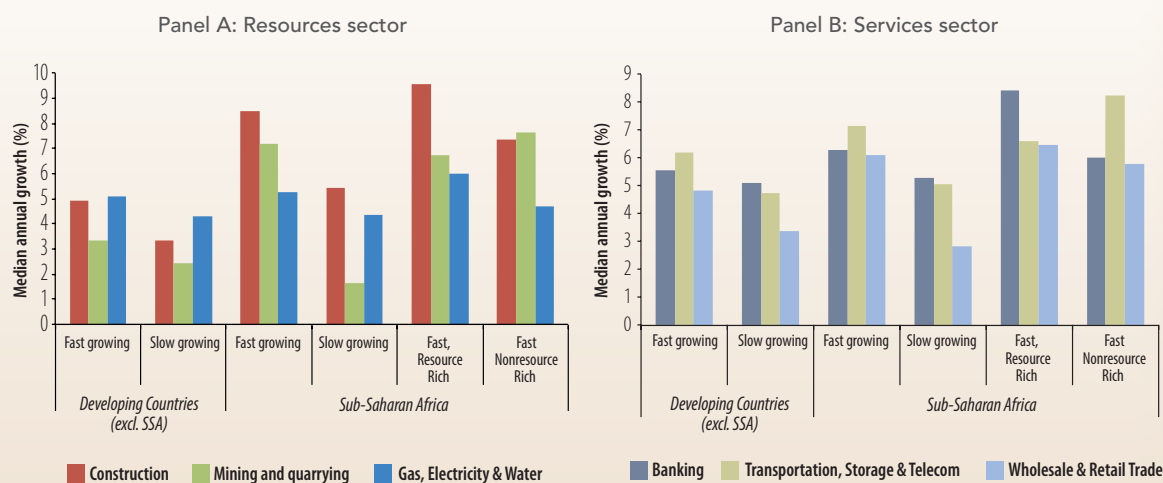
For Sub-Saharan African countries, the resources and the services sectors were the best performers—increasing at annual rates of 7.2 and 6 percent per year, respectively, during 1995–2012

Source: World Bank.

Note: The data of the shares of agriculture, manufacturing, resources, and services are obtained from the World Bank's World Development Indicators. Resources sector includes construction, mining and quarrying, and gas, electricity, and water.

Different components explain the growing share of GDP of these sectors among fast-growing countries during 1995–2012

FIGURE 24: Growth of the components of resources and services sectors, 1995–2012
(Percent per year over 1995–2012)



Source: World Bank.

Note: The value added of the different activities within the resources and services sectors are expressed in U.S. dollars at 2005 prices.

The analysis of the sectoral composition of Africa's growth finds that rapid growth has shifted the structure of African economies (i.e., sector shares in GDP): The relative size of agriculture in GDP has shrunk, as has that of manufacturing, while the share of the resources and services sectors has grown. Indeed, the region's share of manufacturing in GDP is less than half the average for developing countries Page (2014). These trends are also reflected in the region's continuing reliance on primary commodity exports (see below). Clearly, Sub-Saharan Africa's pattern of structural change is divergent from that of fast-growing East Asian countries, where structural change was led by manufacturing, with the share of this sector in total output rising at a fast pace (McMillan and Rodrik 2011; Rodrik 2013).

Analysis of a subset of 11 African countries by de Vries, Timmer, and de Vries (2013) shows that between 1990 and 2010, the sectoral share of employment in Sub-Saharan Africa shifted as well, declining in agriculture and rising in services. The employment share of market services—distribution and retail trade—rose especially sharply. The change in shares essentially represents a shift from a low-productivity activity to a slightly higher-productivity activity (much of the services sector continues to be characterized by informality).⁷ While the size of the resources sector has increased in African countries, the potential of this sector to absorb workers is small (the extractives sector has high productivity, but it is very capital intensive). Moreover, the backward linkages of this sector are small as well. Overall, economic transformation characterized by a reallocation of resources from low-productivity activities such as agriculture into the modern, high-productivity sector has not taken place in Sub-Saharan Africa's growth boom. Several recent studies—the 2014 African Transformation Report, de Vries, Timmer, and de Vries (2013), McMillan and Rodrik (2011), Rodrik (2013), and Page (2014)—have highlighted the issue of Africa's growth without structural transformation.

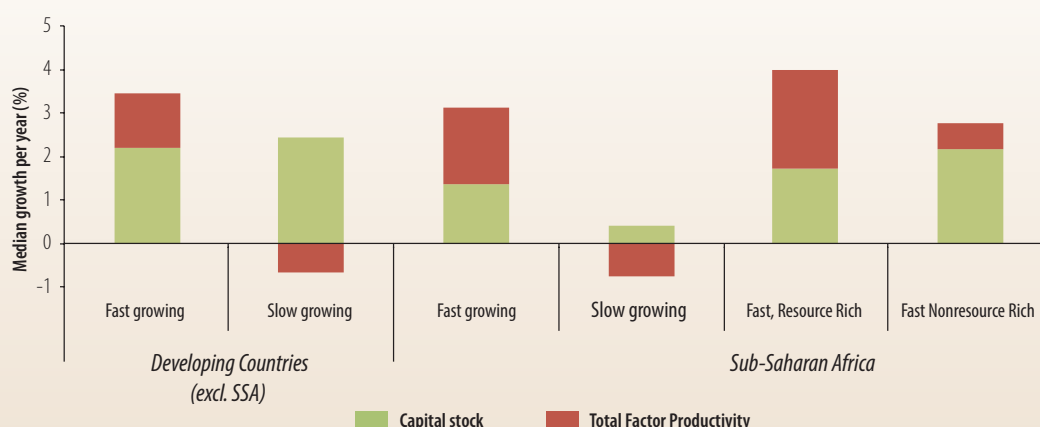
⁷ McMillan and Rodrik, 2011; de Vries, Timmer, and de Vries, 2013; Rodrik, 2013; and Page 2014.

Expansions in Sub-Saharan Africa: Capital deepening or productivity growth?

The sectoral drivers of economic performance may differ across different groups of countries within the region. For instance, surges in the resources sector (most notably, construction and mining and quarrying) have driven economic performance in the fast-growing countries, whereas that role may have been played by the services sector in fast-growing developing countries outside the region (say, gas, electricity and water, and banking). The analysis investigates whether the expansion has been supported by higher capital formation or enhanced total factor productivity growth, or both (box 5). In addition, it assesses whether TFP growth behavior is related to the sectors driving the growth spurts in Africa.

Figure 25 depicts the contribution of capital stock and TFP to (median annual) growth of real GDP per worker during 1995–2012 for developing countries and Sub-Saharan African countries. By construction, stronger growth in output per worker is registered by fast-growing countries compared to slow-growing ones. Interestingly, the results show that (a) slow-growing countries show negative TFP growth throughout the period; and (b) TFP plays a larger role in fast-growing countries, and its contribution is relatively larger among fast-growing countries in the region.⁸ Finally, resource-rich countries in the region outperform non-resource-rich ones in terms of output per worker growth, and the contribution of TFP is clearly more significant in the former group.

FIGURE 25: Contribution of the capital stock and TFP to output per worker growth, 1995–2011
(Median growth rate throughout the period)



Slow-growing countries show negative TFP growth, while in fast-growing countries TFP plays a larger role

Source: World Bank.

Note: The data of output per worker, capital stocks, and the number of workers were taken from Penn World Tables 8.0 (Feenstra, Inklaar, and Timmer 2013).

⁸ Moreover, we also conducted an analysis of growth accounting in the Africa region over the last two decades that included the evolution of human capital. The stock of human capital was computed as the weighted average of the share of population that attained and/or completed the different levels of education (primary, secondary and tertiary). The weights correspond to the returns to education computed by Psacharopoulos (1994). The inclusion of human capital reduces our regional sample to 32 countries in the region, of which 15 are fast-growing and 17 are slow-growing countries. In spite of the reduced number of countries, the analysis still finds positive TFP growth for the fast-growing African countries (mainly explained by the surges in TFP of fast-growing resource-rich nations) and negative TFP growth throughout the period among slow-growing countries in the region.

BOX 5:

Converting natural resources into productive capital—adjusted net savings

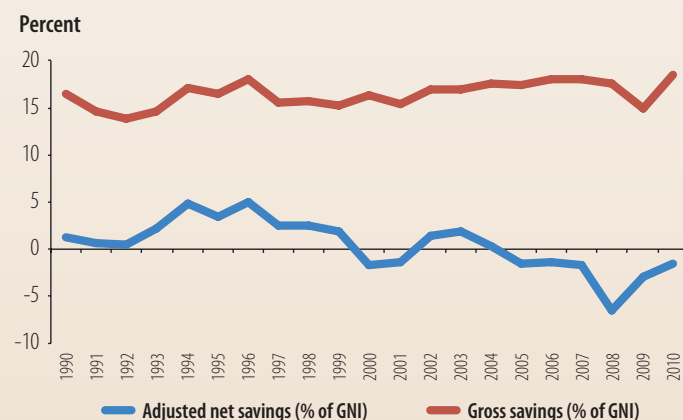
Africa's growth has been fueled in part by its abundant extractive resources. Promoting sustainable development, however, requires building productive capital—physical, human, and social. The issue is how well the region has done in converting its natural resources windfall into wealth broadly measured. Adjusted net savings, or genuine savings, provides a useful measure of the changes in total wealth. It adjusts the conventional measure of savings (national net savings) by deducting the extraction of minerals and environmental depletion and adding investment in human capital.

Figure 26 shows that adjusted net savings have been negative in Sub-Saharan Africa since 2004, which means that the region's growth is being accompanied by a depletion of total wealth. In fact, the gap between gross and net savings has increased by 31 percent over the last two decades. The declining trend in the region's adjusted net savings over the last two decades has been driven mostly by large negative savings in oil-rich countries such as Angola, which had an adjusted net savings of -23 percent of gross national income (GNI) in 2011. In contrast, diamond-rich Botswana, with adjusted net savings of 20 percent of GNI, has shown that resource-rich countries can put themselves on a sustainable growth path

by investing a larger share of resource rents in other tangible and intangible forms of capital. Ghana and Namibia also have genuine savings that are larger than conventional savings. Nevertheless, cross-country data suggest that Africa's resource-rich countries tend to have lower adjusted net savings than comparable countries in the rest of the world. While the concept of adjusted net savings does not take into account the "quality" or "efficiency" of investments in different forms of capital, it does suggest that Africa's resource-rich countries would need to spend relatively more in social sectors.

Net savings have been negative in Sub-Saharan Africa since 2004, which means that the region's growth is being accompanied by a depletion of total wealth

FIGURE 26: Gross and adjusted net savings in SSA, % GNI



Source: World Bank.

GROWTH SPURTS IN SUB-SAHARAN AFRICA

Several African countries have experienced episodes of rapid and sustained growth, that is, growth spurts. Growth spurts are defined as trough-to-peak phases of the cycle in real output per capita that have a duration of at least five years and that the peak of the current expansion is greater than that of the previous one. In addition, the depth of this spurt, as measured by the growth of real output per capita per year, is greater than 3.5 percentage points. The troughs and peaks in real GDP per capita are obtained by implementing the Bry-Boschan algorithm.⁹

⁹ Empirical applications of the Bry-Boschan algorithm using annual data to characterize expansions in economic activity and growth spurts can be found in Harding (2002), Abiad et al. (2012), and Bluedorn et al. (2013). See Annex I for more details.

Identifying growth spurts

Growth in real GDP per capita has been higher and less volatile among Sub-Saharan African countries; however, there is still some degree of heterogeneity across countries. When comparing the performance of countries during 1995–2012 to 1974–94, 32 out of 44 countries in the region registered a higher growth rate, and the average increase in the growth rate for those countries is nearly 50 basis points per year. In terms of growth volatility, it declined in the latter period for 28 out of 44 countries in the region, and growth volatility during 1995–2012 was approximately 0.6 times that of 1974–94.

In line with the results outlined in the previous paragraph, Arbache and Page (2009) show that the frequency of growth decelerations during 1995–2005 declined relative to 1975–94 while, more important, that of growth accelerations increased. Specifically, they found that the share of country-years of growth acceleration in the region increased from 14 percent during 1975–94 to 42 percent during 1995–2005. They also find that growth accelerations were three times as frequent as growth decelerations during the latter period, and that the annual average growth rate during these episodes was nearly 3.8 percent.¹⁰ Recent research also shows that some of the fastest-growing countries in the region during 1995–2012 are non-resource-rich low-income countries (IMF 2013). It is argued that these countries grew thanks to a combination of sound macroeconomic policies and sensible structural reforms.¹¹

One of the stylized facts of the growth experienced in the region is that many countries are experiencing an ongoing growth spurt or have managed to engineer one during 1995–2012. Table 2 lists all (ongoing and new) growth spurts experienced by Sub-Saharan African countries during 1995–2012. As can be seen, the occurrence of growth spurts has been broad based: not only have countries that are abundant in natural resources experienced takeoffs in real output per capita, but so have countries that have specialized in non-resource-based sectors and fragile countries. Most of the growth spurts in Africa were still evolving as of 2012.

Figure 27 looks at the incidence of growth spurts in the developing world and in Sub-Saharan Africa during 1995–2012. The likelihood of a country having a growth spurt during 1995–2012 was monotonically increasing from the late 1990s; however, that frequency declined sharply after the 2008–09 global financial crisis. Despite this decline, the share of country-year episodes that were taking place in Sub-Saharan Africa increased from 25 to 40 percent. This implies that growth spurts in the region continued uninterrupted throughout the crisis. When looking at the incidence of spurts across African countries, it is observed that the incidence of spurts among resource-rich countries was higher during 2002–08 (12 to 13 countries), thus coinciding with the super cycle of commodity prices.

¹⁰ Moreover, Arbache and Page (2009) find that resource-rich countries were more likely to have a growth acceleration than non-resource-rich countries in the region (51 percent compared to 38 percent).

¹¹ The non-resource-rich lower-income countries identified by the IMF (2013) report are Burkina Faso, Ethiopia, Mozambique, Rwanda, Tanzania, and Uganda. These countries are also identified according to our algorithm as fast growing.

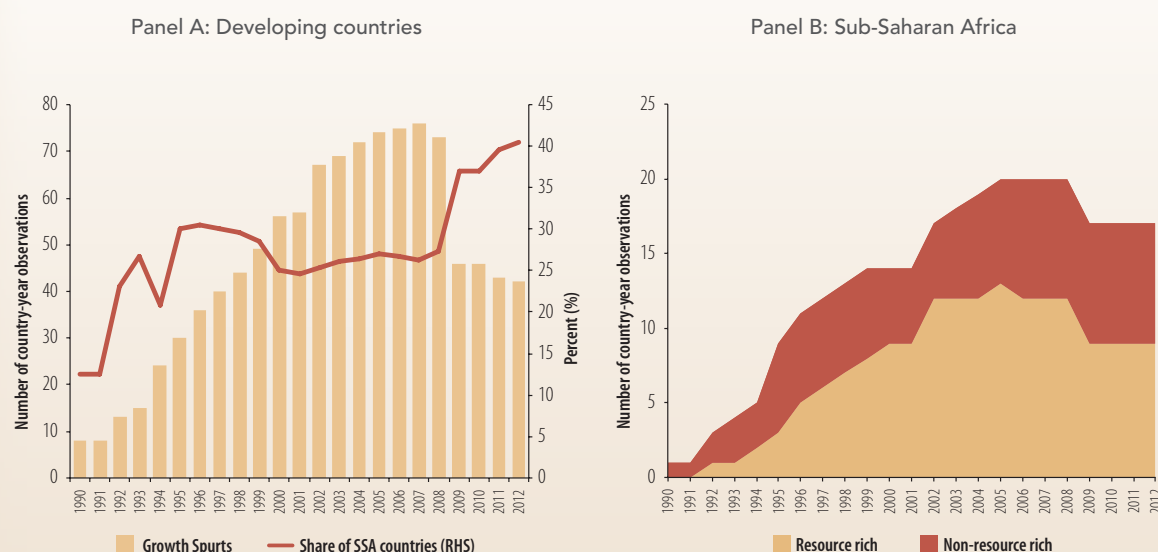
TABLE 2: Fast-growing countries in Sub-Saharan Africa (Ongoing and new growth spurts during 1995–2012)

Country Resources	Features of Expansionary Phases				
	Start	End	Duration (years)	Growth (ppa)	
				GDP p/c (%)	GDP (%)
I. Resource rich countries					
Oil producers					
Equatorial Guinea	1992	2008	17	15.6	18.8
Angola	1994	2008	15	6.5	9.7
Sudan	1995	*	18	3.2	4.6
Chad	1997	2005	9	6.2	9.8
Nigeria	2000	*	13	5.3	7.9
Non-oil resource abundant					
Liberia	1996	2002	7	23.1	28.7
Mozambique	1996	*	17	4.7	7.4
Tanzania	1998	*	15	3.5	6.2
Botswana	1999	2008	10	3.5	4.9
Ghana	2002	*	11	4.3	6.8
Namibia	2002	*	11	3.5	4.9
Sierra Leone	2002	*	11	5.1	8.2
Zambia	2003	*	10	3.2	6.0
Liberia	2005	*	8	7.2	10.6
II. Non-resource rich countries					
Mauritius	1984	*	29	4.0	4.9
Cabo Verde	1992	*	21	6.8	8.4
Uganda	1993	*	20	3.5	6.8
Burkina Faso	1995	*	18	3.2	6.1
Malawi	1995	1999	5	4.4	6.6
Rwanda	1995	*	18	5.7	9.5
Lesotho	2003	*	10	3.4	4.3
Ethiopia	2004	*	9	7.1	9.8
Central African Republic	2006	*	7	4.6	6.5

*Unfinished expansions as of 2012.

p/c = per capita. PPA = percent per annum.

FIGURE 27: Incidence of growth spurts in Sub-Saharan Africa and the developing countries, 1990–2012
(Number of episodes and percentages)



Growth spurts in Sub-Saharan Africa continued throughout the 2008–09 global financial crisis. The incidence of spurts among resource-rich countries was higher during 2002–08 (12 to 13 countries), coinciding with the super cycle of commodity prices

Main features of growth spurts

The application of the algorithm to identify growth spurts renders 23 ongoing and new episodes in Sub-Saharan Africa during 1995–2012, of which 13 episodes correspond to resource-rich countries and 9 to non-resource-rich countries. For developing countries outside the region, 53 ongoing and new episodes of growth spurts are identified. Table 3 summarizes the main characteristics of these takeoffs in per capita growth for countries in the region and other developing countries.

The average duration of growth spurts among fast-growing Sub-Saharan African countries and fast-growing developing countries is relatively similar (13.4 and 13.3 years, respectively). Moreover, spurts in output per capita tend to last longer among non-resource-rich countries (15.2 years) than among resource-rich countries (nearly 12.3 years). During the 23 takeoffs experienced in Africa, the average growth per year was approximately 6 percent—greater than the 5.2 percent per year during takeoffs among other developing countries. Comparing spurts among resource-rich and non-resource-rich countries in the region, the former group grows at a faster pace (6.8 percent per year compared to 4.8 percent), but their growth is more volatile (table 3).

TABLE 3: Mean features of growth spurts in Sub-Saharan Africa (In years and percent per year)

	Fast-growing Developing Countries	Fast-growing SSA Countries		
		All Countries	Resource Rich	Non-Resource Rich
Duration of the growth spurt (in years)				
Average	13.3	13.4	12.3	15.2
Std. Dev.	7.1	5.7	3.6	7.9
Median	12	11	11	18
25th percentile	9.0	9.0	9.8	8.0
75th percentile	15.0	18.0	15.5	20.5
Average annual growth in GDP per capita during spurt (%)				
Average	5.15	5.99	6.79	4.76
Std. Dev.	1.62	4.57	5.69	1.46
Median	4.76	4.64	4.92	4.39
25th percentile	3.83	3.47	3.47	3.46
75th percentile	5.96	6.54	6.69	6.26
Average annual growth in real GDP during spurt (%)				
Average	5.86	8.58	9.60	6.99
Std. Dev.	1.57	5.35	6.58	1.91
Median	5.67	6.80	7.65	6.61
25th percentile	0.05	0.06	0.06	0.06
75th percentile	0.06	0.10	0.10	0.09
No. Spurts	60	23	14	9

Note: Std. Dev. = standard deviation.

Dynamics of output per capita along expansionary periods

The trajectory of real output per capita during the first decade of the trough-to-peak phase of the cycle associated to growth spurts is investigated to see how it is associated with (i) the behavior of the components of aggregate demand, (ii) the behavior of GDP by sector of activity, and (iii) the dynamics of output and capital stock per worker and total factor productivity. The comparative analysis focuses on growth spurts in developing countries and Sub-Saharan Africa, and in the case of the latter, also distinguishes between resource and non-resource-abundant countries.

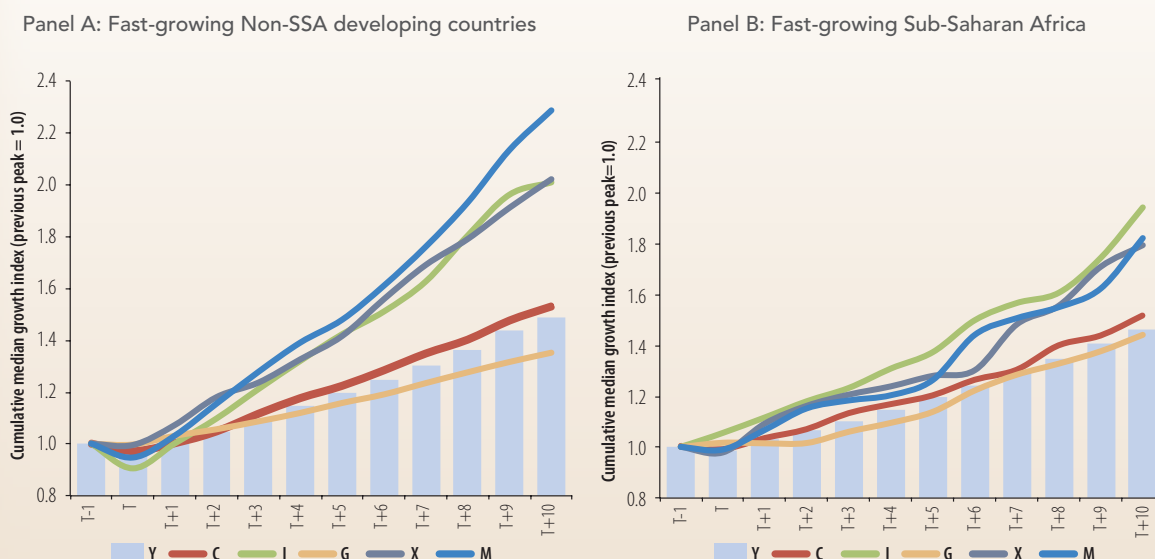
Real output per capita grows at the same pace for fast-growing countries in the region and among developing countries outside the region. Growth takeoffs in non-resource-abundant Sub-Saharan African countries, however, are steeper than among fast-growing developing countries. In fact, real output per capita grows at an annual rate of 4.14 percent from the previous peak in non-resource-rich countries in the region, which is slightly higher than fast-growing developing countries outside the region (4.06 percent per year). These countries also outperform resource-rich African countries, which grew 3.6 percent per year.

Figure 28 depicts the cumulative growth rate of the different components of aggregate demand along the growth spurts for the developing world and Sub-Saharan Africa. A sharp boost in domestic investment and growth of imports that outpace exports appear to characterize the path of fast-growing developing countries outside the region. In the case of Sub-Saharan Africa, the fast pace of real economic activity is supported by a sharp increase in (private and public) domestic investment and balanced growth of exports and imports. Gross capital formation along the first decade of the spurt grew 6.9 percent per year among African countries, while average annual growth in exports and imports exceeded 6 percent.

However, while the increase in domestic investment along the spurt was faster in resource-rich than in non-resource-rich countries (8.2 and 5.1 percent per year, respectively), the growth of exports outperforms that of imports in the latter group. That is, non-resource-rich countries either reduced their current account deficits or moved into surplus along the spurt, while the opposite was the case for resource-rich countries. In non-resource-rich countries, countries like Burkina Faso saw their current account deficits narrow from -15 to -5 percent of GDP over the last decade. Among resource-rich countries, some oil and nonoil producers experienced a deterioration of their current accounts. For instance, Sudan widened its current account deficit from -3.6 percent of GDP in 1995 to -11 percent of GDP in 2012, while Ghana's deficit over the same period increased from -2 to -12 percent of GDP.

FIGURE 28: Expansion in aggregate demand in growth spurts in fast-growing countries, 1995–2012

Period T (=1.0) is the peak in real GDP per capita previous to the start of the expansion



Source: World Bank.

Note: T is the trough in real GDP per capita identified using the Bry-Boschan algorithm to detect turning points applied to annual data.

In Sub-Saharan Africa, the fast pace of real economic activity is supported by a sharp increase in private and public domestic investment and balanced growth of exports and imports

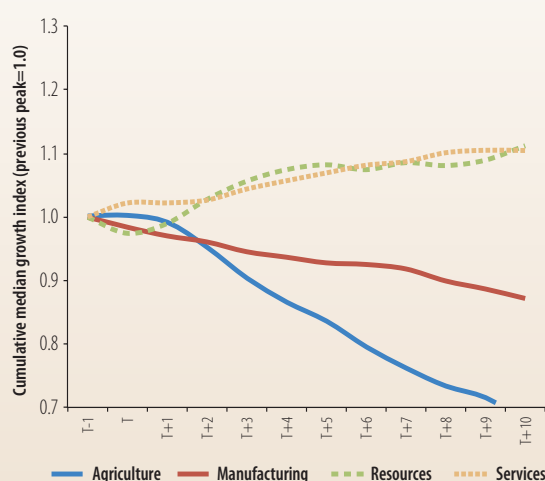
During the last two decades of economic performance in Africa, growth was also broad based across all sectors, although there is some degree of heterogeneity in growth across sectors. Figure 29 shows the evolution of the sector shares during spurts. Growth in the developing world (excluding African countries) has occurred with greater shares in the resources and services sectors and declining shares in both agriculture and manufacturing. In the Africa region, a resources sector boom occurring at the expense of all other sectors was the norm.

Median annual growth of GDP per worker among African countries was faster during the spurt (3.5 percent per year) compared to the median annual rate in the developing world (3.3 percent)

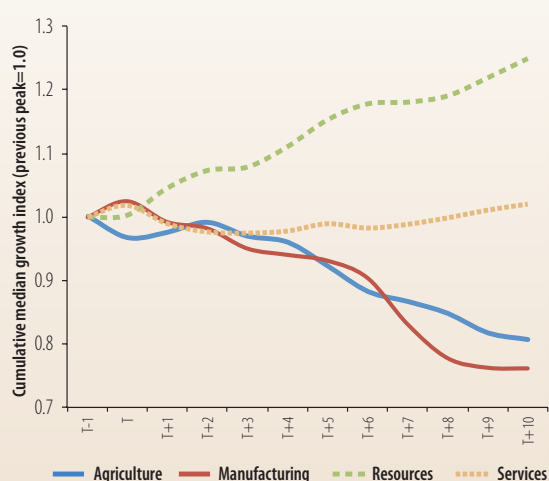
FIGURE 29: Shares of sector activity along growth spurts in fast-growing countries, 1995–2012

Period T (=1.0) is the peak in real GDP per capita previous to the start of the expansion

Panel A: Fast-growing Non-SSA developing countries



Panel B: Fast-growing Sub-Saharan Africa



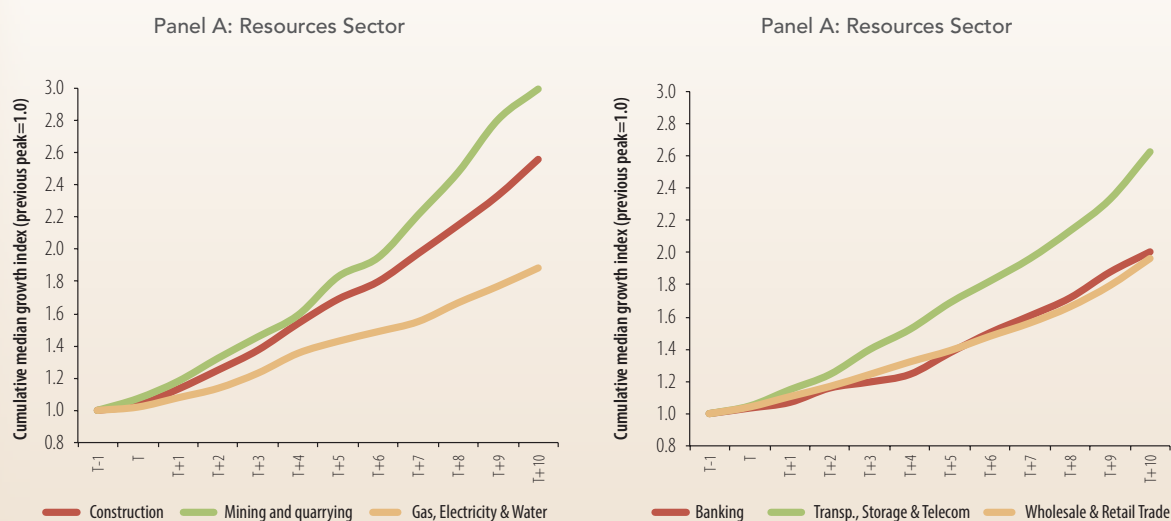
Source: World Bank.

Note: T is the trough in real GDP per capita identified using the Bry-Boschan algorithm to detect turning points applied to annual data. The figure reports the growth rate of the ratio.

Zooming in on the different subsectors within the resources sector shows that the resources sector increase in the developing world was predominantly driven by a boom in the construction sector and higher growth in gas, electricity, and water. For Sub-Saharan Africa, the boom in the resources sector is explained by the surge in mining and quarrying (11.6 percent per year during the first decade of the spurt) and construction (9.9 percent per year). The boom in mining and quarrying might be, in turn, attributed to favorable international prices of oil, metals, and minerals, and to rising foreign investment in extractives industries of the region (figure 30). Finally, banking and transportation, storage, and telecommunications explain the rising share of the services sector among developing countries outside the region, while the share of services in the region remains almost invariant during the first decade of the spurt, despite the increase in the infrastructure sector. Along their corresponding growth spurts, the share of services in Cabo Verde has increased from 72 to 74 percent of GDP, while that of Tanzania has fluctuated around 42 and 47 percent, and in Zambia it has dropped from 50 to 43 percent. In most of these cases, the importance of banking and the infrastructure declined while that of wholesale and retail trade increased.

FIGURE 30: Growth within the resources and services sector along growth spurts in Sub-Saharan Africa

Period T (=1.0) is the peak in real GDP per capita previous to the start of the expansion



Source: World Bank.

Note: T is the trough in real GDP per capita identified using the Bry-Boschan algorithm to detect turning points applied to annual data.

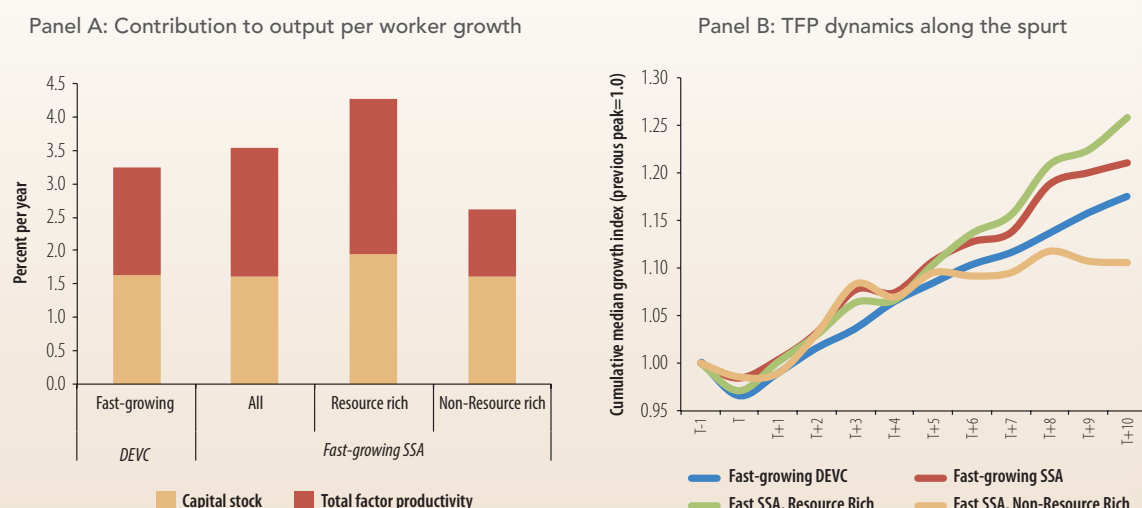
Sub-Saharan Africa's exports grew at a robust pace, driven by the region's natural resources

Finally, the paths of real output per worker, capital stock per worker, and TFP along growth spurts are depicted in figure 31. In the developing world, GDP per worker grew at an average annual rate of 3.3 percent during the first decade of the spurt, with capital deepening and TFP growth contributing equally to the boost in output per worker. Average annual growth of GDP per worker among African countries was faster during the spurt (3.5 percent per year), however, and the contribution of TFP growth was relatively larger than that of capital deepening (1.9 and 1.6 percent per year, respectively).

The pace of growth in labor and TFP is different when comparing resource-rich and non-resource-rich countries in the Africa region. Real output per worker grew faster among resource-rich countries (4.3 compared to 2.6 percent per year), and TFP growth explains more than half of the surge in economic growth in this group of countries (2.3 percent per year or 54 percent of the variation in output per worker). For non-resource-rich countries, TFP growth was positive although slower (1 percent per year). It can be argued that the faster dynamics in output and productivity among resource-rich countries can be attributed to the technological and know-how diffusion embedded in foreign investment in extractive industries. For non-resource-rich African countries, the lower TFP growth would be associated to the shift in economic activity to activities in the services sector that have low productivity (say, the wholesale and retail trade sector).

Average annual growth of GDP per worker among African countries was faster during the spurt (3.5 percent per year) compared to the average annual rate in the developing world (3.3 percent)

FIGURE 31: Capital deepening and total factor productivity growth along growth spurts, 1995–2012
Period T (=1.0) is the peak in real GDP per capita previous to the start of the expansion



Source: World Bank.

Note: T is the trough in real GDP per capita identified using the Bry-Boschan algorithm to detect turning points applied to annual data. The data of output per worker, capital stocks, and the number of workers were taken from Penn World Tables 8.0 (Feenstra, Inklaar, and Timmer 2013). DEVC = Developing countries.

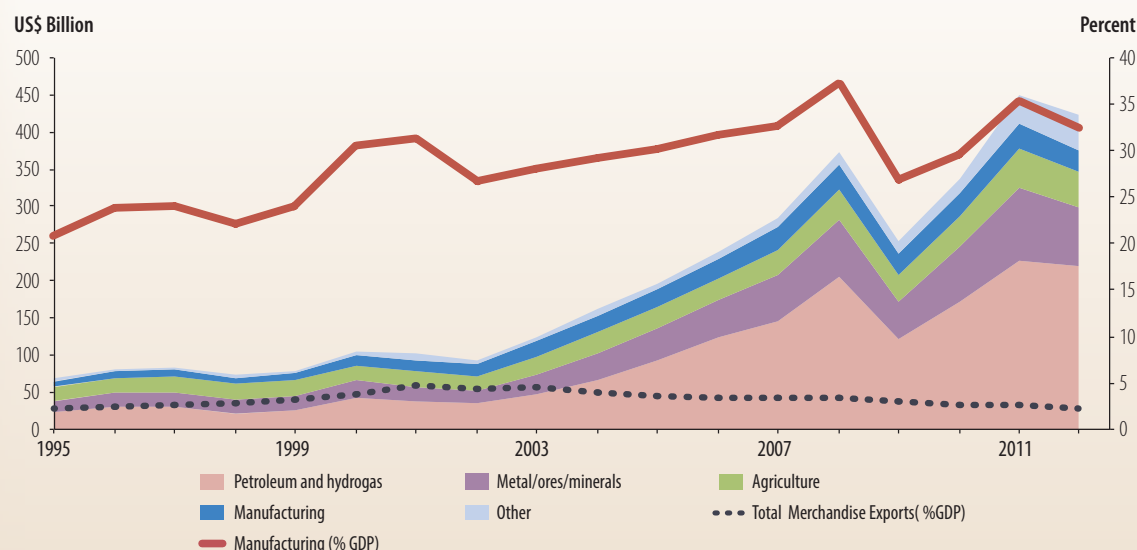
GROWTH AND TRADE PATTERNS IN SUB-SAHARAN AFRICA

Sub-Saharan Africa's largely resource-based growth has had implications for structural change in the region's economies and patterns of export growth. An important issue here is whether African countries' growth has been accompanied by a diversification of exports away from primary commodities.

Pattern of export growth: Same exports, new partners

Sub-Saharan Africa's exports grew at a robust pace, driven by the region's natural resources. During 1995–2012, the region's total exports increased from \$68 billion to over \$400 billion, or at an annual rate of 11 percent (figure 32). Most of this increase came from natural resources export. For example, petroleum, minerals, and metals exports ballooned from \$38 billion to \$300 billion during this period. Petroleum exports (fuel and gas) alone accounted for over half of the exports in 2012. While high commodity prices have helped the region in recent years, the heavy reliance on resource-based exports also makes the region highly vulnerable to the shocks in commodity prices—as has been observed during 2009 and to some extent in 2012.

FIGURE 32: Evolution of merchandise exports in Sub-Saharan Africa, 1995–2012



Source: WITS 2014.

Sub-Saharan Africa's exports grew at a robust pace, driven by the region's natural resources

The region's manufacturing exports are also growing, albeit at a much slower rate. During 1995–2012, manufacturing exports quadrupled from \$7 billion to over \$29 billion—an average annual growth rate of about 8 percent, below that of total merchandise exports. Consequently, the share of manufacturing exports in total merchandise exports has declined over the last 10 years, and at 7 percent is well below the 1995 level of 10 percent (table 4). The region lags all other developing regions in the relative size of its manufacturing exports: The share is one-sixth of that in South Asia and one-tenth of that in East Asia and the Pacific.

TABLE 4: Share of manufacturing exports in total merchandise exports

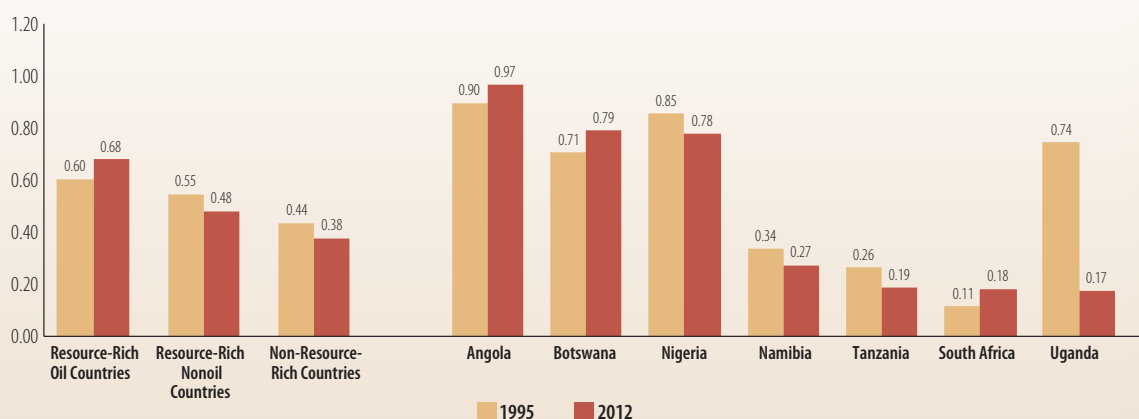
Manufacturing exports (% of Merchandise Exports)	1995 (%)	2005 (%)	2012 (%)
East Asia & Pacific (developing only)	72	80	76
Europe & Central Asia (developing only)	22	23	21
Latin America & Caribbean (developing only)	39	41	35
South Asia	60	50	45
Sub-Saharan Africa	10	12	7

Source: WITS 2014.

Export diversification remains a difficult challenge for many African countries, particularly oil exporters. Oil-exporting countries rely heavily on a single commodity as their revenue source. For example, Angola, Chad, Equatorial Guinea, Gabon, and Nigeria received, on average, more than 92 percent of their exports earnings (as a share of total merchandise exports) from oil during 2010–13. Although, the export revenue share from minerals and metals may not be as high as that from oil, it is still high for some nonoil resource-rich countries—Botswana, Guinea, Mauritania, and Sierra Leone—with earnings more than 50 percent of their revenue from natural resources. In 2012, oil-rich Sub-Saharan African countries had the highest degree of export concentration (index of 0.68) in the region, and the extent of concentration has deepened since 1995. The export concentration index is considerably lower for both the nonoil resource-rich country group (index of 0.48) and the non-resource-rich country group (0.38), and the degree of concentration has declined since 1995 (figure 33).

In 2012, oil-rich Sub-Saharan African countries had the highest degree of export concentration (index of 0.68) in the region, and the extent of concentration has deepened since 1995

FIGURE 33: Export concentration ratios by group, 1995–2012



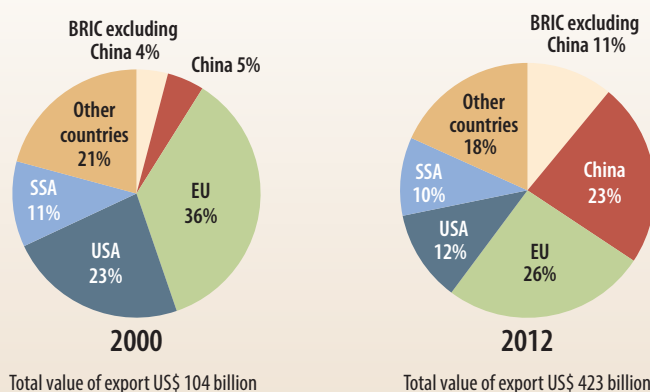
Source: UNCTAD 2014.

Some countries have had success in diversifying exports. An example is Uganda. The country's export diversification has been driven by an increase in nontraditional exports such as flowers, fresh fruits and vegetables, and fresh and frozen fish. Diversification of exports was helped by policy measures to facilitate export growth and the development and revival of nontraditional agricultural exports; a drop in coffee prices, which encouraged producers to switch to other sectors; diverse initiatives from international donors; and regional integration and pacification of neighboring countries, which opened opportunities in new markets. Tanzania also saw major increases in and diversification of output and exports. The production and export of traditional agricultural cash crops (such as cashew nuts, coffee, cotton, tea, sisal, and tobacco) declined considerably in importance. As a result, output concentration decreased quickly. The geographic distribution of Tanzania's exports also changed considerably over the last decade. The European Union (EU) decreased in importance, while regional trade, especially with the East African Community (EAC) and South Africa, increased.

Although Sub-Saharan Africa's merchandise exports have remained concentrated in a few commodities, the region's countries have made substantial progress in diversifying their trading partners. Over the last decade, exports to emerging markets such as the BRICs—Brazil, Russia, India, China—have grown robustly, primarily due to the prolonged boom in commodities demand. The BRICs received only 9 percent of Sub-Saharan Africa's exports in 2000 but accounted for 34 percent of total exports a decade later (figure 34). Total exports to the BRICs surpassed the region's exports to the European Union (EU) market in 2010 and continue to grow. In 2012, the region's exports to the BRICs reached \$145 billion. China alone accounted for about a quarter (23.3 percent) of the region's total merchandise exports. Of course, this shift in trading partners also underscores the region's vulnerability to any slowdown in the BRICs, namely China.

The region's success in growing markets for its manufacturing exports is more mixed. In the early part of the 2000s, most of the region's manufactured exports were shipped to the EU and U.S. markets—these destinations accounted for over half of Sub-Saharan Africa's manufactured exports. However, the share of the EU as a market for these exports has gradually declined. In recent years, the largest share of manufactured exports was traded within the region—more than 40 percent. The region's manufactured exports to the most dynamic export destination in recent years (BRIC countries) were negligible a decade ago and remained low at 4 percent in 2012.

FIGURE 34: Share of total merchandise exports by destination (%), 2000–12



Source: WITS 2014.

Over the last decade, exports to emerging markets have grown robustly, primarily due to the boom in commodities demand

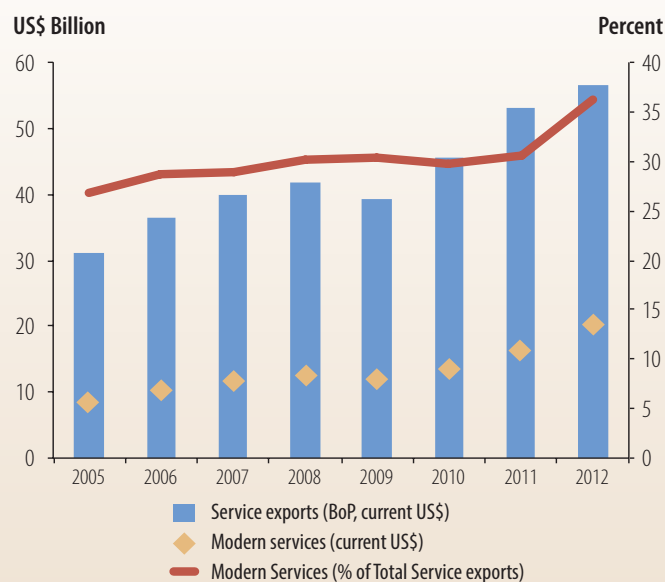
Trade in services – An untapped growth area

Globalization of services is a potentially important source of growth for developing countries. Recent studies (Ghani, Goswami, and Kharas 2011; Goswami and Saez 2014) point to several favorable trends that support this view: services trade is the fastest-growing sector within global trade; the share of modern services in total services trade is rising; and the share of developing countries in world service exports has been rising. Technology and outsourcing are enabling traditional services to overcome their old constraints such as physical and geographic proximity. Modern services, such as software development, call centers, and outsourced business processes, can be traded like value-added, manufactured products, enabling developing countries that focus on such services, innovation, and technology to leverage services as an important driver of economic growth.

Has Sub-Saharan Africa tapped this potential? At over \$50 billion, the region's services exports trail all other developing regions; however, these exports are expanding annually at about 12 percent, on average. Traditional services (such as transportation and travel) have recorded a decline from 73 percent of total services exports in 2005 to less than 64 percent in 2012, while modern services in the region have increased their share by nearly 10 percentage points over the same period, from just over 26 percent of total services exports to about 36 percent (figure 35).

Sub-Saharan Africa's services exports are expanding at an average annual rate of about 12 percent. The share of modern services in total services exports has increased by nearly 10 percentage points between 2005 and 2012

FIGURE 35: Size of the service sector in Africa, 2005–12



Source: World Bank.
Note: BOP = balance of payments.

In some countries such as Mauritius, Rwanda, and Tanzania, modern services exports recorded annual growth rates of over 10 percent between 2005 and 2012, with Rwanda starting from a low base of less than \$40 million in modern services exported in 2005 to over twice that amount at almost \$85 million by 2012. In both Mauritius and Rwanda, rapid expansion in modern services is a result of increased activity in tradable business and financial services. Over 60 percent of those employed in large companies in Mauritius work in the services sector, which offers more employment opportunities than either agriculture or

manufacturing. While these countries have experienced the fastest increase in modern services, others like Kenya are also emerging as places where modern services are becoming important drivers of growth and development.

Annex I. Detecting Turning Points with Annual Data

Applying the Bry-Boschan algorithm to annual data is straightforward (Harding 2002). The *calculus rule* that $> (<) 0$ to the right (left) of a local peak (trough) provides a starting point to identify turning points in a series. Moreover, macroeconomic series are recorded at discrete intervals and typically are not continuous functions of time. Hence, we require a discrete analog of the calculus rule. For annual data, the rule for locating turning points becomes:

Peak in real GDP at time t if:

Trough in real GDP at time t if: .

We apply the calculus rule specified above to annual data on real GDP per capita for a wide array of countries.

We characterize the different phases of the cycle in real output per capita, that is, recessions and expansions. The main features of these phases are defined as follows:

- ▶ The *duration* of the cycle is computed as the number of years from peak to trough during contraction episodes and from trough to the next peak in an expansionary phase.
- ▶ The *amplitude* of the cycle is calculated as the maximum drop of GDP from peak (trough) to trough (peak) during episodes of contraction (expansion).
- ▶ The *slope* of each phase is calculated as the ratio of the amplitude of the peak-to-trough (trough-to-peak) phase of the cycle to its duration.

References

- Abiad, Abdul, John Bluedorn, Jaime Guajardo, and Petia Topalova. 2012. "The Rising Resilience of Emerging Market and Developing Economies." IMF Working Paper WP/12/300, International Monetary Fund, Washington, DC.
- African Center for Economic Transformation. 2014. "African Transformation Report: Growth with Depth." African Center for Economic Transformation, Accra, Ghana.
- Arbache, Jorge Saba, and John Page. 2009. "How Fragile is Africa's Recent Growth?" *Journal of African Economies* 19 (1): 1–24.
- Arslanalp, Serkan, and Takahiro Tsuda. 2014. "Tracking Global Demand for Emerging Market Sovereign Debt." IMF Working Paper WP/14/, International Monetary Fund, Washington, DC.
- Aykut, Dilek. 2014. "International Bond Issuance by African countries." World Bank, Washington, DC.
- Bluedorn, John, Rupa Duttgupta, Jaime Guajardo, Nkunde Mwase, Shan Chen, and Angela Espíritu. 2013. "Breaking through the Frontier: Can Today's Dynamic Low-Income Countries Make It?" *World Economic Outlook*, Chapter 4. Washington, DC: International Monetary Fund.
- Brunelin, S., and A. Portugal-Perez. 2013. "Food markets and barriers to regional integration in West Africa." Work in progress. World Bank, Washington, DC.
- de Vries, Gaaitzen, Marcel Timmer, and Klaas de vries. 2013. "Structural transformation in Africa: Static gains, dynamic losses." GGDC Research Memorandum #136, University of Groningen, October.
- Eichengreen, Barry, and Poonam Gupta. 2014. "Tapering Talk: The Impact of Expectations of Reduced Federal Reserve Security Purchases on Emerging Markets." Policy Research Working Paper Series 6754, World Bank, Washington, DC.
- Engel, Jakob, and Marie-Agnes Jouanjean, with Akanksha Awal. 2013. "Analytical Review of the History, Impact, and Political Economy of Barriers to Food Trade in Sub-Saharan Africa." Overseas Development Institute, London.
- Farole, T., and D. Winkler, eds. 2014. *Making Foreign Direct Investment Work for Sub-Saharan Africa: Local Spillovers and Competitiveness in Global Value Chains*. Washington, DC: World Bank.
- Feenstra, Robert C., Robert Inklaar, and Marcel P. Timmer. 2013. "The Next Generation of the Penn World Table." www.ggdc.net/pwt.
- Ghani, Ejaz, Arti Grover Goswami, Homi Kharas. 2011. "Service with a Smile: A new growth engine for poor countries." <http://www.xoxeu.org/print/6459>.
- Goswami, Arti Grover, and Sebastián Saez. 2014. "Trade in services competitiveness: An assessment methodology." *Journal of International Commerce, Economics and Policy* 5 (1).
- Harding, Don. 2002. "The Australian Business Cycle: A New View." Munich Personal RePEc Archive Paper No. 3698, Munich, June. <http://mpira.ub.uni-muenchen.de/3698/>.
- Hausmann, Ricardo, Lant Pritchett, and Dani Rodrik. 2005. "Growth Accelerations." *Journal of Economic Growth* 10 (4): 303–29.
- Hostland, Douglas, and Marcelo M. Giugale. 2013. "Africa's Macroeconomic Story." Policy Research Working Paper 6635, World Bank, Washington, DC, October.

- IMF (International Monetary Fund). 2013a. *Global Financial Stability Report*. Washington, DC: International Monetary Fund.
- . 2013b. "Keeping the Pace. Regional Economic Outlook: Sub-Saharan Africa." International Monetary Fund, Washington, DC, October.
- Jayne, T. S., and Rashid, Shahidur. 2013. "Input subsidy programs in sub-Saharan Africa: a synthesis of recent evidence." *Agricultural Economics* 44: 6.
- Jayne, T. S., Nicole Mason, Robert Myers, Jake Ferris, David Mather, Margaret Beaver, Natalie Lenski, Antony Chapoto, and Duncan Boughton. "Patterns and Trends in Food Staples Markets in Eastern and Southern Africa: Toward Identification of Priority Investments and Strategies for Developing Markets and Promoting Smallholder Productivity Growth." Michigan State University, Lansing, MI.
- Johnson, Simon, Jonathan D. Ostry, and Arvind Subramanian. 2007. "The Prospects for Sustained Growth in Africa: Benchmarking the Constraints." NBER Working Paper 13120, National Bureau of Economic Research, Cambridge, MA.
- Jouanjean, M. A. 2013 "Targeting infrastructure development to foster agricultural trade and market integration in developing countries: an analytical review." Overseas Development Institute, London.
- Kaminski, J., L. Christiaensen, C. Gilbert, and C. Udry. 2014. "Revisiting Seasonality in Prices and Consumption of Food – Evidence from East and Southern Africa." World Bank, Washington, DC.
- Keyser, J. 2012. "Africa can feed Africa: Removing Barriers to Regional Trade in Food Staples." Background paper for *Africa Can Help Feed Africa: Removing Barriers to Regional Trade in Food Staples*, edited by P. Benton, World Bank, Washington, DC.
- McMillan, Margaret M., and Dani Rodrik. 2011. "Globalization, Structural Change and Productivity Growth." NBER Working Paper 17143, National Bureau of Economic Research, Cambridge, MA.
- Minot, Nicholas. 2012. "Food price volatility in Africa: Has it really increased?" IFPRI Discussion Paper 1239, International Food Policy Research Institute, Washington, DC.
- Page, John. 2014, "Structural Change and Africa's Poverty Puzzle." The Brookings Institution, Washington, DC.
- Rodrik, Dani. 2013. "The Past, Present, and Future of Economic Growth." Working Paper 1, Global Citizen Foundation, Geneva.
- USAID (U.S. Agency for International Development). 2011. "Regional agricultural transport and trade policy study." West Africa Trade Hub Technical Report 41, U.S. Agency for International Development, Washington, DC.
- World Bank. 2011a. "Responding to Global Food Price Volatility and Its Impact on Food Security." Document prepared for the April 16, 2011, Development Committee Meeting by the staff of the World Bank, World Bank, Washington, DC.
- . 2011b. "Missing Food: The Case of Postharvest Losses in Sub-Saharan Africa." Africa Region, Report No. 60371, World Bank, Washington, DC.
- . 2013. "Youth Employment in Sub-Saharan Africa." World Bank, Washington, DC.

