Foresight Africa

Top Priorities for the Continent in 2017

Africa Growth Initiative
at BROOKINGS

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Letter from the Director

Amadou Sy

Director and Senior Fellow, Africa Growth Initiative
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2017 holds promise for Africa. Despite the troubles of 2016—political turmoil in the Gambia and the Democratic Republic of the Congo, continuing violence in South Sudan and Nigeria, drought in southern Africa, low commodity prices, and lowered growth outlooks—I enter 2017 with a positive attitude. So many of these serious challenges are those which Africa has weathered before and come out stronger for it. Peaceful transitions, such as in Ghana, provide examples of good governance and respect for the rule of law. Regional actors are creating African solutions to African problems in both the security and infrastructure realms, among others. Commodity-reliant countries are looking to diversify while the others are taking advantage of low oil prices.

In this year's *Foresight Africa*, the Brookings Africa Growth Initiative scholars and outside experts explore six overarching themes that provide opportunities for Africa to overcome its obstacles to spur fruitful and inclusive growth. These six interconnected, cross-cutting themes demonstrate the prospects for Africa's success for its policymakers, businessmen and women, and all its citizens. By examining such closely intertwined issues, we hope to bring a holistic view of the continent, emphasizing that with each challenge there is a solution, though it might not be found where we expect it to be.

Sub-Saharan Africa—especially its oil-exporting economies—has seen many credit downgrades and lowered growth outlooks in 2016, raising the importance of **financing for development** even higher. In Chapter 1, our authors explore several different mechanisms for financing development agendas as well as arguments for increased domestic revenue mobilization and economic diversification.

Growth will not be possible in Africa without jobs. Given the looming population boom, Africa must adapt not only through job creation, but also through skills development and support in both forgotten and frontier sectors. In the second chapter, our authors discuss not only the job prospects for Africans going into 2017, but **new ways to think about job creation.**

Essential to any modern economy is technology. In many ways, especially when it comes to financial inclusion, Africa is at the forefront. In addition, innovations are creating opportunities unheard of in other parts of the world—though accessibility to many advancements remains somewhat limited. In this chapter, our authors discuss how obstacles to innovation can be overcome in order for Africa to reach its full potential.

For the second year in a row, our contributors cover the increasingly important topic of urbanization. In the follow up from Habitat III and the New Urban Agenda, policymakers agree that **smart urban planning** is a requirement for successful development. This type of planning is challenging, though, as it requires an awareness of energy needs, transportation possibilities, pollution potential, safety, informal settlements, and affordability, among many other aspects.

In no other area of global governance has Africa shown a more united front than in the fight against **climate change**. Africa is expected to bear the brunt of the destructive effects, and the region's high poverty rate means that the poor will suffer the most. In this chapter, our authors offer thoughts to both the national and international communities on policies for combating climate change in light of Africa's unique circumstances.

To tie everything together, of course, are the policymakers, who have the power to create incentives for job creation, enact laws to combat climate change, create appropriate regulatory environments for innovation, and stabilize the macroeconomic environment. However, as our authors argue, without **good governance and respect for the rule of law**, countries and their citizens must fight an even-more uphill battle towards inclusive growth.

With this iteration of *Foresight Africa*, we aim to capture the top priorities for Africa in 2017, offering recommendations for African and international stakeholders for creating and supporting a strong, sustainable, and successful Africa. In doing so, we hope that Foresight Africa 2017 will promote a dialogue on the key issues influencing economic development in Africa in 2017 and ultimately provide sound strategies for sustaining and expanding the benefits of economic growth to all people of Africa in the years ahead.

Over the course of the year, we will incorporate the feedback we will receive from our readers and continue the debate on Africa's priorities through a series of events, research reports, and blog posts.

MOBILIZING FINANCIAL RESOURCES:

Strategies to manage the commodity slump and attract investment

Chapter 1

Sub-Saharan Africa's oil exporters:

Decisive domestic adjustment is needed to address growing financing needs

ISSUE BRIEF FROM THE AUTHOR

AMADOU SY
Director and Senior Fellow, Africa Growth Initiative,
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While prospects remain encouraging for many sub-Saharan African countries, how things have changed for the oil-exporting ones![1] Prior to 2014, oil exporters boasted an average current account surplus and even managed to generate a small government budget surplus (Figure 1.1). But then in 2014 oil prices fell so abruptly that by early 2016 they had breached their 10-year low. As revenues from oil exports shrunk, government revenues that largely depend on them fell, and so government financing requirements increased. Sub-Saharan African oil exporters are now faced with the "twin deficits" of their current account and government budget.

The challenge is that external financing requirements are increasing exactly at the same time as financial conditions are tightening. The United States' interest rates are increasing, which not only raises refinancing costs and the cost of new borrowing, but also dampens the search for yield and reduces the appetite for risk that had pushed investors to venture in frontier markets, including in Africa. Capital flows to oil-exporting countries may decline further or, even worse, reverse. Tighter financial conditions leave credible and decisive domestic adjustment as the main policy option to address growing financing needs. Unfortunately, oil exporters have so far been rather tentative in their adjustment efforts. In the face of depleted buffers and tighter financial conditions, they have been slow and at times even reluctant to implement much-needed macroeconomic adjustments.

[1] We use the IMF definition of oil-exporting countries: "countries where net oil exports make up 30 percent or more of total exports. Except for Angola, Nigeria, and South Sudan, they belong to the Central African Economic and Monetary Community (CEMAC)." See IMF (2016).

2017, then, is the time to use the oil shocks to not only implement the right macroeconomic policy mix but also to put oil-dependent economies on a better footing so they can make significant progress towards the sustainable development goals (SDGs). There is really no other choice as oil prices are expected to remain low for long (even though they have been rising of late). Short-term adjustment will only be a "pain medicine" and sectoral policies, including in agriculture, will be needed to diversify oil-rich economies and strengthen their structural transformation. Financing will only be one part of the equation and raising more revenues from the non-oil economy is an option that should be exercised. But now that oil rents have shrunk, it is the time to accelerate the pace of reforms that do not require much funding such as improving the efficiency of spending. Policymakers will need the right combination of political will, effective communication, and private sector and other stakeholders' involvement. The social contract in place during the boom years should be revisited.

Oil-exporters are facing larger financing needs

Unfortunately, and although oil prices have somewhat recovered, prospects do not look good and external financing will be difficult to obtain next year.

The boom and bust cycle of oil prices is leading to macroeconomic imbalances that will need to be financed. Fluctuations in the price of oil give a sense of how brutal the shock has been for oil exporters. The price of the commodity fell from $112 per barrel in mid-2014 to less than $39 in early January 2016. Falling oil prices have led to lower export revenues, deteriorated current account balances, and put pressure on currencies. Figure 1.1 shows how the current account deficit for oil exporters moved from positive to negative territory from 2013 to 2014. Such countries managed to generate a current account surplus of 3.8 percent of GDP in 2013, which fell to a deficit of 0.6 percent in 2014 and worsened to 4.7 percent of GDP in 2015. Figure 1.1 also shows how fiscal balances have worsened over time.

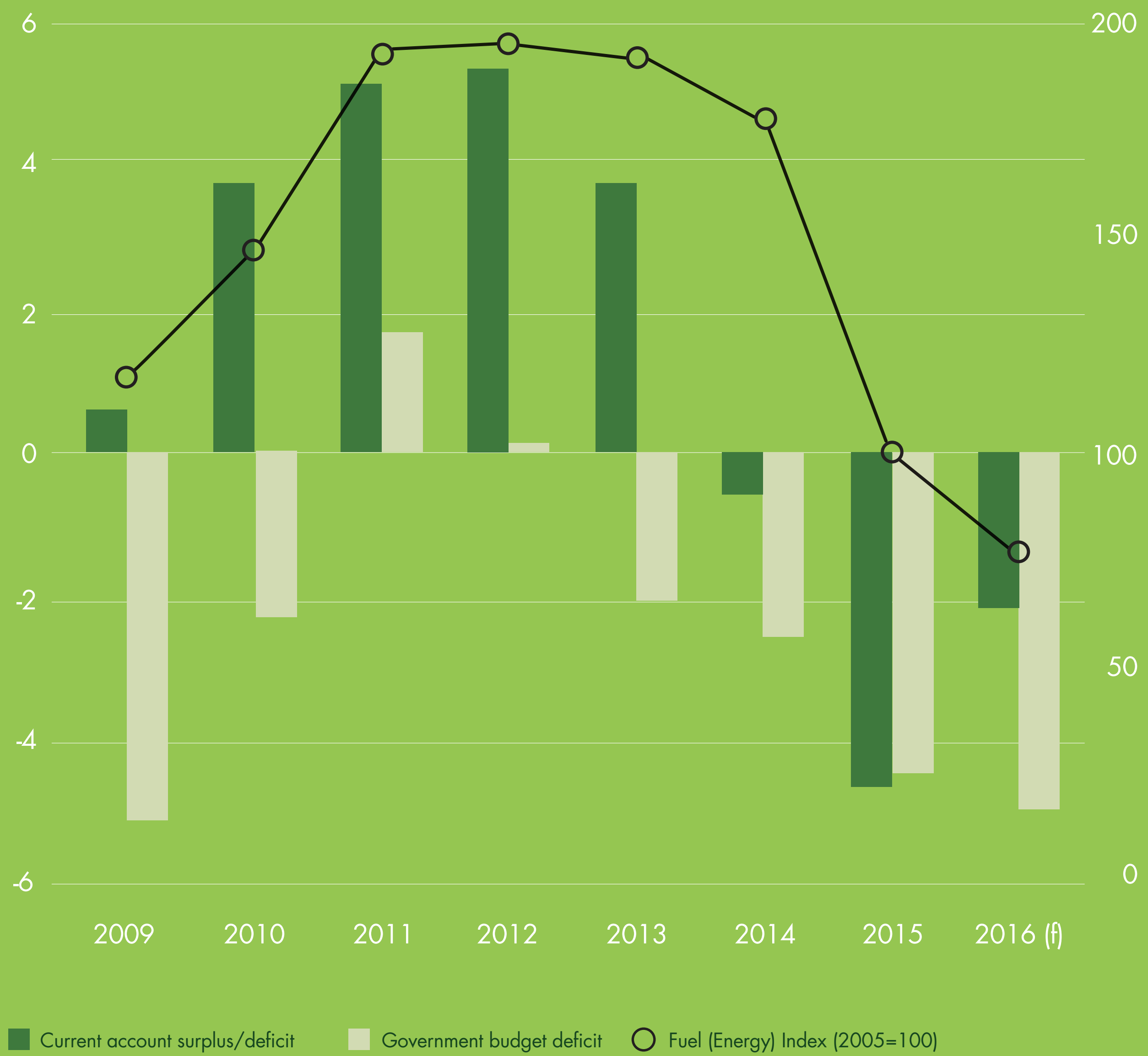
The large oil shock led to increased financing, and now a crucial question is to what extent external financing will be available in 2017. Unfortunately, and although oil prices have somewhat recovered, prospects do not look good and external financing will be difficult to obtain next year.

FIGURE 1.1.

SUB-SAHARAN AFRICA'S OIL-EXPORTING COUNTRIES:

TWIN DEFICIT FIGURES (IN PERCENT OF GDP)

Unsurprisingly, sub-Saharan oil-exporting countries face a twin deficit due to still-low commodity prices. In fact, current account deficits, which had moved from positive to negative between 2013 and 2014 have continued to remain negative over the past two years. At the same time, the government budget deficit has been expanding since 2013. In 2017 policymakers will continue to face gloomy prospects.



Sources: IMF Regional Economic Outlook (October 2016), IMF Primary Commodity Price System. Available at: https://www.imf.org/external/pubs/ft/reo/2016/afr/eng/sreo1016.htm.

FIGURE 1.2. REAL GDP GROWTH AND FORECASTS FOR SUB-SAHARAN AFRICA AND OIL-EXPORTING AFRICAN COUNTRIES

Forecasts for sub-Saharan Africa indicate that the region will experience even lower real GDP growth in 2016 than it did in the previous year—with oil-exporting countries experiencing larger declines than the regional average. In 2017, however, forecasted improvements in growth are in part predicated on policymakers' execution of sufficient policy adjustment and developmental spending on, for example, public infrastructure projects.

Source: IMF Regional Economic Outlook, October 2016.

TABLE 1.1. TOP AFRICAN ECONOMIC GROWTH PERFORMERS OF 2016-2017

While commodity exporters continue to experience economic strains in the short term, non-resource-intensive countries such as Côte d'Ivoire, Ethiopia, Senegal, and Tanzania are expected to remain within the top five African countries with the highest growth rates in 2016 and 2017, based on current estimates. Meanwhile, Ghana's growth rate is projected to rise substantially in 2017 following the opening of a new oil field, which may increase the country's output by nearly 50 percent.

Top performers based on 2016 growth estimates	
Country	**GDP growth (%) for 2016**
Côte d'Ivoire	8.0
Tanzania	7.2
Senegal	6.6
Ethiopia*	6.5
Rwanda	6.0
Kenya	6.0
Mali	5.3
Togo	5.3
Niger	5.2
Burkina Faso	5.2

Note: The highlighted countries will exit the top 10 in 2017.
*Fiscal year data

Source: IMF Regional Economic Outlook, October 2016.

Top performers based on 2017 growth estimates	
Country	**GDP growth (%) for 2017**
Côte d'Ivoire	8.0
Ethiopia*	7.5
Ghana	7.4
Tanzania	7.2
Senegal	6.8
Kenya	6.1
Rwanda	6.0
Burkina Faso	5.9
Uganda	5.5
Mozambique	5.5

Note: The highlighted countries will enter the top 10 in 2017.
*Fiscal year data

Source: IMF Regional Economic Outlook, October 2016.

Potential potholes to investment to watch for in 2017

Few could have predicted the confluence of factors that have shifted African markets in recent years. We've seen countries making earnest efforts to improve investment climates that have helped drive economic growth. We've seen large reductions in absolute poverty and growth in an African middle class with disposable income. We've seen the scale up of new technologies and the leapfrogging of legacy systems in areas such as banking, telecommunications, and utilities. At the same time, we've seen the devastation that a crash in commodity prices can bring to national budgets and some businesses. And, of course, little progress has been made on intractable corruption in many countries.

On balance, I remain more optimistic about the investment opportunities in Africa than I have been in the 30 years that I have been working with the continent, but I see three interrelated challenges that I believe will increasingly become gating issues that drive or inhibit investment flows over the next 12 months, depending on how they are addressed. These are: trust and trustworthiness, political will, and uncertainty.

Many social challenges that were once exclusively the domain of government budgets and aid groups can today be tackled with help from business.

First, I am concerned about persistent deep-seated public skepticism of the private sector that lies just below the surface of the welcome mat. It manifests itself in myriad overt and subtle forms in African politics and policy. Yet with aid budgets around the world flat and FDI growing, historically aid-reliant countries must adapt in order to secure the capital needed to feed, educate, and power a healthy and growing citizenry. Serious investors must be sincerely embraced and considered valued clients and partners that create jobs and generate economic growth, rather than piggy banks useful for tax revenues only.

To be sure, some of this skepticism of business is warranted. The legacy of some businesses that may have prioritized short-term profits over the health, well-being, and long-term relations with local communities has left scars. But we must not lose sight of the fact that many social challenges that were once exclusively the domain of government budgets and aid groups can today be tackled with help from business. This is because innovative models have been developed that enable these services to be delivered in a financially viable, self-sustaining manner. From electricity generation to privately operated public transportation, to private medical

Elizabeth Littlefield

President and CEO, Overseas Private Investment Corporation

clinics for low-income communities and for-profit schools that can cost as little as $6 per month, many critical development needs can be met with long-term private business models.

Second, distrust of the private sector can make ministers and civil servants reluctant to make difficult choices and decisions. When governments make bold decisions to eliminate energy subsidies or establish a cost-reflective tariff to attract investment in critical power upgrades, it's tempting to blame any accompanying energy cost increase on a predatory private sector. But that acts like a bucket of cold water on future investment. Trust and trustworthiness between investors and governments are needed to unlock critical capital flows for development.

My final concern is around uncertainty. It is investors' worst enemy. From energy tariffs to taxation to tendering processes to land and regulatory policies, predictability is what investors crave. Yet, we are seeing many instances of governments re-negotiating the agreements struck with early pioneering investors when their countries become more popular and less risky as an investment destination. Worse, we're seeing a retreat in short-term FDI in some markets because of the chilling effect of punitive policy changes. Nothing stymies prospective investors more than seeing existing investors having to deal with retroactive taxes, renegotiated concessions, or other painful and unforeseen policy changes. The experience of investors already in a country is the best advertisement for future investors—and it can be either a positive one or a very negative one.

The experience of investors already in a country is the best advertisement for future investors.

In many cases, a suboptimal but stable policy is preferable to a more attractive policy that might change. By sticking with a proven system with which investors and governments have practice, investors have a reliable foundation for business plans, project development timeframes shrink, and investment will flow.

Africa needs foreign investment to create jobs and opportunities, boost economic growth, drive innovation and build stable markets. It is my fervent hope, as president of the U.S. government's development finance institution, that governments and investors will grow to understand each other's needs and perspectives and see each other as partners in Africa's growth. When both can trust and be trusted to carry out their roles with fairness, pragmatism, and a sense of urgency, we will see progress in meeting the enormous needs and capitalizing on the historic opportunities that Africa richly merits.

International reserves have been depleted and additional foreign financing is less available

In the first half of 2016 alone, a number of oil-exporting countries, such as Angola, Gabon, and the Republic of the Congo, saw credit rating downgrades.

One buffer against falling oil prices is the level of international reserves, but such a buffer is limited. Oil-exporting countries in the region have been depleting their international reserves and, as noted by World Bank (2016), the cumulative decline in international reserves in oil-exporting countries in the region was more than 30 percent between end-June 2014 and March 2016. IMF (2016) also remarks that these countries have financed about two-thirds of their current account deficit by drawing on international reserves to the tune of 1.5 percent of GDP each year since 2014.

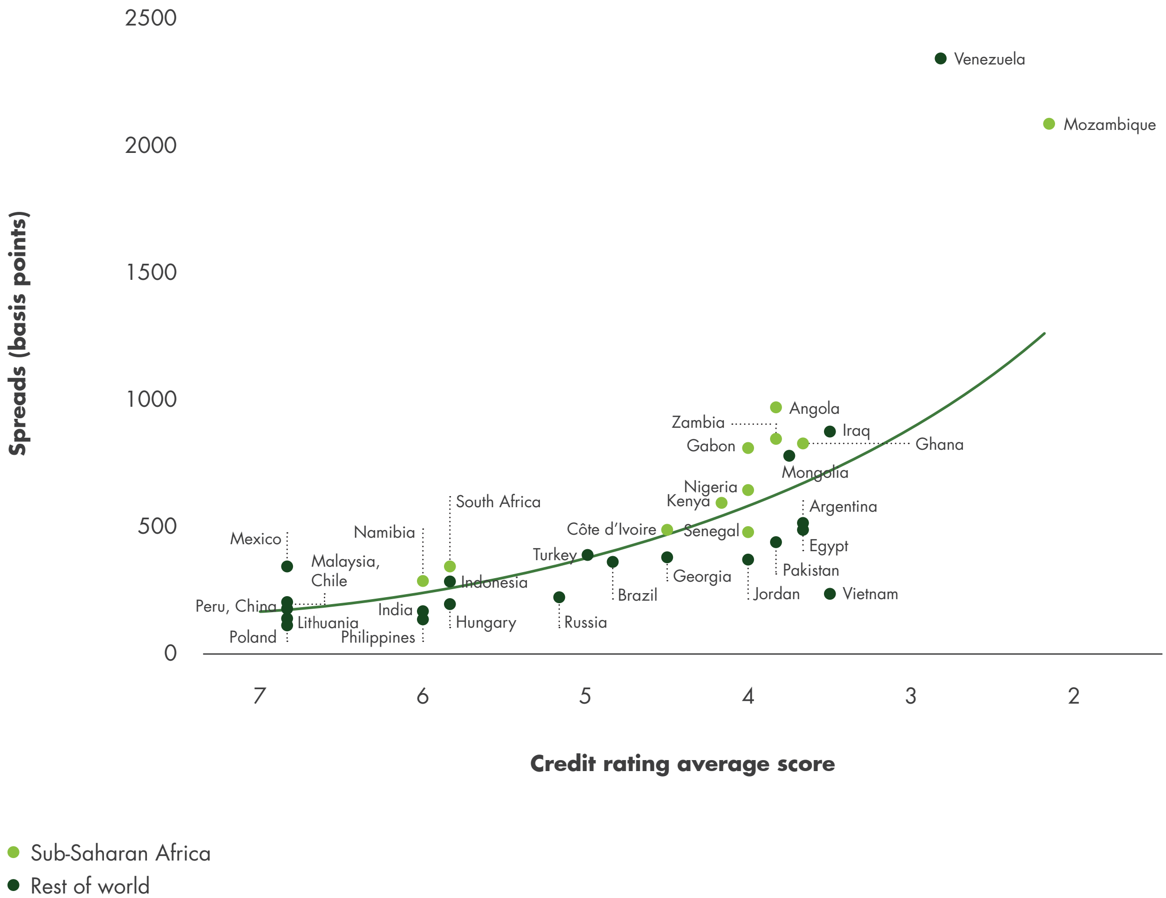
Foreign borrowing can also help finance the widening current account of oil exporters. But, as noted above, accessing the international debt market is becoming increasingly difficult and costly. In 2016, only South Africa and Ghana tapped international bond markets, the latter raising $750 million at yield of 9.25 percent after having delayed the issuance because of the higher price demanded by investors.[2] It is useful to note that unlike oil-exporting countries like Nigeria and Angola, Ghana was already under an IMF program and had already started its domestic macroeconomic adjustment.

As noted by World Bank (2016), the pace of credit rating downgrades has accelerated over the past year. In the first half of 2016 alone, a number of oil-exporting countries, such as Angola, Gabon, and the Republic of the Congo, saw credit rating downgrades. Higher interest rates and lower ratings are complicating these countries' efforts to access international markets. Figure 1.3, which shows sovereign bond spreads and ratings as of November 15, 2016 (before Mozambique's downgrade to "restrictive default" from CC by Fitch Ratings) indicates that oil- (and commodity-) exporting countries pay a relatively higher cost to issue debt. Nigeria's planned international bond issuance, its first since 2013, will provide a litmus test for other African oil-exporting countries seeking to finance themselves externally.

[2] Bloomberg, September 8, 2016. Available at: https://www.bloomberg.com/news/articles/2016-09-08/ghana-selling-benchmark-size eurobond-in-fourth-issue-since-2013.

FIGURE 1.3. SOVEREIGN SPREADS V. CREDIT RATING SCORES

African commodity-exporting countries tend to pay a higher cost to issue debt. The graph below shows the negative relationship between credit rating scores and the sovereign bond spreads. African countries, compared to other developing and emerging nations, pay a higher spread for the same level of default risk, as measured by credit ratings.



Note: Spreads are as of November 15, 2016. Credit rating average scores refer to the average ratings of Fitch, Moody's, and S&P ratings. Numerical values correspond to the following credit rating categories: 7=A, 6=BBB/Baa, 5= BB/Ba, 4=B, 3=CCC/Caa, and 2=CC/Ca.

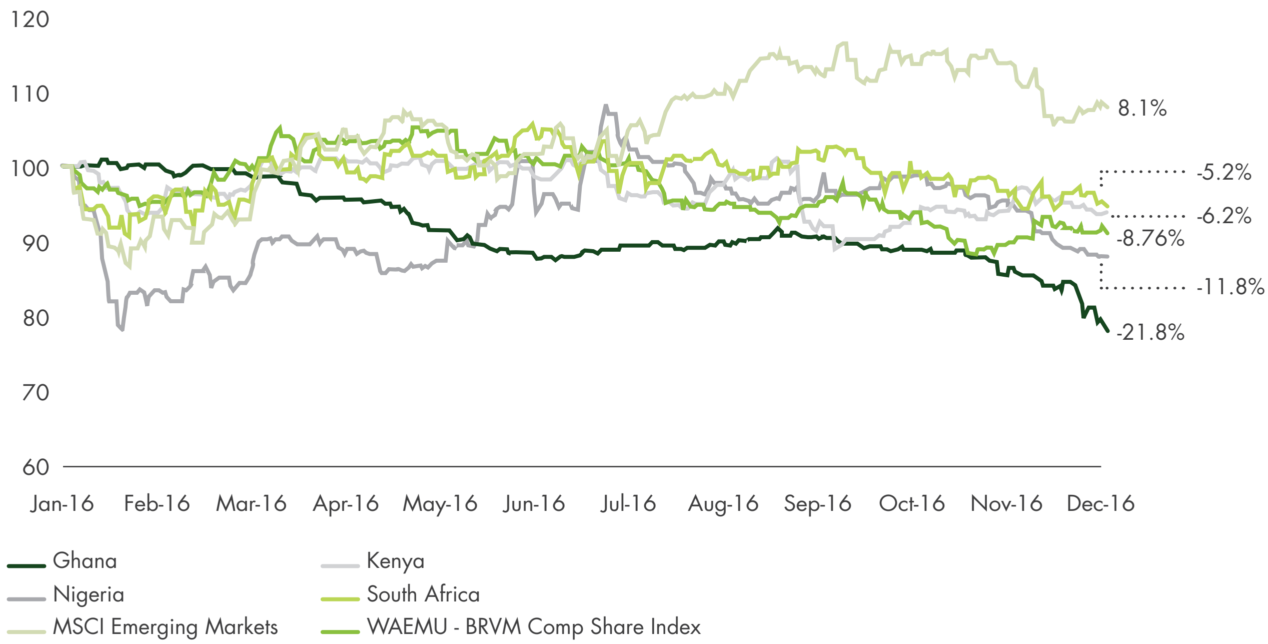
Source: Bloomberg L.P., J.P. Morgan EMBI Global.

Capital inflows (foreign direct investment (FDI) and portfolio inflows) are typically sought to finance current account deficits (with a preference for the former as it is more stable), but there are indications that investors are not as eager to invest in many oil-exporting countries as in other African countries. Indeed, World Bank (2016) notes that capital inflows in the region have slowed. In the case of Nigeria, capital inflows fell by 55 percent in the first quarter of 2016 while outflows more than doubled.

Against this background of tight foreign financing, what policy options are left for African oil exporters?

FIGURE 1.4. RETURNS FOR SELECT EQUITY MARKET INDICES (JANUARY 1 TO DECEMBER 1, 2016)

African equity indices fell below the emerging markets benchmark index (MSCI EM) registering negative returns in 2016. Ghana's decline not only reflects difficult macroeconomic conditions and power outages, but also investors' preference for the fixed-income market.

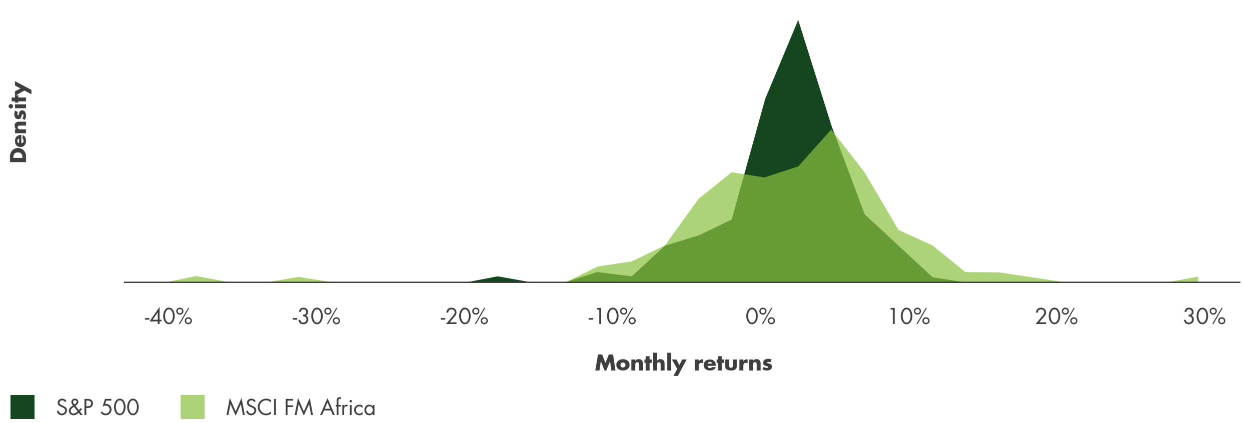


Note: Index (January 1, 2016 = 100). Equity indices are denoted in local currency terms, except for the MSCI Emerging Markets Index which is denoted in U.S. dollars. Percentages listed are total returns calculated using only price change for the period.

Source: Bloomberg L.P.

FIGURE 1.5. PROBABILITY DENSITY FUNCTION OF MONTHLY RETURNS: S&P 500 AND MSCI FM AFRICA

The graph below represents a probability density function comparing the monthly returns of the S&P 500 index with that of the MSCI FM Africa between May 2002 and April 2016. In that period, the lowest possible return for the MSCI FM Africa and the S&P 500 were -39 percent and -19 percent, respectively; while the highest monthly returns were 30 percent and 10 percent respectively. The MSCI FM Africa index is reportedly riskier than the S&P 500, given the larger distribution in the graph.



Source: Bloomberg L.P., MSCI.

The year of Africa

Makhtar Diop
Vice President for Africa, World Bank

As we begin a new year, calls for forecasts on what's at stake for Africa in 2017 keep pouring in. Predicting the near future for a continent as diverse as Africa is a perilous endeavor; one I usually stay away from. This year is no exception. With economic growth in sub-Saharan Africa falling in 2016 to 1.5 percent—its lowest level in over two decades—pundits have been quick to point out that Africa is no longer rising.

Times remain tough for sub-Saharan Africa with risks to the economic outlook remaining tilted towards the downside. But in a world full of uncertainty, African countries are faced with a unique opportunity to implement policies that matter.

For the region's largest economies and other commodity exporters came the realization that we can no longer depend on commodities. In fact, we never should. The reason is simple: Ample financing in times of high commodity prices have often delayed structural reforms. While commodity exporters have begun to address fiscal vulnerabilities and rebuild policy buffers, their efforts will take time.

For the economic juggernauts of sub-Saharan Africa, economic diversification is no longer an option, improving the non-resource tax systems is a must, and enhancing agricultural productivity is not an outdated concept.[1] Consider this: Higher productivity would not only raise the incomes of farmers, it would also free up resources, such as labor, for other economic sectors.

The big lesson from the downturn is that good policies make a difference. Which brings me to an important point: Sub-Saharan Africa is growing at diverging speeds. While some countries are struggling, over a quarter of the countries in the region continue to experience solid growth. But here comes the catch: As noted in this year's Africa's Pulse, our latest analysis of issues shaping Africa's economic future, countries that are showing signs of resilience tend to have stronger fiscal and monetary policies, better business regulatory environments, more effective public institutions, more diversified export structures, and not much oil.

For African countries, the time has never been better to move beyond business as usual and invest in the future. But I remain optimistic about prospects for a new model of high and inclusive growth. With the right policies, its ability to leapfrog development hurdles, and the ingenuity of its people, Africa can defy the odds.

References

World Bank. 2016. Africa's Pulse, No. 14, October 2016. Washington, D.C.: World Bank Group. Available at: https://openknowledge.worldbank.org/handle/10986/25097.

[1]See: Diop, M. 2016. Foresight Africa 2016: Banking on agriculture for Africa's future, Africa in Focus, Brookings Institution, January 22. Available at: https://www.brookings.edu/blog/africa-in-focus/2016/01/22/foresight-africa-2016-banking-on-agriculture-for-africas-future/.

Unlocking infrastructure investment across Africa

Enoh T. Ebong
Deputy Director, U.S. Trade and Development Agency

Modern, efficient infrastructure is the key to economic growth. Unfortunately, energy, transportation, and internet costs in Africa are among the highest in the world. This lack of infrastructure makes it difficult for African markets to grow sustainably. It also inhibits companies, including those in the United States, from accessing these markets.

Many African governments are working hard to address this issue by building airports, rail lines, and power plants. But they cannot do it alone. The World Bank estimates that $95 billion is needed annually to build the infrastructure Africa needs to sustain its growth—a price too steep for the public sector to bear on its own.

The only way to meet this demand is to mobilize private capital in support of infrastructure development, which is exactly what the U.S. Trade and Development Agency (USTDA) does.[1] As the U.S. government's project preparation agency, we help African stakeholders alleviate a key constraint to infrastructure development: lack of bankable projects. There has been a sharp expansion of investors and investment funds interested in Africa in the last few years, but that investment has been stalled by a lack of qualified projects available for investment.

To address this issue, USTDA provides African project sponsors access to U.S. industry experts who conduct the comprehensive analysis required for their infrastructure projects to attract financing and reach commercial operation. This early-stage financial support creates opportunities that were not previously available: It opens the door for private sector capital to enter with less risk and opens up markets to U.S. firms. It also helps African developers build the infrastructure they need to grow their economies.

This mutually beneficial model works. At this year's U.S.-Africa Business Forum, our Kenyan partners described how assistance during a project's initial stages—which are also its riskiest—helps them attract financing. One energy developer said that while he went into the USTDA process thinking he had done his homework, undergoing our due diligence and working with U.S. industry experts has improved his project and prepared him to face financiers.

Demand for this kind of support has never been higher. To meet it, we at USTDA are leading the communications strategy for the Project Preparation Facilities Network, an association of 19 facilities preparing African projects for financing. By coordinating closely with our sister organizations, we can increase the number of bankable projects, unlocking private capital and building the infrastructure Africa needs in 2017 and beyond.

As both a daughter of Nigeria and a proud American citizen, I am excited about the promise this holds for African project sponsors and their U.S. partners.

[1] For more information on the United States Trade and Development Agency (USTDA), visit www.ustda.gov.

Credible and decisive domestic adjustment in 2017 is the main policy option left for oil-exporters

But unlike more diversified economies, oil-dependent economies are like oil tankers, and they are difficult to turn around quickly.

The typical medicine against a negative oil shock for oil exporters is a combination of fiscal contraction, currency depreciation, and monetary tightening (to limit inflationary pressures). In addition, state-owned enterprises (SOEs) and the financial sector are closely watched to avoid any bad surprises such as the materialization of quasi-fiscal liabilities and higher nonperforming loans from exposures to oil and gas and currency mismatches. To make the medicine easier to ingest, existing policy buffers can be used to smooth the adjustment. When policy buffers are too low, multilateral institutions such as the IMF, the African Development Bank, and the World Bank as well as bilateral donors, including China, are asked to pitch in (when the political economy environment allows it).

But unlike more diversified economies, oil-dependent economies are like oil tankers, and they are difficult to turn around quickly. Still, implementing the right set of policies quickly and in a credible way is crucial. Unfortunately, African oil exporters have typically not been able to manage this difficult situation as credibly and decisively as they need to.

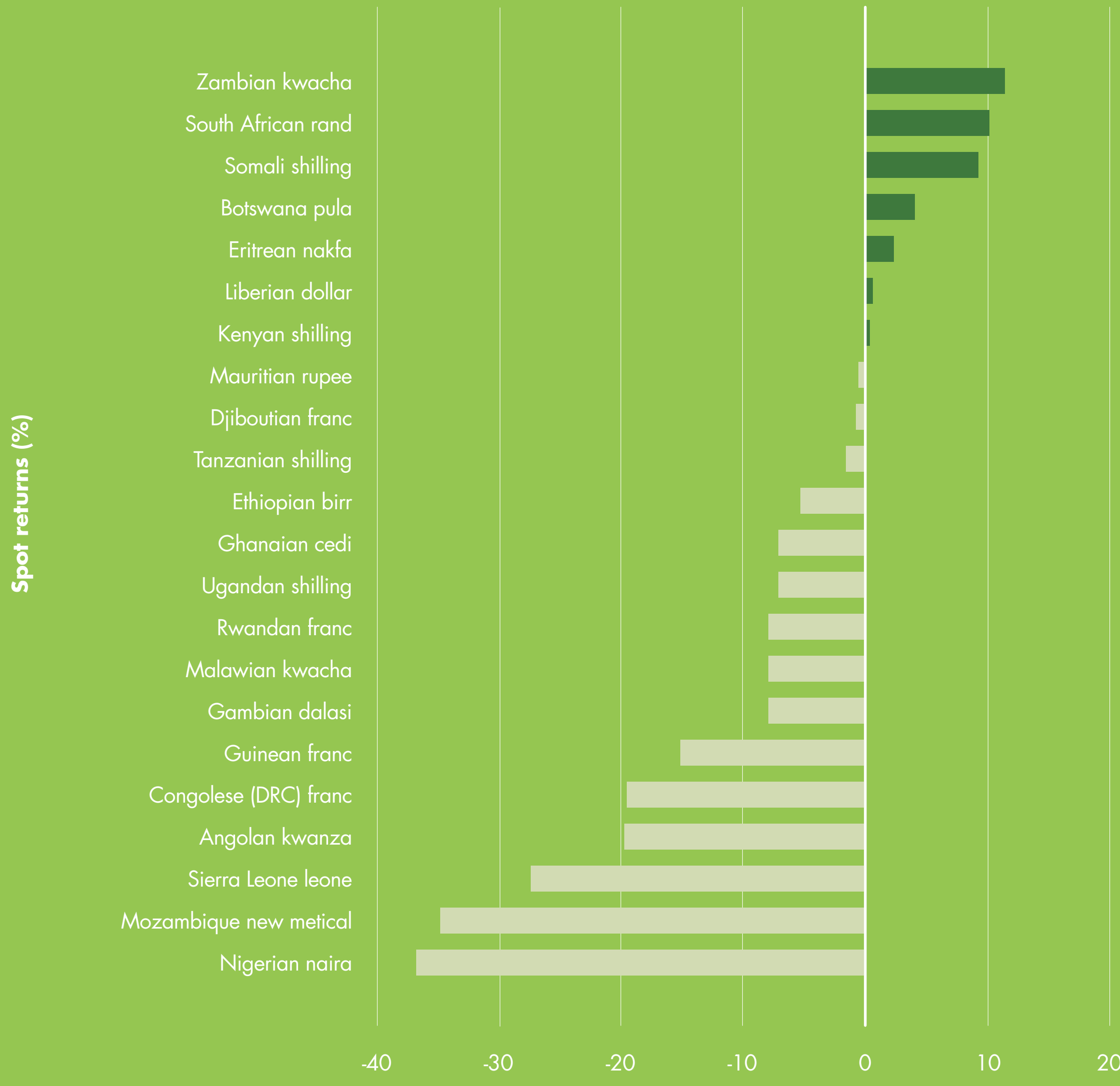
Slow exchange rate adjustment is evident not only in the dwindling international reserves of African oil-exporting countries but also in the scarcity of foreign exchange (getting U.S. dollars has becoming increasingly difficult in Nigeria, for instance), and in the large gap between parallel markets and official exchange rates such as in Angola and Nigeria. Budget outturns show that many countries were not able to rein in current expenditures or to execute capital expenditures (as in Nigeria, which sought to use it as countercyclical policy). In many countries, government debt has risen and a larger share of falling revenues are now allocated to service debt. IMF (2016) notes, for instance, that public debt has increased sharply among oil exporters by 20 percentage points of GDP since 2013 (although from a low level in Nigeria). Government arrears have also increased, and some governments have even resorted to central bank financing. Reasons for not achieving the right and timely policy mix have been numerous and include treating the oil shock as a temporary shock rather than a permanent one, long delays in coordination between ministries and in execution, and difficulty in managing the political economy of reform.

A silver lining, however, is that the current shock and its negative consequences on the economies and lives of the citizens of African oil-exporting countries can be an opportunity to "fix the machine." Indeed, the sharp fall in oil prices has highlighted the fragility of the current growth model. Structural transformation is not deeply rooted, and there has been little progress in diversifying economies

FIGURE 1.6.

IN 2016, MANY AFRICAN CURRENCIES DECLINED AGAINST THE DOLLAR

From January 1 to December 1, 2016, most African currencies declined against the U.S. dollar with the Nigerian naria and Mozambican new metical falling by more than 30 percent. The Zambian kwacha, on the other hand, strengthened the most against the dollar (as copper prices rose) in 2016 following its slump last year due to persistent power crises, a large budget deficit, and low copper prices.



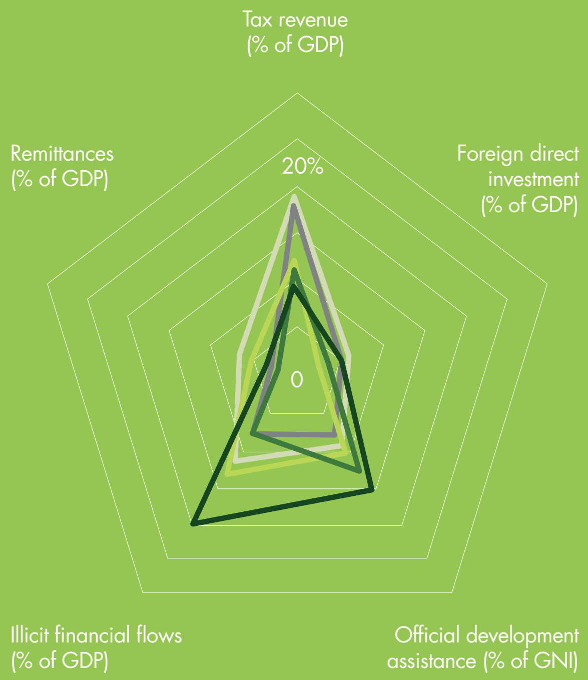
Source: Bloomberg L.P.

FIGURE 1.7.

FINANCIAL FLOWS AND GOVERNANCE

Recent AGI research has found that good governance has a more significant effect on domestic resource mobilization (tax revenues) than on external financial flows such as FDI, ODA, remittances, and illicit financial flows. The radar charts below indicate that countries with the lowest levels of corruption and highest levels of political stability have the highest tax-to-GDP ratio. Conversely, countries with low political stability scores have a relatively high ODA-to-GDP ratio. In addition, though the differences are subtle, the charts hint that more corrupt countries have higher FDI-to-GDP ratios.

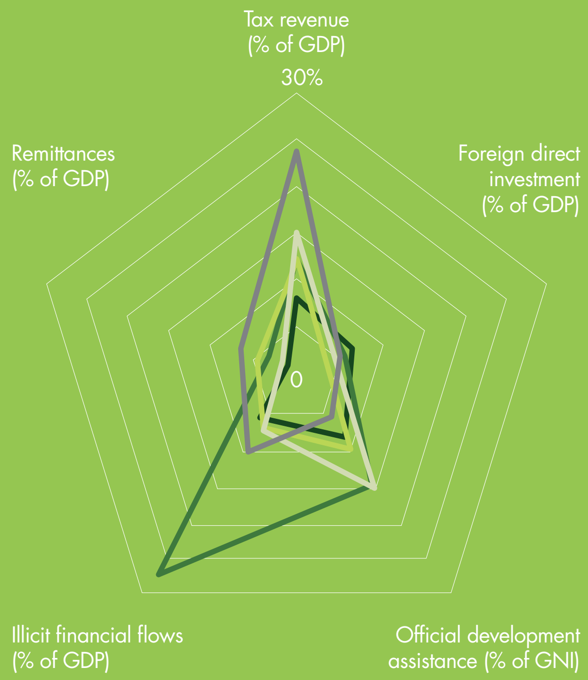
POLITICAL STABILITY



Q1 Q2 Q3 Q4 Q5

Note: Q1 indicates least politically stable quintile; Q5, most politically stable.

CONTROL OF CORRUPTION



Q1 Q2 Q3 Q4 Q5

Note: Q1 indicates most corrupt quintile; Q5, least corrupt.

Sources:

Global Financial Integrity. 2015. "Illicit Financial Flows from Developing Countries: 2004-2013." Washington, DC. Available at: http://www.gfintegrity.org/issues/data-by-country/.

International Monetary Fund. 2016. "World Economic Outlook." Washington, DC. Available at http://www.imf.org/external/pubs/ft/weo/2016/02/weodata/index.aspx.

Sy, Amadou N.R., and Mariama Sow. 2016. "Domestic Resource Mobilization and External Financing: When does governance matter? Evidence from sub-Saharan Africa." Africa Growth Initiative Working Paper. Brookings Institution. https://www.brookings.edu/research/domestic-resource-mobilization-and-external-financing-whendoes-governance-matter/.

World Bank World Development Indicators; United Nations Conference on Trade and Development "Foreign Direct Investment Statistics." Geneva. Available at: http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.asp.

2017 is the time to accelerate the implementation of the domestic revenue mobilization agenda.

and the overdependence on oil-export revenues. 2017 is the time to accelerate the implementation of the domestic revenue mobilization agenda, which was much heralded in the 2015 Addis Ababa Action Agenda, and improve the taxation of the non-oil economy, consider the merit of increasing the VAT (value-added tax) rate, and revisit poorly targeted tax exemptions and subsidies. 2017 is also the time to ensure that capital expenditures (which are still needed to finance the large infrastructure gap) have a value for money and outcomes that are really growth enhancing. 2017 is the time to revisit how current expenditures in the oil economy were part of an ineffective social contract where oil windfalls would result in a higher wage bill and increased government spending for goods and services.

2017 is the time to reconsider the role of the private sector and the financial sector as engines of broad-based growth beyond their typical dependence on government contracts and oil and gas revenues. In the oil economy, the government is too often the be-all-end-all and crowds out or even stunts the private sector. 2017 is the time to level the playing field and revisit the role of the state and its areas of interventions, including reducing the cost of doing business and providing adequate infrastructure to boost private sector-led growth and competitiveness. Such measures are also part of the needed new social contract.

2017 is the time to step up the improvement of institutions to complement the macro stabilization effort and set the foundation for sustainable and inclusive growth. Too often poor governance has arrested the effectiveness of public expenditures to improve outcomes and enhance growth. Good governance is also critical for the domestic revenue mobilization agenda. Recent work shows that good governance is more relevant for raising tax revenues than for attracting foreign direct investment. This is important because tax revenues are typically the largest source of financing for development.[3]

2017 is also the time to take a serious look at the social compact in oil-exporting countries. Social protection expenditures can be very low in oil-exporting countries and should be revisited. After all, how much did the poor really benefit from the boom cycle in oil prices? Now that adjustment times have come, how much of its cost should they bear? 2017 is the time to build the capacity to implement targeted interventions and proceed to implement targeted social protection measures to help smooth the effects of the necessary macroeconomic adjustment. For instance, increasing the VAT, which is a regressive tax should be accompanied by well-targeted compensation of the poorest segments of the population.

[3]See Sy and Sow (2016).

Policymakers in oil-exporting countries need a three-pronged approach that will credibly and decisively focus on macroeconomic adjustment, set the basis for medium-term broad-based growth, and revisit the social contract. These objectives are vital at this juncture, and addressing short-term issues must be done to avoid jeopardizing medium-term growth.

References

International Monetary Fund (IMF). 2016. Regional Economic Outlook: Sub-Saharan Africa: Multispeed Growth (October 2016). Washington, D.C.: International Monetary Fund. Available at: https://www.imf.org/external/pubs/ft/reo/2016/afr/eng/pdf/sreo1016.pdf.

Sy, Amadou N.R., and Mariama Sow. 2016. "Domestic Resource Mobilization and External Financing: When does governance matter? Evidence from sub-Saharan Africa." Africa Growth Initiative Working Paper. Brookings Institution. Available at: https://www.brookings.edu/research/domestic-resource-mobilization-and-external-financing-when-does-governance-matter/.

World Bank. 2016. Africa's Pulse, No. 14, October 2016. Washington, D.C.: World Bank Group. Available at: https://openknowledge.worldbank.org/handle/10986/25097.

EVENT TO WATCH

MAY 22-26, 2017

The African Development Bank Group's 2017 Annual Meetings

The African Development Bank Group (AfDB) and the government of India will host the AFDB's 2017 Annual Meetings in Ahmedabad, the capital of the Indian state of Gujarat. Following the India-Africa Summit that took place in New Delhi in 2016, the 2017 meetings are meant to highlight the close economic cooperation between India and the African continent and present new opportunities to further develop India-Africa business ties. India is one of the AfDB's 24 non-regional member countries, having joined it in 1982. Although it comprises a small share of contributions to the AfDB's African Development Fund (less than 1 percent), it still serves as a major investment partner to the continent, channeling nearly $7.4 billion as lines of credit mainly through the Export-Import Bank of India in order to implement 137 projects in 41 countries.

Revenue mobilization in commodity-rich countries: Challenges and opportunities

Since the fall in commodity prices in 2014, most commodity-rich countries have been facing a growing fiscal challenge. The large decrease in commodity prices has increasingly been perceived as more permanent than temporary. This issue is particularly pressing in African countries whose fiscal revenue structure depends "excessively" upon commodity revenues.

Excessive dependence on commodity revenues occurs when the share of revenues from commodities greatly exceeds their contribution to GDP. For example, between 2010-2013, some of Africa's biggest economies such as Nigeria and Angola have had fiscal revenue structures that depend "excessively" upon commodity revenues, while others, such as Guinea, Mauritania, and Zambia have been much more balanced. For example, in Nigeria, hydrocarbon revenues represent about 75 percent of total revenues while hydrocarbon only constitutes about 20 percent of GDP. This "excessive'' dependence on the revenue from commodities naturally leads to important fiscal vulnerabilities in the current period of, apparently, permanently low commodity prices.

In the near future, most of these countries will still be able to finance their way out of growing fiscal deficits by increasing their public debt. However, larger spreads as well as the prospect of interest rate hikes by the U.S. Federal Reserve severely limit the continuation of this strategy in the medium run.

This "excessive'' dependence on the revenue from commodities naturally leads to important fiscal vulnerabilities in the current period of, apparently, permanently low commodity prices.

How should these fiscally vulnerable commodity-rich countries proceed in 2017? One option is to reduce the fiscal deficit by reducing government spending and increasing efficiency. While tough times provide the political will to increase efficiency and carry out medium- to large-scale spending reforms, there are limits to how far spending can be cut considering important social, developmental, and infrastructure gaps in the region.

Another option is to use the political space provided by these difficult times to enact much-needed tax reforms which, among other things, may involve increasing tax rates, especially in those "excessive'' commodity revenue dependent countries.

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As shown in Gunter, Riera-Crichton, Vegh, and Vuletin (forthcoming),[1] increasing taxes may be a smart option because tax changes have non-linear effects on economic activity. Under low or moderate initial tax rate levels, the negative impact of tax hikes on long-run economic activity is very small (or virtually zero), while the impact increases in a non-linear way as the initial level of tax rate rises. Naturally, more revenue collection is not the only answer to complex fiscal problems and increasing government efficiency and targeting will always go along in improving the overall effect of fiscal policy. Interestingly, countries with high dependency on commodity revenues such as Nigeria and Angola often have low tax rates (e.g., with standard VAT rates of 5 percent and 10 percent, respectively). In contrast, countries that are less dependent on commodity revenue, like Mauritania, Guinea, and Zambia, have relatively higher VAT rates of 16 percent, 20 percent, and 16 percent, respectively. This new policy research insight indicates that countries like Nigeria and Angola could quickly mobilize revenues from non-commodity-related activities by increasing their VAT rates with relatively small side effects on economic activity. In other words, the fiscal challenges currently faced by African countries with "excessive" dependency on commodity revenues may provide not only the chance to reduce a growing structural fiscal deficit and debt problem, but also an opportunity to help balance their revenue composition in a manner that is more in sync with their economic structure.

Countries like Nigeria and Angola could quickly mobilize revenues from non-commodity-related activities by increasing their VAT rates with relatively small side effects on economic activity.

[1] Gunter, S., Riera-Crichton, D., Vegh, C. and Vuletin, G. Non-linear Effects of Tax Changes on Output: A Worldwide Narrative Approach. Forthcoming.

INCREASING EMPLOYMENT OPPORTUNITIES:

Navigating Africa's complex job market

Chapter 2

The tipping point:

The youth bulge and the sub-Saharan African labor market

ISSUE BRIEF FROM THE AUTHORS

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The demographic dividend has been touted as a potential source of growth for the African continent and its relatively young population.[1] In the same vein, it comes with the challenge of employment creation that can absorb the large cohort of youth that is set to enter sub-Saharan Africa's labor markets in the approaching decades. Less positively, however, countries that fail to plan accordingly might miss these potential opportunities or the resulting youth bulge could increase the risk of social tension and other risks arising from high youth unemployment rates. The year 2017 offers an opportunity for identifying and implementing policies to capitalize on the segment of the population that is quickly growing up.

Relative to other regions, sub-Saharan Africa's demographic transition begins from a much lower base and is beset by conflict and death from HIV/AIDS and other diseases resulting in a demographic transition peak that is expected to be much lower than that of other regions (Bloom, Canning, and Sevilla, 2003). Between 1950 and 2010, the global fertility rate has almost halved and is estimated at 2.5 births per woman (Lam and Leibbrandt, 2013). However, sub-Saharan Africa's fertility rate has declined at a much lower rate and remains relatively high at 5 births (World Bank, 2014). Data from Ethiopia and Nigeria, the continent's most populous nations, indicate that average fertility rates have been declining over time to current rates of 4.6 and 5.7 respectively (Bhorat and Tarp, 2016). While these rates are still relatively high, the declining trend indicates

[1] The shift from a regime of high mortality and high fertility to one of low mortality and low fertility is known as the demographic transition (Oosthuizen, 2014). The demographic dividend is associated with the potential economic growth prospects that come with a demographic transition—reduced dependency ratios and rising standards of living as resources are freed up for savings or investments.

Youth are less likely than older cohorts to find employment, and, when they do, are disproportionately more likely to be self-employed or employed in the informal sector.

that these countries are still very much in a demographic transition phase. However, different African countries are at different stages of the demographic transition: South Africa's birth rate has already declined to 2.4 and is much further along its transition compared to Mozambique's 5.9 births per woman, a rate that is observed to be rising with time (Bhorat and Tarp, 2016).

Subsequently, unlike other regions with aging populations, sub-Saharan Africa faces a rise in the share of its working-age population (WAP). Population data indicates that the WAP in the sub-Saharan African region will increase by 70 percent from 466 million in 2013 to 793 million in 2030 (Lam and Leibbrandt, 2013). However, high levels of youth unemployment and/or underemployment coupled with low-wage income will significantly constrain the continent's ability to reap the benefits of the demographic dividend. Youth unemployment across sub-Saharan Africa is four times higher than the region's aggregate unemployment level. In Nigeria, 45 percent

TABLE 2.1. SUB-SAHARAN AFRICAN LABOR MARKET OUTLOOK

Employment prospects in sub-Saharan Africa seem to be stagnating according to the International Labor Organization (ILO). Productivity, while predicted to rise in 2016, remains below 2000-2013 levels—largely to due Africa's lack of economic diversification. In addition, despite decreasing numbers of the extreme working poor (under $1.90/day), many are unable to break the barrier out of the working poor category, as the share of working poor continues to grow. Not shown here is the *underemploym*ent (the underutilization of the productive capacity of the employed population) rate in the region, which, at an extreme, reaches 75.8 percent in Cameroon. Thus, unemployment numbers alone cannot always demonstrate the health of the labor market, as in Ghana, where the unemployment rate is 5.2 percent, but the underemployment rate is 47.0 percent.

	2000-2007	2008-2013	2014	2015	2016	2017
Labor force participation rate	69.8	69.9	70	70.2	70.3	70.4
Unemployment rate	8.1	7.6	7.3	7.4	7.5	7.5
Employment growth	3.0	3.0	3.4	3.0	3.0	3.1
Vulnerable employment	72.9	71.4	69.8	69.9	69.7	69.6
Extreme working poverty (less than $1.90)	49.3	39.9	35.2	34.3	33.1	31.7
Working poverty (between $1.90 and $3.10)	23.8	27.7	29.6	29.7	30.0	30.4
Productivity growth	2.9	1.8	1.5	0.5	1.2	1.7

Note: Employment and productivity growth figures present percentage growth rates. Employment figures refer to the total economy. Labor productivity is measured as real output per worker, PPP-adjusted. Vulnerable employment share is defined as the sum of own account workers and contributing family workers in total employment.

Source: ILO calculations based on ILO Research Department's Trends Econometric Models, November 2015. From report http://www.ilo.org/wcmsp5/groups/public/—dgreports/—dcomm/—publ/documents/publication/wcms_443480.pdf.

Science and the farm

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Africa's youth employment issue is fundamentally one of agricultural modernization and investment in science. Farming remains the dominant occupation of most young Africans; this despite the fact that few respond "I want to be a farmer" when asked about their aspirations. More youths remain on farms than leave, although the movement away is very visible and has raised concern[1] about food security, aging of the countryside, and excessive dependence on food imports. Concerns would be best directed toward understanding the needs of young people who stay on farms, already a large group that will grow as the global slowdown and attenuation of the commodity boom affect the continent. The agriculture that will allow young farmers to prosper will have to draw on the best of modern agricultural science—and at present it does not.

Current levels of investment in Africa's agricultural science cannot support modernization. The prevailing paradigm of "closing yield gaps" has created the erroneous view that known science can be applied to great effect without investing in new science. Across the subcontinent, although investment in agricultural research has grown in real terms since 2000, it has declined as a share of agricultural GDP. Spending on agricultural research in Africa south of the Sahara in proportion to the size of the agricultural sector is about half that in Latin America and the Caribbean.[2] At a time when social media vastly improves the capacity of young people to communicate even in remote rural areas, the absence of vibrant scientific communities weakens the attitudinal foundation supporting innovation. Even the improved varieties that advanced farmers seek may be a decade or more old. Today's pests and diseases and erratic weather patterns overtake yesterday's new varieties. Science that does not keep up falls behind.

Science that does keep up can deliver. Over 200 new bean varieties have been developed and released through the PanAfrican Bean Research Alliance (PABRA), a consortium of 29 bean-producing countries in Africa led by the International Center for Tropical Agriculture (CIAT). These new varieties are helping to transform beans from a subsistence food to a marketed crop that boosts nutrition. Over 60 new varieties of orange sweet potato with enhanced vitamin A have been released in 15 countries of Africa over the past decade and a half, reducing the vitamin A deficiency of millions. A new program on African Chicken Genetic Gains (ACGG) led by the International Livestock Research Institute (ILRI) in partnerships with the governments of Ethiopia, Nigeria, and Tanzania is producing a better backyard chicken for smallholder farmers. These and other efforts to strengthen the scientific foundations of Africa's agriculture are essential for creating the jobs that will employ ambitious and hopeful young people. Some entrants to the labor force should become scientists, and millions of others should be beneficiaries of science through advances in soil management, greenhouse gas mitigation, better breeds and seeds, improved management of pests and diseases, rapid response to biotic shocks, and the myriad other ways in which advanced science serves agriculture.

The challenges of youth employment and agricultural modernization are often seen and addressed in isolation. In fact, they are inseparable—either mutually reinforcing problems that jeopardize the future of an entire continent, or mutually reinforcing solutions, each to the problem of the other. Investment in agricultural science determines which.

[1] The International Fund for Agricultural Development. 2016. Why Are Rural Youth Leaving Farming? Office of the Secretary General's Envoy for Youth, United Nations, April 13. Available at: http://www.un.org/youthenvoy/2016/04/why-are-rural-youth-leaving-farming/.

[2] Agricultural Science and Technology Indicators, "Benchmarking Tools for Various Regions," available at: http://www.asti.cgiar.org/.

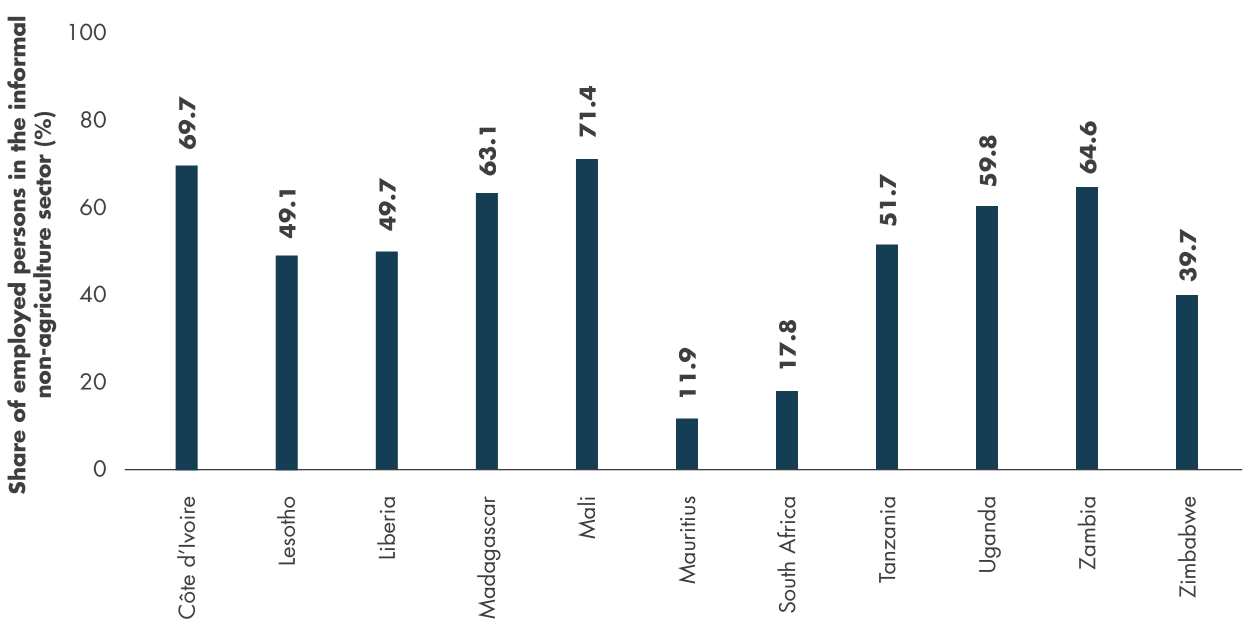
Employers and job seekers highlight high job search and training costs as limiting youth employment opportunities.

of the youth are unemployed and in Ghana the rate is twice as high as the national rate. Youth wages in South Africa are observed to be 40 percent less than the calculated peak labor income (Bhorat and Tarp, 2016). Research has shown that the youth are less likely than older cohorts to find employment, and, when they do, are disproportionately more likely to be self-employed or employed in the informal sector (Goldin, Hobson et al., 2015).

In the sub-Saharan African region, challenges to the creation of job opportunities for the youth stem from a combination of demand- and supply-side factors. In terms of supply, there is a marked mismatch between skills demanded and those attained by job seekers. Lack of access to finance for youth and particularly female entrepreneurs further limits growth and expansion opportunities. Labor demand is constrained by insufficient private sector growth resulting in muted employment growth. Accordingly, job creation growth has severely

FIGURE 2.1. EXAMINING THE INFORMAL ECONOMY IN SUB-SAHARAN AFRICA

There is a substantial informal economy in many African countries, as shown in the graph below. In fact, the informal sector contributes 50-80 percent of GDP, 60-80 percent of employment, and 90 percent of new jobs in the region. This high proportion of informality in the African labor market, though, deters much economic and human development. Not only is the informal sector less productive overall, but the individuals in the sector tend to earn less, not recieve benefits, and lack many social protections. Policies to encourage movement to the formal sector would boost both the economy and livelihoods.

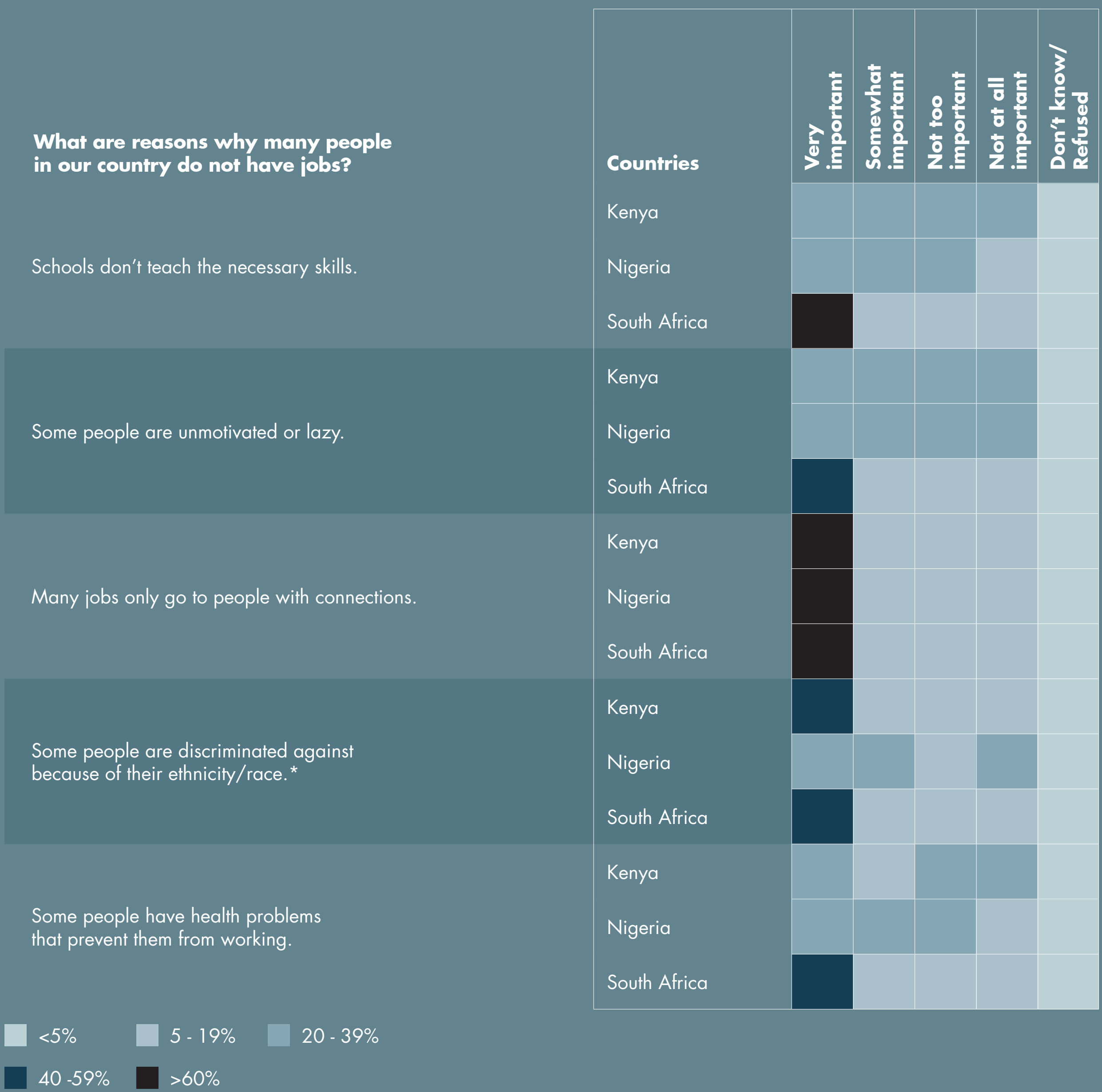


Note: Calculation according to ILO: Share of employed persons in the informal sector (%) = (Persons employed in the informal sector x 100)/Total employment.
Source: ILO ILOSTAT database. Available online at: http://www.ilo.org/ilostat/faces/oracle/webcenter/portalapp/pagehierarchy/Page3.jspx?MBI_ID=3.

FIGURE 2.2.

PERCEPTIONS OF UNEMPLOYMENT IN SELECT AFRICAN COUNTRIES

Though Nigeria, Kenya, and South Africa are among the biggest economies in sub-Saharan Africa, they also struggle with high unemployment, a challenge that may continue to grow as more and more of the youth begin to enter the workforce. Indeed, according to a Pew survey (2016), over 80 percent of respondents in these countries view the lack of employment opportunities "a very big problem." Interestingly, the perception of on-the-ground challenges to getting a job differs somewhat among the countries.



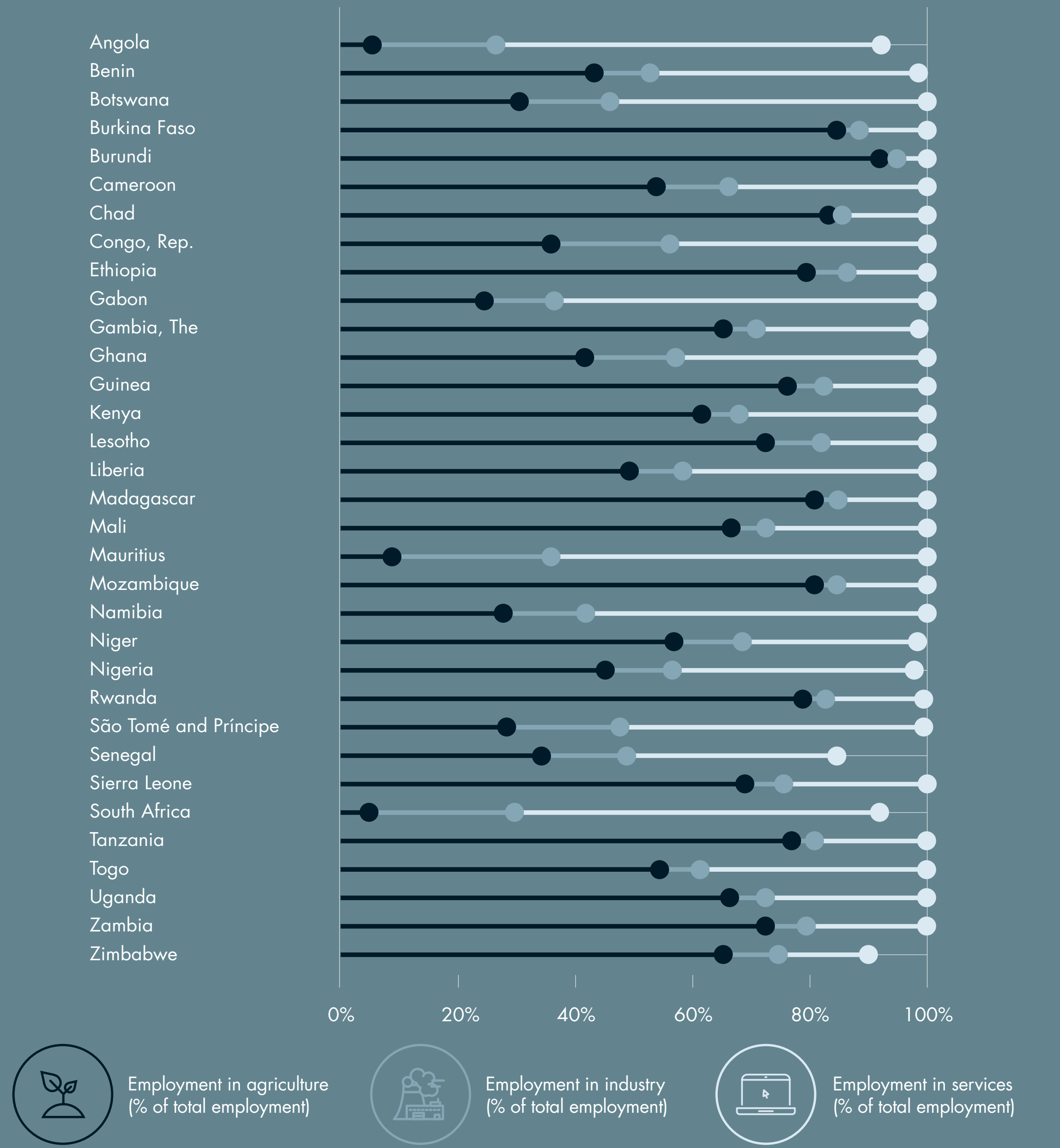
*Note: In Kenya and Nigeria, the question asked about "ethnicity." In South Africa, the question asked about "race."

Source: Data from Pew Research Center, November, 2016, "In Key African Nations, Widespread Discontent With Economy, Corruption." Available at: http://assets.pewresearch.org/wp-content/uploads/sites/2/2016/11/15092830/Pew-Research-Center-Development-in-Africa-Report-FINAL-November-15-2016.pdf.

FIGURE 2.3.

EMPLOYMENT BY SECTOR

While the services sector continues to absorb more and more jobs throughout the region, employment makeup in African countries varies substantially—though participation in agriculture remains stubbornly high in most places. Notably, though, is the lack of employees in the highly productive industrial sector, largely due to a lack of supply of workers or a nascent industrial sector. Policies to encourage movement into industry—especially those that encourage education—might be able to bridge those gaps.



Note: The above three employment sectors are the only sectors for employment available from the World Bank's Development Indicators for the most recent available year for each country. Not all countries have available data and not all countries have sector totals that equal 100 percent of employment, which could be due to estimations used in the calculations of sectors or the possibility for other categorizations of employment outside the three sectors indicated.

Source: World Bank's World Development Indicators (various years).

Skills for a changing world

The world is facing a major shift in demographics. In fact, by 2050, Africa will be home to a billion young people. With so many of the world's youth concentrated in Africa, countries have the advantage of large working-age populations, and could be looking to capitalize on a "demographic dividend."

But the economic contribution of young people will depend on the skills they possess, placing a premium on education. Unfortunately, many countries in Africa are struggling to educate their current youth, and projections in coming decades predict millions more will be left behind. According to the latest *UNESCO Global Education Monitoring Report,*[1] based on current trends, sub-Saharan Africa will not achieve universal secondary school completion until after 2080. On top of the issue of schooling completion, millions of young people who do complete school still lack even basic literacy and numeracy skills, and recent estimates from the Education Commission find that more than half the world's youth in 2030 will not meet even low levels of proficiency.

McKinsey[2] predicts this will lead to major skills gaps for the workforce, with far more low-skilled workers than low-skilled jobs and far too few medium- and high-skilled workers that employers will seek. Gaps in schooling and academic skills will also be exacerbated by changes in the world of work that demand a workforce with a broader set of skills that include critical thinking, collaborative problem solving, information literacy, and creativity. By 2030 it is predicted that 2 billion jobs will be automated, half of all those in existence today. What is perhaps most surprising is that many of these are not manual labor, but those that require "routine cognitive skills" like accountants and lawyers. Already today the lack of technical skills and "workplace competencies" like teamwork and communication skills are barriers for employers to fill open positions.

This climate poses major challenges to African education systems to rapidly expand access to high-quality education, as well as shift the focus of education systems from rote academic learning to a teaching and learning environment that fosters the full breadth of skills needed in a changing world. Already research from Brookings' Center for Universal Education finds that countries across the continent have articulated a vision for education to fulfill this broad mission, and many

By 2030 it is predicted that 2 billion jobs will be automated, half of all those in existence today.

[1] UNESCO. 2016. Education for People and Planet: Creating Sustainable Future for All. Global Education Monitoring Report. Available at: http://unesdoc.unesco.org/images/0024/002457/245752e.pdf.

[2] Dobbs, R. et al. 2012. The world at work: Jobs, pay, and skills for 3.5 billion people. McKinsey Global Institute, June. Available at: http://www.mckinsey.com/global-themes/employment-and-growth/the-world-at-work.

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have included breadth of skills in curriculum and policy documents.[3] However, most systems are struggling with how to implement a broader vision of high-quality education—which should be a priority in 2017.

African education systems need to rapidly accelerate progress in order to capitalize on their increasing share of the world's youth. This will not be accomplished with a business-as-usual approach, but rather requires innovative approaches to teaching and learning, reaching children and youth in and out of school. African countries have already managed to "leapfrog" progress in other sectors—skipping land line phones in favor of mobiles and jumping to mobile banking before reaching everyone through brick-and-mortar banks.

No region may be more primed to do the same in education as well. In fact, our research shows new innovative approaches are reaching even the most marginalized children with more effective ways of teaching and learning breadth of skills. Such innovations are shifting the teaching and learning environment with a focus on "hands-on, minds-on" learning, altering the ways students are assessed and competencies are recognized, and utilizing new tools and technology to personalize learning and better build partnerships between schools and communities. For example, e-Learning Sudan, now called Can't Wait to Learn, has managed to bring math instruction to displaced children with no access to schooling by providing tablets with engaging games and lessons that were designed based on their own drawings. Evaluations have shown children can learn basic numeracy skills aligned to the national curriculum quickly, and the program is a flexible and empowering way for children to learn. Learner Guides, a program run by the NGO Camfed in Zimbabwe, Tanzania, Ghana, Zambia, and Malawi, can also help leapfrog educational progress by expanding the education workforce, unburdening teachers, and helping children foster critical life skills like resilience and goal-setting. The program supplements the current schooling system by bringing young women who have completed Camfed's secondary education program back into their rural communities to facilitate a peer-to-peer learning program.

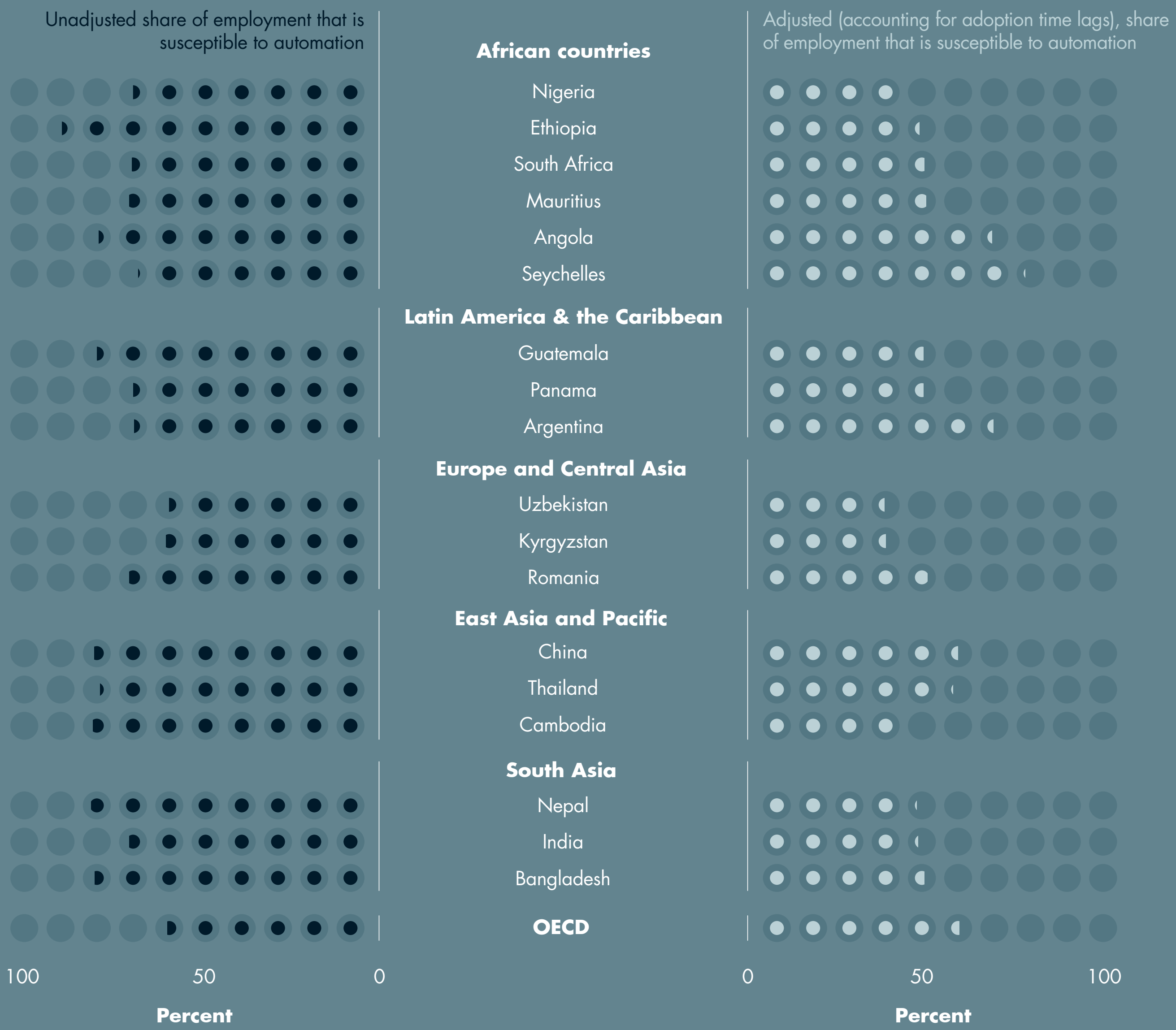
Already today the lack of technical skills and "workplace competencies" like teamwork and communication skills are barriers for employers to fill open positions.

[3] Care, Ester., K. Anderson, and Kim, H. 2016. Visualizing the breadth of skills movement across education systems. Brookings Institution. Available at: http://skills.brookings.edu/.

FIGURE 2.4.

JOBS AND AUTOMATION:
HOW SUSCEPTIBLE IS AFRICA?

The automation of jobs has been a historical challenge in the developed world and is becoming a growing one in the developing world: Both in Africa and elsewhere, two-thirds of all jobs are susceptible to automation due to advancing technology. The situation, though, is not necessarily dire, as slow adoption of advanced technology and lower wages are likely to stave off automation and its resulting job displacement in developing countries. The figure below demonstrates the number of jobs susceptible to automation generally (left), and also the number of jobs susceptible to automation but incorporating the lag time of uptake (right). The figures on the right show that in a majority of cases these developing-country jobs are safer than they would otherwise be in the short term owing to lags in technology adoption.



Note: As indicated in the World Bank's World Development Report 2016, unadjusted probabilities of automation for occupation are from Frey and Osborne's 2013 paper, ""The Future of Employment: How Susceptible Are Jobs to Computerisation?" and weighted by employment, while the adjusted probabilities—which account for the slower pace of technology adoption in poorer countries, using the adoption lag of earlier technologies—are from Comin and Mestieri's 2013 paper "If Technology Has Arrived Everywhere, Why Has Income Diverged?."

Source: World Bank. 2016. World Development Report 2016: Digital Dividends. Washington, DC: World Bank. doi:10.1596/978-1-4648-0671-1. License: Creative Commons Attribution CC BY 3.0 IGO. Available at: http://documents.worldbank.org/curated/en/896971468194972881/pdf/102725-PUB-Replacement-PUBLIC.pdf.

TABLE 2.2. EMPLOYMENT FROM THE AFRICAN GROWTH AND OPPORTUNITY ACT

The African Growth and Opportunity Act (AGOA), the cornerstone of the U.S.-Africa trade relationship, has the opportunity to encourage job creation on the continent through incentives to trade. The following information comes from a 2016 survey conducted by the African Development Bank that received responses from 32 of 37 currently AGOA-eligible African ministries of trade on their trading relationship with the United States. As countries begin to create AGOA utilization strategies—like Ethiopia has—policymakers expect these numbers to increase. In the past few years job growth has strengthened. It is evident also from the responses that the ability to track employment creation is, unfortunately, a barrier to fully tracking the benefits of the AGOA legislation: Of the 32 respondents only nine were able to provide information on job creation due to AGOA.

Jobs created in recent years because of AGOA		
2013	**2014**	**2015**
3,565	3,660	10,715
Note: This data is from countries that shared specific figures over the last three years. Not all nine countries with data available shared figures.		
Jobs created and/or maintained because of AGOA		
2013	**2014**	**2015**
21,806	22,256	50,970
Note: This data is from countries that shared specific figures over the last three years. Not all nine countries with data available shared figures.		
Jobs employing women and youth created and/or maintained because of AGOA		
2013	**2014**	**2015**
2,090	2,050	4,248
Note: Not all countries had data specific to employment for women and youth. These numbers represent the totals for the countries that did have data.		

Source: 2016 African Development Bank Survey of African Ministries of Trade.

lagged population growth resulting in historically high unemployment rates for young people. Better access to tertiary education in Ethiopia, for example, has resulted in the increased supply of skilled graduate workers relative to available vacancies for skilled workers (Bhorat and Tarp, 2016). Employers and job seekers also highlight high job search and training costs as limiting youth employment opportunities. Consequently, the average unemployment duration among potential workers is observed to be on the increase.

Observing a demographic transition does not guarantee that the continent will benefit from a demographic dividend unless the shift is accompanied by nuanced policy changes that enhance the productivity of the working-age population and support the broad-based expansion of the economy and employment opportunities. Hence, we propose three main areas of focus for policymakers in 2017 and beyond.

Increased investment in human capital

Broadening access to education will ensure a steady supply of skilled workers into the labor market to support the transition to higher value added sectors. As fertility declines, capital deepening motivates parents to support the human capital accumulation of their children.

Thus ensuring higher completion rates at the secondary school level and higher transition rates into university for male and female students alike may have a positive impact on employment and earning potential. Further recommendations revolve around re-establishing technical colleges to vary the skill sets of potential workers, reducing the cost and barriers to tertiary education, as well as transforming curriculum to provide skills that are more in line with labor demand and structural transformation objectives. Efforts must be put toward the creation of labor market information systems that can assess current skills gaps in the economy and allow for better skills planning.

Targeted and productive job creation that will increasingly absorb the working youth

Any youth employment objective will necessarily fall within the broader goal of structural transformation and economic growth. This is all the more reason why it is important to diversify economic activity away from the current high concentration in traditional low-value added agriculture, as it is in many African economies, to more productive activities such as agri-processing, manufacturing, and high-value added services. For example, Kenya has a large population of educated youth employed in mobile phone-based financial services innovations that have high job creation potential (Bhorat and Tarp, 2016).

Institutional strengthening

For those young self-employed workers in the informal sector, there should be institutional mechanisms that ensure adequate access to credit, in light of the fact that these individuals are likely to be wealth and asset constrained. This should be combined with strategies to improve the performance of informal businesses and create stronger linkages to the formal sector. This does not preclude larger objectives of ensuring more equitable asset and land ownership in many African countries. Improving access to formal financial services can help to more efficiently turn savings into investment and provide more opportunities for accessing credit for productive purposes.

FIGURE 2.5.

SUB-SAHARAN AFRICAN SMES AND THE BOTTLENECK OF TIME

The 2017 *Doing Business* report, which publishes annual data on regulatory constraints for small and medium enterprises (SMEs), notes that sub-Saharan African economies are improving their scores at a rate three times that of OECD high-income economies. Despite this achievement, though, running a business in the region is still quite difficult, as it requires going over multiple hurdles to even get the business started. Time is a particular bottleneck, as it takes extensive time to even start a business let alone obtain permits and electricity. Wait times at borders also allow agricultural exports to spoil. Eliminating many of these obstacles could promote the growth of SMEs—the major employers in sub-Saharan Africa—opening them up to even more job-creating opportunities.

Source: World Bank's Doing Business 2017 Report for Sub-Saharan Africa. Available at: http://www.doingbusiness.org/reports/~/media/WBG/DoingBusiness/Documents/Profiles/Regional/DB2017/SSA.pdf. Doing Business data. Available at: http://www.doingbusiness.org/data.

Growth of African SMEs and jobs will depend on technology uptake

Information and communication technologies (ICTs) are transforming Africa. Across the continent, new startup digital enterprises are emerging, while existing small and medium enterprises (SMEs) are increasingly leveraging ICTs to expand. Intensified use of ICTs presents Africa's SMEs with opportunities in virtually every sector as well as room to create jobs.

The pace of transformation across Africa, however, is slow and one of the major barriers is poor ICT infrastructure. A number of countries are reaping the benefits of greater digital penetration but others are watching from the sidelines. In Kenya for example, the M-Pesa mobile money disruption has enabled many SMEs to be more efficient.

Right now, Africa's youth should be a catalyst for creating digital jobs in virtually every sector including business processing outsourcing both from external and internal sources.

According to the 2016 Global Systems for Mobile Association (GSMA) report,[1] however, the rest of Africa is still the world's most under-penetrated region in terms of mobile connectivity in spite of the fact that it recorded an annual subscriber growth over the same period of more than 13 percent. Improved universal infrastructure that is affordable and a flexible policy and regulatory environment would go a long way in realizing Africa's digital potential. With improved access to the internet and a more open policy environment, African enterprises could be better equipped to leapfrog and create innovative solutions.

At the same time, the adoption of 4G in sub-Saharan Africa is dismal owing to the fact that the relevant spectrum is still tied up in analog broadcast. Implementation of digital migration in some countries is slow. As a result, many countries in the region have allocated far less spectrum to mobile services than their counterparts in other parts of the world, even though the region is heavily dependent on mobile networks for internet access. This trend undermines SME expansion, especially those that operate in remote areas.

Right now, Africa's youth should be a catalyst for creating digital jobs in virtually every sector including business processing outsourcing (BPO) both from external and internal sources. They

[1] Global Systems for Mobile Association (GSMA). The Mobile Economy. 2016. Available at: https://www.gsmaintelligence.com/research/?file=97928efe09cdba2864cdcf1ad1a2f58c&download.

Bitange Ndemo
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have a fairly good education and can take advantage of the fiber connectivity in major urban centers. SMEs that have ventured into the BPO industry and other digital-dependent enterprises experience many challenges including excessive taxation on both ICT equipment and broadband use. Capacity building, too, is a problem in many countries as governments are often reluctant to spend in ICT especially on areas where they have no understanding. Just like other digital jobs destinations in India and the Philippines, there is need for a deliberate policy and effective implementation to support this emerging sector to provide much-needed employment.

In the future, the Internet of Things and Big Data analytics will bring new digital jobs to the continent's young job seekers. African governments should prepare by modernizing the education and training system.

In the future, the Internet of Things (IoT) and Big Data analytics will bring new digital jobs to the continent's young job seekers. African governments should, therefore, prepare by modernizing the education and training system to better prepare the workforce for the influx of these new types of jobs.

Further, as we look ahead, global dynamics indicate that China is losing its competitiveness in low-end manufacturing of ICT hardware. India is stepping into this one-trillion-dollar industry, but there is an opportunity for African countries to take advantage too. Perhaps there are lessons to be learned from Ethiopia, the African country already competing with India in this emerging space. This will require massive, practical capacity building in Africa's SMEs through makerspaces or incubation centers.

For SMEs to succeed and exploit emerging opportunities that create jobs for Africa's youth bulge, governments—in 2017 and beyond—must adopt supportive policies—such as targeted tax incentives and updated laws—that realize practical capacity building and flexible regulatory frameworks to enable innovation.

In addition, adequate taxation and fiscal policy is important for providing public goods such as schooling, infrastructure, and transportation that are crucial for any long-run growth trajectory and for improving the labor market prospects of lower-income groups and the youth. Finally, for those countries that are further along in the demographic transition, emphasis must be placed on the provision of pensions and health care for an aging population.

References

Ajakaiye, O., Jerome, A., Nabena, D., & Alaba, O. (2016). The relationship between growth and employment. Haroon Bhorat and Finn Tarp Eds., *Africa's lions: growth traps and opportunities for six leading economies in African economies (pp. 181-228).* Washington, D.C.: Brookings Institution Press.

Bhorat, H., & Tarp, F. E. (2016). *Africa's lions: growth traps and opportunities for six leading African Economies.* Brookings Institution Press: Washington, D.C.

Bloom, D. E., Canning, D., & Sevilla, J. (2003). *The demographic dividend: a new perspective on the economic consequences of population change.* Santa Monica, California: RAND.

Goldin, N., Hobson, M., Glick, P., Lundberg, M., & Puerto, S. (2015). *"Toward Solutions for Youth Employment: A Baseline for 2015." Solutions for Youth Employment*, Washington D.C. Washington, D.C.: S4YE.

Lam, D., & Leibbrandt, M. (2013). *Global Demographic Trends and their Implications for Employment.* Paper prepared as background research for the Post-2015 UN MDG Development Agenda on Employment and Employment Growth. New York: UN.

Oosthuizen, M. (2014). Bonus or Mirage? South Africa's Demographic Dividend. *Journal of the Economics of Ageing 5,* pp. 14–22.

World Bank. (2014). World Development Indicators Fertility rate, total (births per woman) [Data file]. Retrieved from http://data.worldbank.org/indicator/SP.DYN.TFRT.IN. Washington, D.C.: World Bank.

JANUARY 24-31, 2017

African Union Assembly Meeting

The 28th Ordinary Session of the African Union (AU) Assembly will convene African heads of states and governments in Addis Ababa, Ethiopia to discuss the regional organization's priorities, including those under the 2017 theme: "Harnessing demographic dividend through investments in the youth." Since 2016 marked the 10th anniversary of the implementation of the African Youth Charter and 2018 will conclude the African Youth Decade (2009-2018), the January Assembly will be an important opportunity for the AU to define a roadmap of concrete actions that member states and the regional economic communities can take in support of these agendas for empowering Africa's youth in 2017 and beyond.

MARCH 13-24, 2017

UN Women's Commission on the Status of Women

The 61st Session of the Commission on the Status of Women will take place in the United Nations headquarters in New York and will focus on the theme of "Women's economic empowerment in the changing world of work." Through deliberations of the policies, programs, and roles that different stakeholders can play in advancing women's economic empowerment, the session will aim to develop action-oriented recommendations that support gender-responsive implementation of the 2030 Agenda for Sustainable Development.

OCTOBER 2017

Continental Free Trade Area Agreement Launch

The Continental Free Trade Area (CFTA) is expected to comprise all 54 African states, creating a single continental market for goods and services that reaches over a billion people—who represent a combined GDP of approximately $3.4 trillion. Ultimately, it will allow for free movement of labor and capital within the region, which in addition to boosting intra-African trade, competitiveness, and industrial and entrepreneurial development is expected to spur job creation and increase real wages for African workers.

Negotiations to establish the CFTA remain underway as the indicative deadline to launch the single regional market—the end of 2017—approaches. According to the initial roadmap for the implementation of the trade agreement, the CFTA Negotiating Forum—the technical body overseeing the negotiations—as well as senior officials and ministers of trade would adopt the final text of the agreement in meetings in October and November 2017. Then the African Union Summit of Heads of States and Government would approve it in January 2018. Observers have argued that although the current pace of negotiations may not allow these deadlines to be met, the target date of late 2017 has been useful in garnering political attention and moving discussions forward.

BOOSTING TRANSFORMATIONAL TECHNOLOGY:

Creating supportive environments for game-changing innovations

Chapter 3

Regulatory environment and technological innovation in Africa:

Any tension?

ISSUE BRIEF FROM THE AUTHOR

NJUGUNA NDUNG'U
Former Governor, Central Bank of Kenya
On Leave of Absence from the University of Nairobi

Why is regulating technology important? Are regulations and the regulatory environment likely to stifle innovation in Africa? What regulations are appropriate and even helpful for innovation? How can governments balance out regulations and entrepreneurship? Is there tension between the regulators and innovators in Africa?

So far, nothing can elaborate on these questions better than the development, success, and spread of digital financial services (DFS) in Africa. In particular, Kenya's M-Pesa (as well as similar products in Kenya and Tanzania), a mobile phone-based banking product and later a technological platform, has pushed the frontier of innovation and financial inclusion without compromising financial stability. Kenya's combination of a supporting policy environment with a sound regulatory and supervisory framework allowed space for innovators and entrepreneurs to introduce financial innovations and a diversification of products into the market. Regulators agreed with the innovators on prudent risk management, and the policy environment ensured a stable macroeconomic environment. These combined factors ensured Kenya's success. These are major outcomes that form a strong base for lessons for 2017 in the African continent as well as for Kenya to sustain the frontier and move to the next level.

Indeed, countries that have embraced DFS and created a regulatory yet innovation-friendly environment have provided the guidelines

Indeed, countries that have embraced digital financial inclusion and created a regulatory yet innovation-friendly environment have provided the guidelines to proactively shape market outcomes.

to proactively shape market outcomes. This lesson has allowed innovators to successfully introduce new products into the market with new delivery channels and methods. Those countries have raised their financial inclusion profiles and created vibrancy in the financial market and the totality of their economies. Thus, different countries in Africa that have provided better regulatory environments even at extremes—such as the Kenyan case of "test-and-learn" approach—have found great success. The case is different for those countries that have not embraced the digital financial revolution; often their constraints can be traced to their prevailing regulatory environment, but not their prevailing legal frameworks.

The M-Pesa revolution and resulting technological platform developed in four innovative and virtuous stages, spurred by a conducive regulatory environment. First, the mobile phone platform was used for money transfer between users and later for payments and settlement—these uses were made easier and a rollout more possible in 2006 when the Kenyan government amended the communication law to recognize electronic units of money. The practicality of transforming cash into electronic units of cash, storing it on a SIM card, and simultaneously loading it into a bank account led to the development of a transactions platform in the absence of a national payments and settlement law. Second, encouraged by regulators, virtual savings accounts were developed using the same M-Pesa technological platform—impacting the banking intermediation process.

Third, the development and application of information capital (credit scores) for participants in this technological platform arose as companies started using the M-Pesa payment data including travel and communication patterns to determine the risk profile of customers and offer them loans at affordable rates, eliminating information asymmetry inhibiting the development of credit markets in Africa. This development was supported by already-existing credit information bureaus and amendments on information sharing to the Banking Act. Finally, cross-border payments and international remittances based on the M-Pesa technological platform have become possible aided by the National Payments Act, which allowed for standalone payments and settlement units including foreign exchange remittances. Now, the M-Pesa technological platform has revolutionized financial inclusion in Kenya to reach over 75 percent of the population and increase financial access touch points: 76.7 percent of the population are within five kilometers of a touch point, and there are 161.9 financial access touch points per 100,000 Kenyans compared to 63.1 in Uganda, 48.9 in Tanzania, and 11.4 in Nigeria.

FIGURE 3.1.

INTERNET AND MOBILE PHONE ACCESS IN AFRICA DIFFER GREATLY

Mobile phone access in sub-Saharan Africa has grown by leaps and bounds in the past decade: Almost 82 percent of all Africans had a cell phone in 2015. The internet, however, has not seen that sort of uptake, largely because of the infrastructure needed to provide it. Indeed, the world has an average of 209 internet servers per person and OECD members average 1087 servers per person, but the region averages only 10. Unsurprisingly, then, access to the internet remains low: Overall, only 15 in 100 Africans have access.

Digital divide: Who has access to the internet in sub-Saharan Africa? (percent)

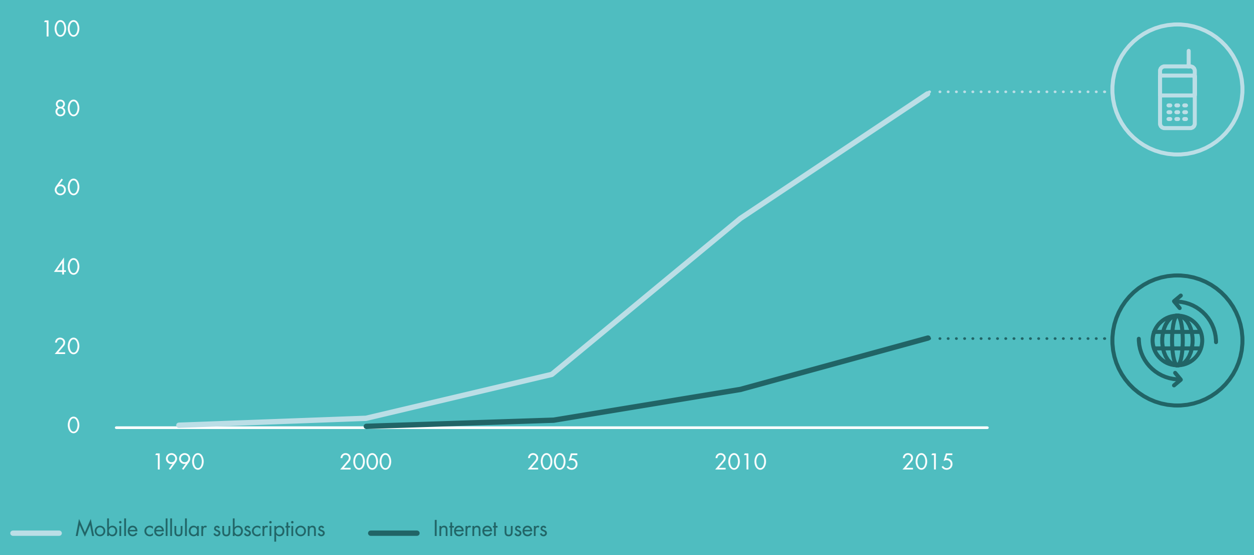
MEN	WOMEN	URBAN	RURAL	AGE 15-24	AGE 45+
18	12	23	10	20	8

15

AVERAGE (INDIVIDUALS) FOR AFRICAN COUNTRIES

Source: World Bank. 2016. World Development Report 2016: Digital Dividends. Washington, DC: World Bank. Based on data from Research ICT Africa (various years), ITU, and Eurostat (EC, various years). Data available at http://bit.do/WDR2016-FigO_6.

Mobile cellular subscriptions and internet users in sub-Saharan Africa (per 100 people)

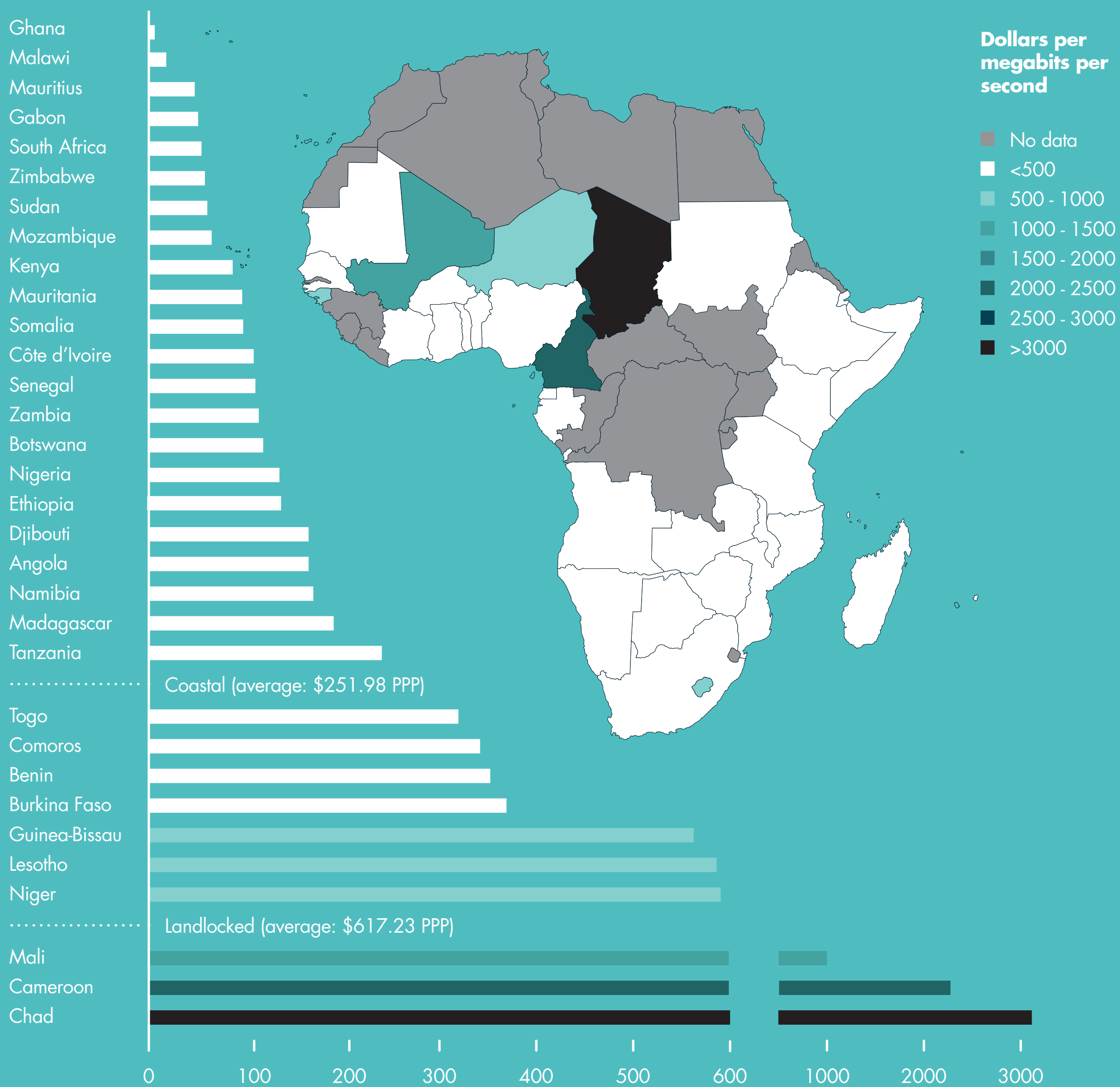


Source: World Bank World Development Indicators (2015).

FIGURE 3.2.

INTERNET PRICES CAN CONSTRAIN ACCESS

Internet prices in sub-Saharan Africa vary wildly, from $3037 per megabits per second (Mbit/s) in Chad to $8 in Ghana, though the region's average is $366 Mbit/s overall. A major trend, though, is how geography affects these prices, as landlocked countries pay an average $365 more than coastal countries per Mbit/s. Given that much of Africa recieves its internet via (albeit expensive) undersea cables, coastal countries have much easier access. New initiatives to provide internet via low-orbit satellites and high-altitude balloons offer the hope of more accessible, cheaper internet for all, though still have a long way to go when it comes to cost and reach.



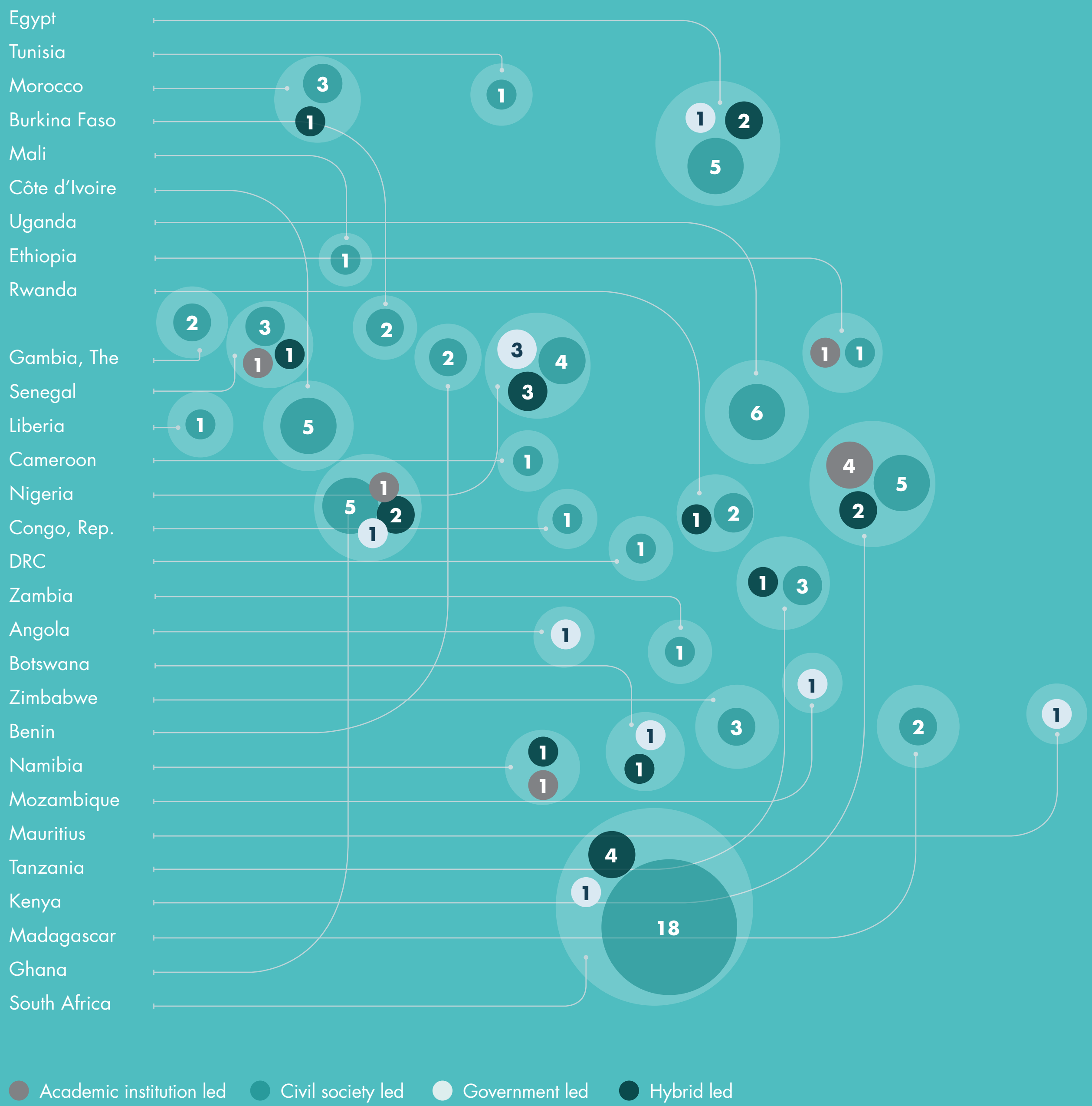
Note: Price per Mbit/s in US$ PPP a month in 2014 Q4/2015 Q1 for fixed, residential broadband service. Mbit/s = megabits per second; PPP = purchasing power parity.

Source: World Bank. 2016. World Development Report 2016: Digital Dividends. Washington, DC: World Bank. doi:10.1596/978-1-4648-0671-1. License: Creative Commons Attribution CC BY 3.0 IGO. Available at: http://documents.worldbank.org/curated/en/896971468194972881/pdf/102725-PUB-Replacement-PUBLIC.pdf. Data URL: http://bit.do/WDR2016-MapB4_5_1.

FIGURE 3.3.

TECH HUBS IN AFRICA

Tech hubs, defined by the World Bank as "spaces mainly focused on developing a digital entrepreneurship ecosystem, or a network of engagement between digital entrepreneurs, designers, and potential investors," are popping up in Africa in different forms. These hubs enable the digital vanguard to gain skills and network through brainstorming sessions, workshops, and business- and technology-related trainings, among others. Notably, the great majority of these hubs—74 in fact—are civil society led. In sub-Saharan Africa, South Africa, Kenya and Ghana all boast a great number of tech hubs, but there are also many scattered across the continent.



Source: Firestone, R. and Kelly, T. *The Importance of Mapping Tech Hubs in Africa, and beyond.* 24 August 2016. World Bank Information and Communications for Development Blog. Available at: http://blogs.worldbank.org/ic4d/importance-mapping-tech-hubs-africa-and-beyond.

Going forward, what can regulators in Africa do to encourage the innovation revolution?

Products like M-Pesa cannot thrive if the regulators on both sides do not understand the potential of the innovations taking place to the totality of the economy as well as the risks.

Products like M-Pesa cannot thrive if the regulators on both sides do not understand the potential of the innovations taking place to the totality of the economy as well as the risks, and provide risk mitigation processes upfront—thus avoiding stifling emerging innovative products. Other countries in Africa that have followed similar paths even with different legal frameworks have been successful. Rules and guidelines should encourage prudent behavior by both the financial institutions and market participants. Regulators should manage the orderly entry and exit of financial institutions in the market, minimizing the potential for major disruptions in the financial system. This did not change when other regulators, like telecommunication (telco) regulators in Kenya, came to the scene; in that example, it strengthened the case for DFS and provided credibility with regulators working as a team.

So far, this pattern has worked well, but DFS platforms have brought other actors that are regulated differently into the marketplace, such as the fintechs and the telecommunication companies partnering with banks to provide access to financial services. What happens now, when such partnerships require different regulators and regulatory technology? In this case, regulatory technology must develop further, cope, and align with these new product designs and market actors. In the Kenyan case, M-Pesa is like a joint product between commercial banks and a telco (Safaricom), and other similar products have been developed and rolled out to the market in a similar way. These types of products sit in a commercial bank as a transactions platform and the telcos provide the technological transmissions of transactions to this platform. The regulators of banks and telcos then concentrate their efforts and guidelines along these *shared* responsibilities.

For further progress and increased uptake of transformative innovations in 2017 what is required is further improvement in the regulatory environment.

For further progress and faster financial inclusion in Africa in 2017—as well as increased uptake of other transformative innovations—what is required is further improvement in the regulatory environment, regulatory reforms as well as leveraging on successful cases to make the financial market more accessible, efficient, safe, and reliable to boost confidence and endogenously move financial inclusion to the next level. It is emerging in this way for example in East Africa.

The lessons are clear that a poor regulatory environment can be a major obstacle to innovations in the market and will constrain the speed of financial inclusion. In this regard, we can scheme out the role of regulations and what we may regard as a good regulatory environment. First, regulatory changes are needed to enable successful adoption and adaptation of innovations. In successful cases of DFS, regulators in telecos, central banks, and even competition encouraged adoption and use by steering a favorable environment for new products and enhancing their credibility. Second, the regulatory environment as well as frontier regulatory technology being adapted in the financial sector improved financial inclusion. The success of financial inclusion and accessibility to the financial market is compatible with the developmental role of regulators in Africa. Finally, related policies must open and even encourage and incentivize the consumer base to take up the new technology. In the Kenyan case, by bringing the financially excluded into the banking system, it has enhanced consumer protection and has created a better environment for monitoring anti-money laundering (AML) and combating the financing of terrorism (CFT). More importantly, it has created a better environment for monetary policy.

From this example, we can also provide a more global picture of the urgency of such innovations and their potential for transforming the lives of millions. A McKinsey Global Institute Report (2016), *Digital Finance for All: Powering Inclusive Growth in Emerging Economies,*[1] recently recounted some of the achievements of this new technology:

- Digital finance has the potential to provide access to financial services for 1.6 billion people—more than half of whom are women—in emerging and developing economies.

[1] Manyika, J., Lund, S., Singer, M., White, O. and Berry, C. 2016. *Digital Finance for All: Powering Inclusive Growth in Emerging Economies.* McKinsey Global Institute. Available at: http://www.mckinsey.com/global-themes/employment-and-growth/how-digital-finance-could-boost-growth-in-emerging-economies.

EVENT TO WATCH

JANUARY 15-17, 2017

United Nations World Data Forum

At the recommendation of the U.N. Secretary-General's Independent Expert and Advisory Group on Data Revolution for Sustainable Development, Statistics South Africa will host the first U.N. World Data Forum (WDF) in Cape Town, South Africa in early 2017. The forum aims to coordinate the efforts of experts in statistics, measurement, data science, and information systems, with those of data users—including policymakers, academic communities, businesses, and civil society—in order to build capacities for leveraging data to make evidence-based policy decisions related to the 2030 Agenda for Sustainable Development. Topics for discussion will include innovative data sources and technologies, data governance and privacy issues, financing data collection and analysis, and data communication and visualization.

- It can increase the volumes of loans extended to individuals and businesses by $2.1 trillion and allow governments to save $110 billion per year by reducing leakage in spending and tax revenues.

- Financial service providers can benefit by serving $400 billion annually in direct costs while sustainably increasing their balance sheets by as much as $4.2 trillion.

- The overall boost to GDP in these economies can be $2.7 trillion by 2025, a 6 percent increase. The contribution would come from raised productivity of financial and non-financial businesses and governments with DFS.

However, the fears of regulatory arbitrage, risks, and misunderstanding of how innovations are taking place continues to prevent so many African regulators from embracing DFS as well as creating an environment for other innovations in the market to thrive. The tension of regulation and innovation perhaps reigns even into 2017. What should be done? Going forward, how is the balance to be achieved? Nothing seems to explain this better than the words of the late Sir Andrew Crockett after the global financial crisis:

> *But whatever the underlying causes [of the global financial crisis], public opinion rightly expects the regulatory environment to be reformed to prevent a repetition of the economic and human costs of the crisis. There is a natural desire in such circumstances for "more regulation." What is needed, however, is "better regulation," a regime that can more readily identify emerging vulnerabilities, that can properly price risks, and that strengthens incentives for prudent behavior. In some cases, this will require additional regulation; in others, a better-targeted use of powers that regulators already have.*[2]

Institutions define the rules of the game, generating a set of dynamic principles to guide the market of dynamic innovators and entrepreneurs.

What results can we look for or showcase where the balance of regulation and innovation has been seen to work? Do we assume that in 2017 the regulators, especially in Africa, will acquire and adapt the frontier regulatory technology that will balance out and encourage innovation, innovative products, and entrepreneurship? The Kenyan case demonstrates that entrepreneurs and innovations will thrive with a supporting policy and regulatory environment. Its successes would not have been possible without the strong regulatory institutions as institutions have two important functions: First, they define the rules

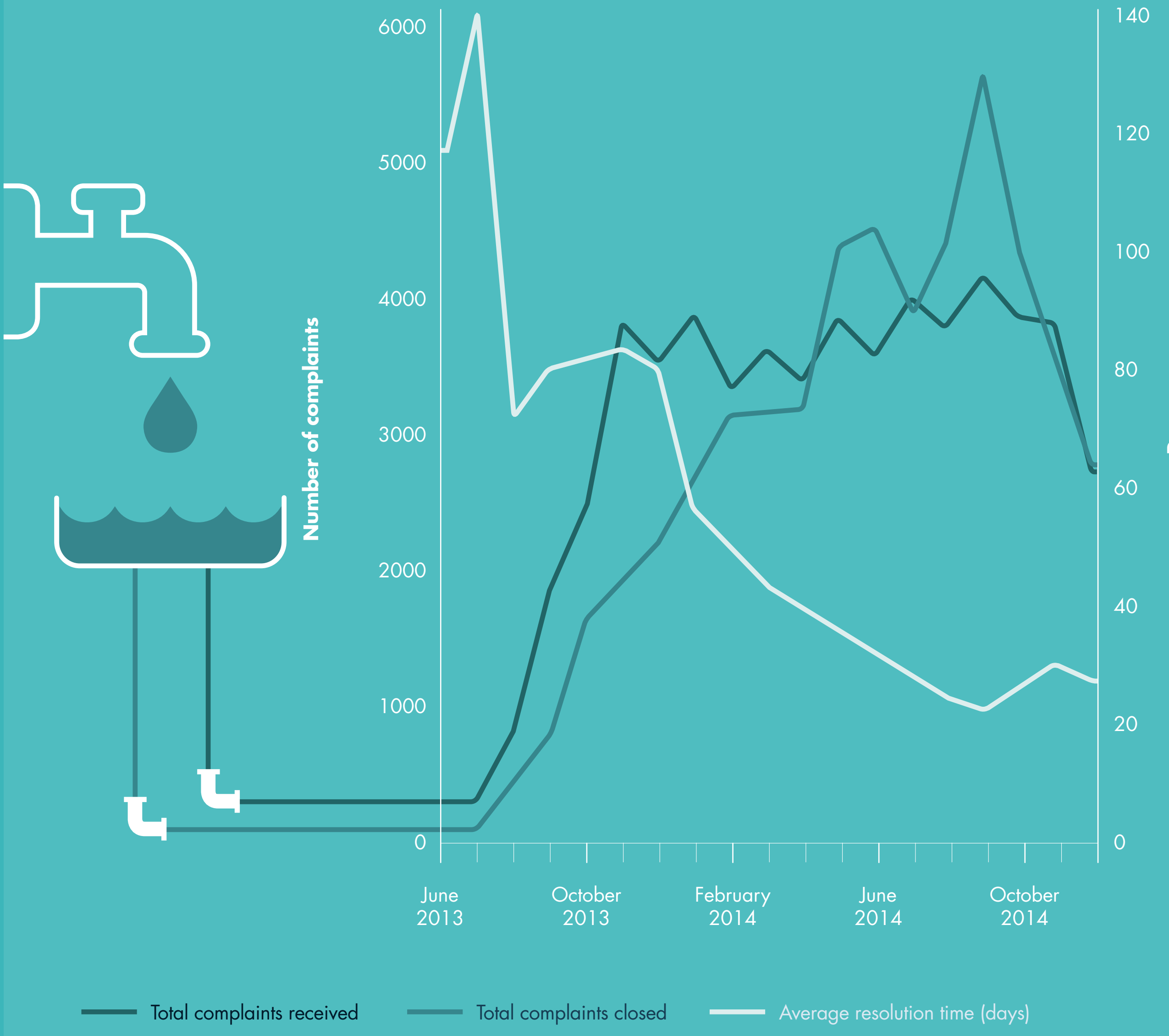
[2] "Rebuilding the Financial Architecture," *Finance & Development,* Volume 46, Number 3, September 2009. Available at: https://www.imf.org/external/pubs/ft/fandd/2009/09/pdf/crockett.pdf.

FIGURE 3.4.

AN EXAMPLE OF TECHNOLOGY IMPROVING SERVICE DELIVERY:

NAIROBI'S WATER UTILITY USING DIGITAL CUSTOMER FEEDBACK

Service delivery within urban areas goes beyond availability of goods; rather, efficiency and customer response is additionally central to a productive, well-functioning system. New forms of communication, such as digital customer feedback at a Nairobi water utility, corresponded with a marked increase in improved service delivery through the resolution of complaints. In this case, the mobile application MajiVoice provides customers the opportunity to register complaints via text message or internet. Not long after its introduction—June 2013—citizens were empowered to register complaints and those issues were resolved faster.



Source: World Bank. 2016. World Development Report 2016: Digital Dividends. Washington, DC: World Bank. doi:10.1596/978-1-4648-0671-1. License: Creative Commons Attribution CC BY 3.0 IGO. Available at: http://documents.worldbank.org/curated/en/896971468194972881/pdf/102725-PUB-Replacement-PUBLIC.pdf.

of the game, generating a set of dynamic principles to guide the market of dynamic innovators and entrepreneurs. Second, they define the appropriate incentives (as well as penalties). A combination of rules, dynamic guidelines, and appropriate incentives will encourage prudent behavior in the market and will support market development. In this regard, innovators and entrepreneurs will find it easy and rewarding to operate and thrive in such a market and a regulatory environment.

This synergy is what will support innovation in the market and attract new entrepreneurs. But there are two important caveats to watch for in 2017. Financial stability—like so many other important drivers of growth—cannot be sustained by regulations alone. Other internal and external factors, such as an unstable macroeconomic environment and threats of recession, can threaten success. Economic recession robs the economy of the supply of investment opportunities and the financial sector thrives on this dynamism to allocate financial resources to affect the investments. In addition, capping interest rates destroys the instrument that is used worldwide to price risk. In this case, domestic de-risking is bad for financial stability as well as encouraging innovation and entrepreneurs in the market. A regulatory approach and a regulatory environment that will encourage innovation and entrepreneurship is what African economies should strive to achieve in 2017 but also work on the pitfalls that can disrupt the process that will kill innovativeness and broad-based growth across sectors.

Digital jobs and smart urbanization

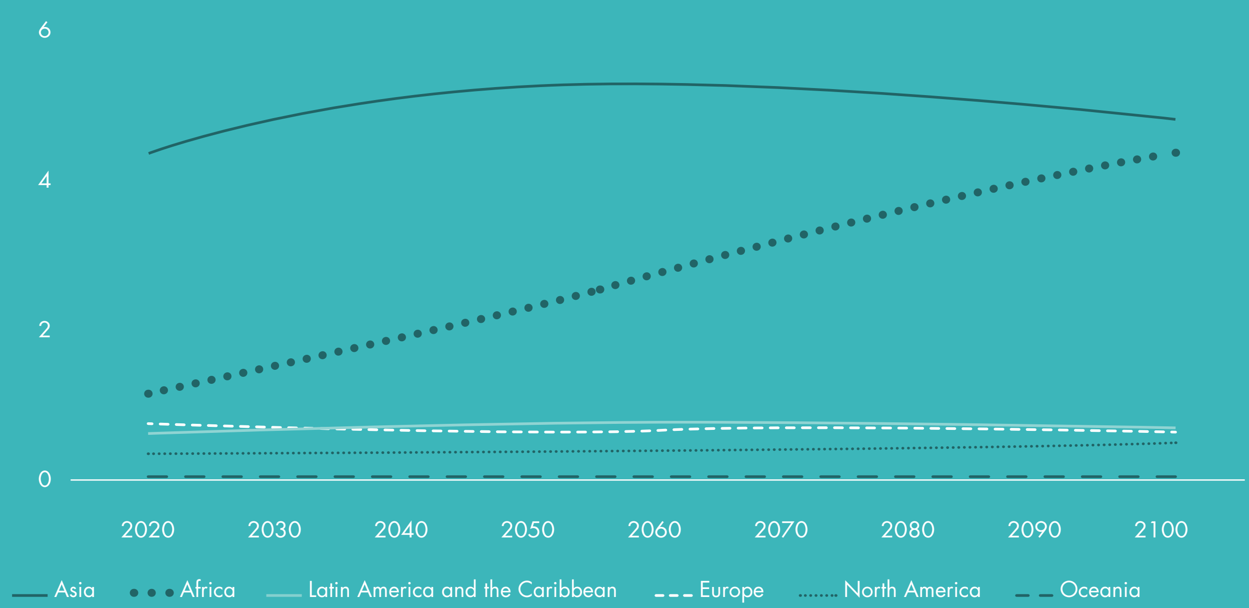
Given Africa's demographic boom and Africa's drive to play a more competitive role in the global economy, the question is not if digital jobs will play a role in Africa's future job market, but whether or not these jobs can be successfully used to catalyze growth, support innovation, and foster sustainable and resilient communities. The worldwide model of digital jobs has been configured largely to utilize low-cost, but tech-savvy, labor in developing countries to augment the staff of international ICT businesses rather than to supply a steady stream of jobs for its burgeoning population. While this trend can help foster the emergence and growth of a middle class in these countries, it also creates an inherent instability as other developing nations vie for (and can ultimately take away) those commodity-based digital jobs.

With all indications that urbanization trends will continue for decades in Africa, national governments

FIGURE 3.5. PROBABILISTIC POPULATION PROJECTIONS BASED ON THE WORLD POPULATION PROSPECTS

Africa's population will continue to boom at least for the next 100 years, far above much of the world, creating demand for new types of jobs.

Total population (both sexes combined) by country or area, 2020-2100 (billions)



Source: U.N. Medium-Variant Projection, 2015.

Adam Brown
Director of Infrastructure East Africa,
Tetra Tech, Inc.

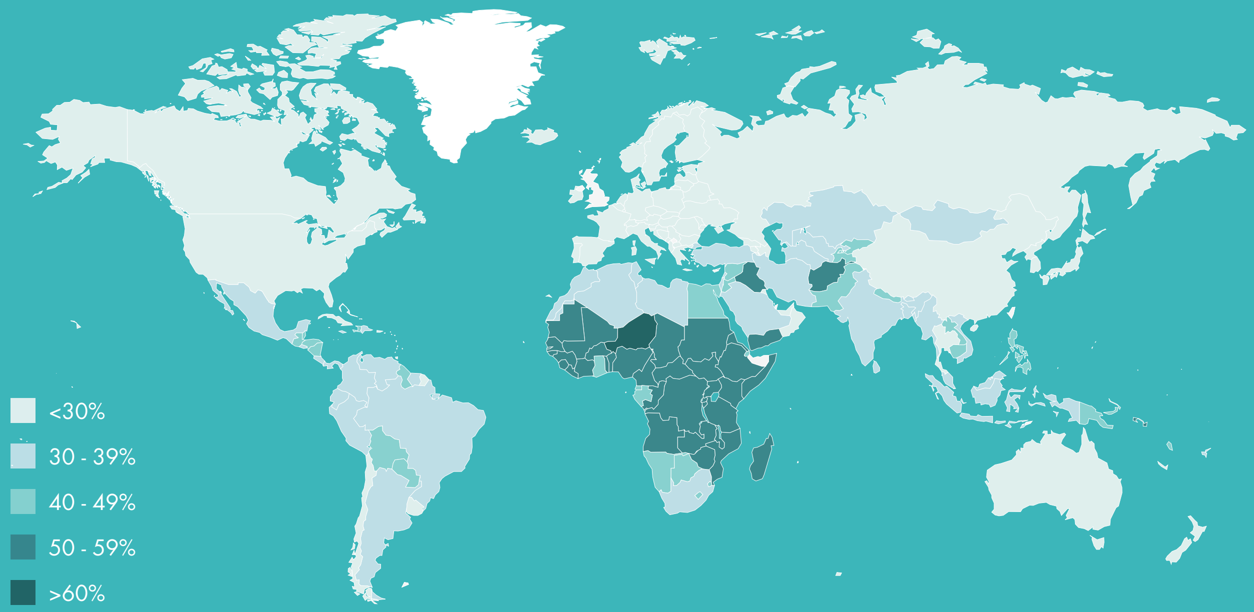
Patrick Adolwa
Director of Infrastructure,
Konza Technopolis Development Authority

should strive to create policy frameworks that help ensure endogenous and sustainable growth of digital jobs that are not solely outsourced to Africa from without. Further, policymakers should include digital jobs in an economic system that promotes productivity across the analog-digital spectrum. For example, technological innovations in agriculture can increase farming outputs, which affects jobs along the entire supply chain. Similarly, technological innovations in medicine can help ensure a healthy and therefore productive population. The overall effect is one where the preponderant application of technology at both the local and national economic levels significantly impacts the number of digital jobs generated from within the African economy.

One way to support digital jobs, especially in the wake of Habitat III resolutions in Quito, is through urban centers: In Africa, a higher proportion of the

FIGURE 3.6. PERCENTAGE OF COUNTRY'S POPULATION UNDER 20 YEARS OLD IN 2015

Not only will Africa's population boom, but the number of youth on the continent is already high, creating demand for strong, modern economies and new technologies to adapt the region to the changing world.



Source: United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision, DVD Edition.

youth population will reside in urban centers by the year 2040. When these centers serve as hubs for technology and innovation, all sectors of the economy, as well as all segments of the community, can benefit in a more meaningful way. Urban centers in Africa should strive to attract international technology businesses, which will contribute to an overall system that promotes science, technology, engineering, and mathematics (STEM) education, entrepreneurship, inclusion and accessibility, and ultimately more jobs for all sectors of the economy.

Given its position as the youngest and fastest-growing population in the world, Africa no doubt needs more digital jobs to support its population. But that those digital jobs should shore up an African-based technology economy is much more significant. Africa is in a unique position, and significantly so, to prepare its youth for more STEM-based jobs (including digital jobs) while building both urban and rural communities that promote productivity and innovation.

This will not happen by wishful thinking. It will happen through the deliberate and systematic strategies of progressive African governments with a long-term vision and the wherewithal to implement appropriate policies in technology and to provide and facilitate the necessary funding to create resilient, sustainable, innovative, and productive (let's just call it "smart") urban communities as well as efficient agricultural systems. As the concept of smart cities emerges in the world, Africa has a unique opportunity to take a new look at what the word "smart city" really means in the context of African urbanization in the digital age. Africa needs successful urbanization models that incorporate technology into the community fabric in a way that provides greater access to and benefits from technology across the socio-economic spectrum. Kenya is looking to do just that with its new smart city.

Konza Technology City and other smart cities in the developing world

Konza Technology City (KTC) of Kenya[1] is a new smart city being planned, designed, and built from the ground up. It is striving to be a model for combining urban master planning, technology, policy, and the rule of law to create a place that takes the word "smart" in its truest sense. While KTC is currently going through the steps of building a city—and all of the concrete, steel, and human resources that this entails—it is also asking, and endeavoring to answer, hard questions about how to make smart choices about the nexus of technology, jobs, creation, and urban planning.

Smart cities like Konza, and those in other parts of the world such as the Smart Cities Mission in India, must strive to play a major role in ensuring that technology and digital jobs help to bring people out of poverty and increase their physical and digital mobility. This is especially important in Africa where urbanization trends have not been contributing to the goal of transitioning people out of poverty to the degree that can and should be expected. When cities like KTC serve as innovation hubs—where people live, work, and play—the community extends well beyond the physical borders of the city. When smart cities create digital jobs by way of innovative technology, especially in life sciences and agriculture, it creates jobs across all sectors of the economy, which ensures that digital jobs are part of the solution—not the solution itself.

[1] Konza Technology City (KTC) of Kenya, available at: http://www.konzacity.go.ke/.

BOLSTERING URBANIZATION EFFORTS:

Africa's approach to the New Urban Agenda

Chapter 4

Africa's New Urban Agenda

ISSUE BRIEF FROM THE AUTHOR

PETER GRIFFITHS
Managing Editor, LSE Cities

The year is 2063. Celebration is in the air across Africa's cities—many states are celebrating a century of independence from colonial rule. The significant outlier—Liberia—enjoyed its bicentennial under the banner of "Land of the Free" in 2047 using the year of declared independence. Africa is now—willingly—the world's most important supplier of labor, much of it highly skilled. The Africa Union's (AU) celebrations of the 50-year "global strategy to optimize Africa's resources for the benefits of Africans" merge into the general sense of jubilee. Kinshasa-Brazzaville (joined after a referendum) and Lagos are now the first- and third-biggest cities in the world; Dar es Salaam, Lilongwe, Niamey, Nairobi, and Khartoum all vie for spots in the top 10. Africa's many global cities are household names. The world's cycling capital includes paths through rehabilitated equatorial African forests; many of the most livable cities are scattered across the continent; and, after major infrastructure investment and free movement, travel between African cities is generally smoother than between, say, London and Paris. Africa's bold urbanization strategy brought more benefits to Africans than could ever have been expected.

Power shift

Africa was the only region to provide a coordinated response to what should go into the United Nations' New Urban Agenda.

Back in 2016, Africa was the only region to provide a coordinated response to what should go into the United Nations' New Urban Agenda. The action-oriented document set global standards of achievement in sustainable urban development. The AU swiftly harmonized the strategy with Agenda 2063, Africa's action plan and vision for a united and prosperous future. The move was widely celebrated by the global community: Africa was finally recognizing and embracing its urban future. At the same time, what was overlooked by the international community was the subtle power shift. Africa was no longer following, but leading, on global policy initiatives. Involvement in the New Urban Agenda, while important for Africa, has been merely a stepping stone towards owning its (urban) future. After all, Agenda 2063 is an African document.

Why is strengthening cities in Africa important when considering political decisions and policymaking?

Bruce Katz
Centennial Scholar, Brookings Institution

In October of 2016, the third United Nations Conference on Housing and Sustainable Urban Development (Habitat III) reaffirmed the high stakes of ongoing urbanization in the developing world and set a new agenda for promoting sustainable and inclusive growth. It also made clear that achieving the goals set forth requires stronger sub-national leadership and capacity.

Those stakes are especially high across Africa, which is forecast to urbanize at a rate of 3.65 percent[1] annually, adding nearly 350 million new city-dwellers by 2030. The question for African cities as they expand in population and economic importance is twofold: How to grow in ways that are both sustainable and inclusive? And, what forms of governance can incentivize sustainable physical and economic growth while also housing the capacity to enable it?

These questions have grown more complex as city responsibilities have increased. Many of the most pressing economic and social challenges we face globally are distinctly urban: inequality and technological upheaval, environmental degradation and unsustainable development, energy and climate pressures, demographic change, migration, and social unrest. These dynamics require a problem-solving apparatus beyond the capabilities of national governments alone. Robust city and metropolitan governance can provide a solution.

Local governance itself is not without its own hurdles. Regional leaders must resist parochialism—understanding that collaboration with neighbors is imperative at a time when competition is global, not local. The limits of municipal capacity within government demand a broader conception of governance, one that includes the private and civic sectors as co-stewards of the metropolitan agenda. This type of networked, distributed governance can provide "checks and balances" on any central governing party, mitigating a third unfortunately prevalent threat: corruption.

Yet, despite these challenges, localism offers benefits beyond its cost. With "policy" at the regional level delivered by cross-disciplinary networks of actors—local government, but also private sector innovators, civic organizations, and research institutions—cities are more flexible and nimble than national governments, and thus more able to experiment and solve complex problems. Many of the distinct challenges facing rapidly growing African cities—from land rights, to infrastructure, to education and training—are best solved by local authorities. And by leveraging the full value of public assets within their borders, these cities can raise local sources of capital, reducing their reliance on transfers from national governments or international aid.

Once proven in one region, innovations in governance and policy must be spread—adapted and tailored for other areas and other cities. In some ways, rapidly developing cities in Africa, especially underdeveloped mid-sized urban centers, have the opportunity to avoid the mistakes of cities in the developed world and to invent a modern form of city-building and governance that can, in turn, inform progress underway in cities across the U.S. and Europe. Through this new circuitry of innovation, we have a chance to deliver on the goals of building better cities and better nations.

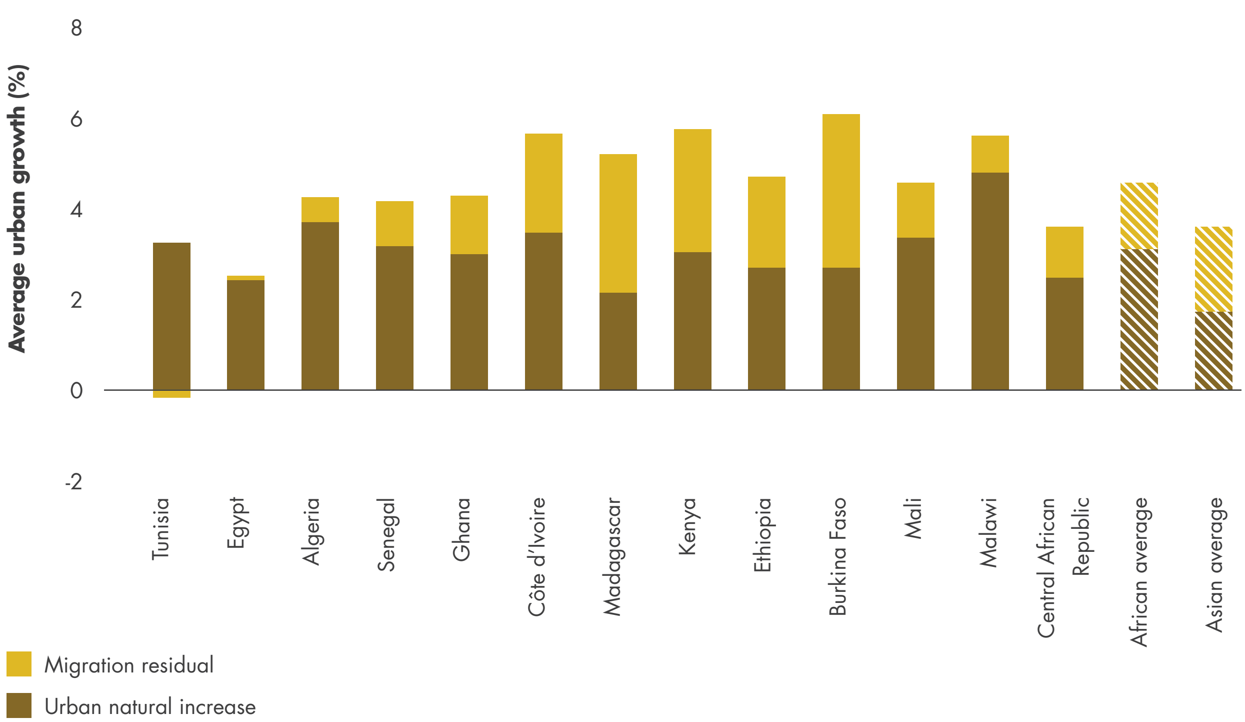
[1] United Nations World Urbanization Prospects. Available at: https://esa.un.org/unpd/wup/.

Involvement in the New Urban Agenda, while important for Africa, has been merely a stepping stone towards owning its (urban) future.

There are more hints to the wind of change. Burundi, the Gambia, and South Africa's rejection of the International Criminal Court, arguing that Africans were being unfairly singled out; campaigns like #RhodesMustFall in South Africa to "decolonize" education; pan-African internet memes clarifying that "Africa is not a country;" and even the AU's desire for visa-free travel across Africa for all Africans, all suggest an eagerness for Africa to redefine how it engages with itself and the world. That Mpho Parks Tau—Johannesburg's former mayor—was elected as president of the global United Cities and Local Governments signposted a growing understanding of Africa's future clout. In essence, Africans are increasingly saying that international bodies can't be relied on to fairly communicate Africa's needs or Africa's context. Some have gone as far as suggesting these bodies effectively maintain the status quo of colonial power, calling for African (or at least Global South) institutions to be built instead.

FIGURE 4.1. AFRICAN CITIES TEND TO SEE MORE GROWTH FROM NATURAL INCREASE THAN MIGRATION

Compared to other developing regions, especially Asia, African cities have increasingly seen growth in the population of their cities not from migration but rather natural increase. This type of population change occurs when births exceed deaths in that city, referred to as "mushroom cities."



Note: The African average includes the African countries shown. The Asian average includes 12 countries: Bangladesh, China, India, Indonesia, Japan, Malaysia, Myanmar, Pakistan, Philippines, Korea, Sri Lanka and Thailand.

Source: African Economic Outlook 2016. Adapted from Web Appendix Table 3 in Jedwab, Christiaensen and Gindelsky (2015). Data available at http://dx.doi.org/10.1787/888933350602).

While not acknowledged at the time, Africa's involvement in the New Urban Agenda has been simply part of repositioning itself towards greater say in global decisions; it is no longer necessarily what the agenda means for Africa but rather the other way round. That UN-Habitat is headquartered in Nairobi may have been remarkably far-sighted: Africa is gearing up to run (and establish) international bodies.

Building tomorrow's cities

However, Africa will only achieve this future if it has attractive cities, so it is appropriate that the continent is taking the lead on this issue.

However, Africa will only achieve this future if it has attractive cities, so it is appropriate that the continent is taking the lead on this issue. The New Urban Agenda suggests such cities are fairer for people and good for the environment. They are well-planned, housing is affordable without being spatially segregated, inhabitants are well connected to opportunities and each other, walking is both possible and useful as sprawl is contained and pavements are prioritized, pollution is low, energy is sustainable, technology is used creatively, and everyone is welcome (except possibly for criminals as there's an expectation that these cities are safe). Almost all of these are in some way related to urban form.

Africa already has advantages. While some people travel very long distances to work, it has arguably the most sustainable modal share: More than 70 percent of trips are done by walking and cycling in many African cities. Rapid urbanization provides an opportunity to fill in gaps in the urban fabric and densify cities to improve accessibility. Higher urban densities can improve service delivery efficiency, promote urban vitality, and facilitate more sustainable public transport, walking, and cycling. These advantages depend, however, on effective city management and urban design that minimize the negative costs of congestion and pollution. Africa's limited energy infrastructure coupled with its enormous renewable energy potential provides a clear path to cleaner cities, provided industrial and modernization policies don't encourage mode shift to private cars as has happened elsewhere.

Dar es Salaam and Kampala are imagining fly-overs that'll crisscross their cities to resolve congestion while providing infrastructure seen as critical for economic growth. New York had similar modernization ambitions in the 1940s, yet not realizing them doesn't seem to have negatively affected growth in the world's second-richest city by GDP. African cities should carefully review the potential and costs of reshaping their cities around new infrastructure. Other cities around the world have found that big highway projects can cause congestion because of the effect of induced demand. In addition,

FIGURE 4.2.

URBAN SERVICE DELIVERY OUTPACES RURAL DELIVERY IN AFRICA

Service delivery in Africa continues to be a problem, though urban areas offer much more access to vital services such as water, sanitation, and electricity. Indeed, average access has increased in both rural and urban areas. However, as these country snapshots indicate, while access remains low in many countries, urban areas benefit much more.

Note: Data for sanitation and water are from 2015. Data for electricity is from 2012.

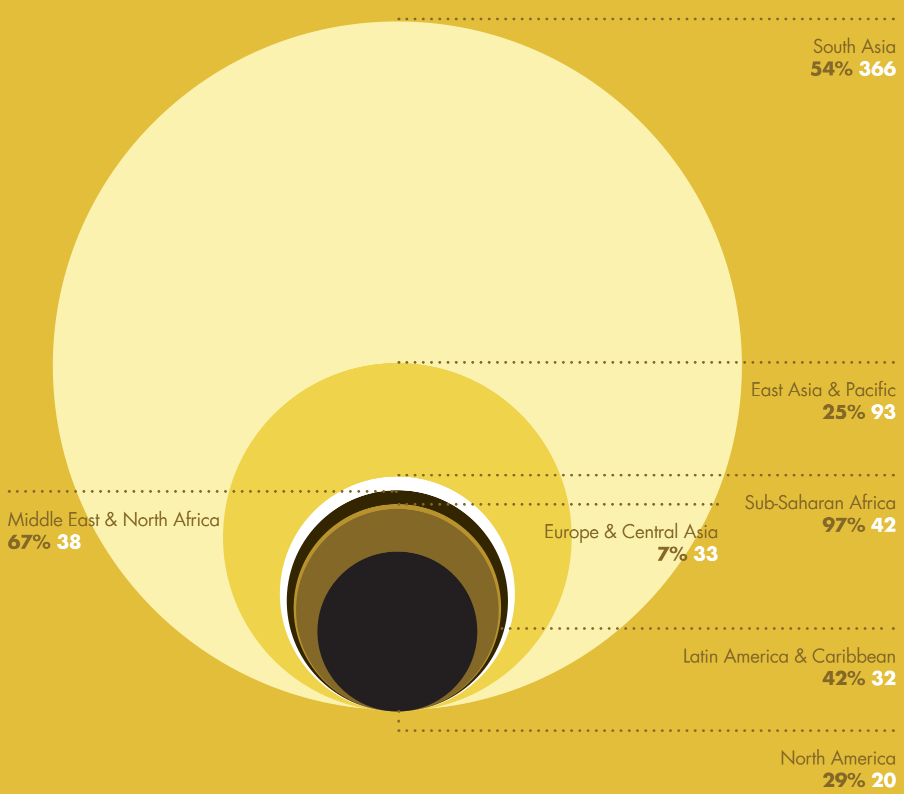
Source: World Bank World Development Indicators (various years).

FIGURE 4.3.

GROWTH IN POPULATION DENSITY

Population density—the number of people per square kilometer—in sub-Saharan Africa has increased over the last 25 years at a rate almost double any other region of the world. While some countries, namely Mauritius, Rwanda, Burundi, and Comoros, are among the most densely populated globally, even countries in Africa that are less densely populated have seen their densities double since 1990. For example, Niger, which now boasts a low population density of 16 people per square kilometer, experienced an increase of its population density by 150 percent. Burkina Faso, which has had an increase of over 100 percent maintains a population density of 66 people per square kilometer. These changes in population density come also as African countries are transitioning to become more urban, with larger proportions of people living in cities than rural areas than ever before. In smaller countries, like Rwanda, which a population density of over 440 people per square kilometer, this trend means that many cities do not have the room to grow outwardly.

	Percent change from 1990 to 2015	**Population density of African countries** (people per sq. km of land area)
Mauritius	19%	622
Lesotho	34%	70
Seychelles	34%	204
Zimbabwe	49%	40
Swaziland	49%	75
Cabo Verde	53%	129
South Africa	56%	45
Rwanda	60%	471
Botswana	64%	4
Sierra Leone	64%	89
Central African Republic	67%	8
São Tomé and Príncipe	68%	198
Somalia	71%	17
Namibia	74%	3
Guinea-Bissau	75%	66
Gabon	81%	7
Malawi	83%	183
Côte d'Ivoire	87%	71
Ghana	87%	120
Comoros	90%	424
Nigeria	91%	200
Togo	93%	134
Cameroon	93%	49
Congo, Rep.	94%	14
Kenya	96%	81
Zambia	99%	22
Burundi	99%	435
Mauritania	101%	4
Senegal	101%	79
Sudan	104%	22
Burkina Faso	105%	66
Mali	107%	14
Guinea	109%	51
Mozambique	109%	36
Madagascar	110%	42
Tanzania	110%	60
Liberia	114%	47
Gambia, The	117%	197
Benin	118%	96
DRC	121%	34
Uganda	124%	195
Equatorial Guinea	124%	30
Angola	125%	20
Ethiopia	128%	99
Chad	136%	11
Niger	152%	16



Source: World Bank World Development Indicators (2015).

Without a clear vision for how to grow cities to accommodate half-a-billion people over the next 20 years, Africa's cities will continue to sprawl.

they may also lead to increased inequality as it is frequently easier to clear poorer areas, like slums and even established informal areas, to make space for roads. Severance, where roads cut off interaction between communities, may be another risk to building socially inclusive cities. In years ahead, Africa should certainly prioritize transport infrastructure; however, it should ideally focus on putting people closer to opportunities first and making sure most inhabitants can both share and benefit from increased connectivity.

Densification of African cities offers both challenges and opportunities. Kigali in Rwanda is looking to put people closer together and tackle housing affordability by enforcing strict land-use policies. High-density flats also avoid scarce land being gobbled up by single-story homes. However, it is one of Africa's smallest countries: Many other countries don't have the incentive to not waste land. (For example, neighboring Democratic Republic of the Congo is two-thirds the size of Western Europe.) Given that Africa has an incredible window in which to densify cities to make sure people are both close to each other and to opportunities, the biggest risk is abundant and cheap land (although large plot sizes make them seem expensive). Without a clear vision for how to grow cities to accommodate half-a-billion people over the next 20 years, Africa's cities will continue to sprawl.

However, typology isn't the only factor that impacts social inclusion and the environment. Africa is largely un-zoned. While zoning can certainly increase the collective imagination and sharpen the vision of what is possible, mono-functional zoning simply increases the burden of travel by putting people far away from opportunities. It may also be less resilient to change, more prone to speculation (something the New Urban Agenda is opposed to), and more likely to support unattractive, deadly streets. Smaller, tighter blocks—often grown organically or informally over time—tend to support more dynamic street life. While not romanticizing slum conditions (Africans on average have better access to mobile phones than toilets), many informal areas may already have some of the DNA needed to build more attractive cities.

Africa's urban future will benefit from better planning, but the risk is that the pendulum swings too far and that cities are over-determined, unable to adapt to change, and lacking in creativity.

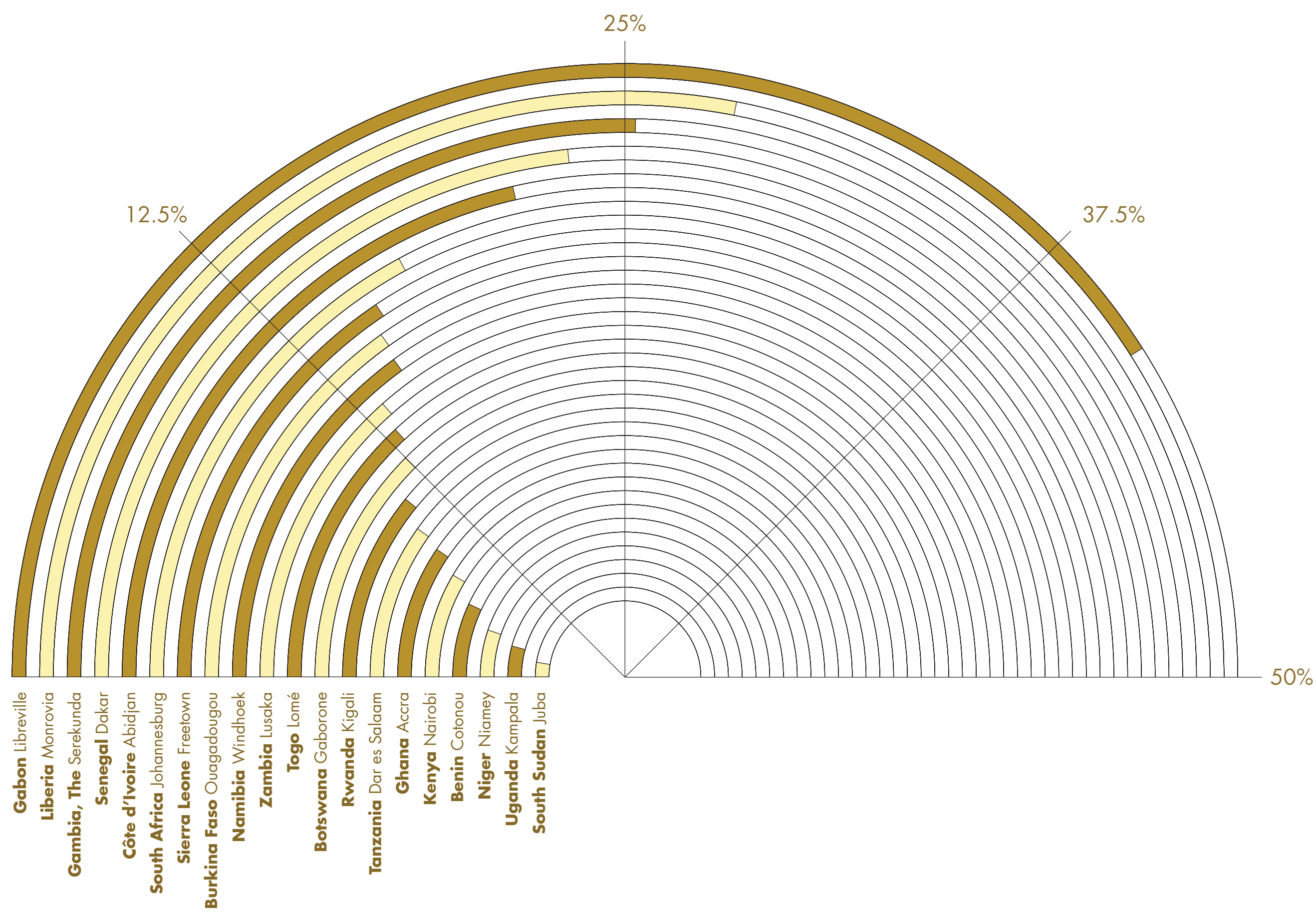
This leads arguably one of the biggest risks facing Africa's future. Throughout history, cities have flattened "slums" to later regret the loss of value. Slums and poorly serviced and informal areas are often demolished by well-meaning governments and replaced by typologies and street patterns that are less able respond to current and future needs. Clearly, Africa's urban future will benefit from better planning, but the risk is that the pendulum swings too far and that—with the promise that planning and better architecture can take Africa from poor to rich—cities are over-determined, unable to adapt to change, and lacking in creativity.

Can Africa afford this?

Many experts—pointing to examples like the Chinese-built city of Kilamba outside Luanda—believe Africa's cities will be built by foreign interests. The lack of skills, institutional capacity, and finances present a significant challenge to Africa's urban agenda.

FIGURE 4.4. GDP CONTRIBUTION OF MAJOR AFRICAN CITIES

Cities in Africa are not only growing in population, but in many countries, major cities dominate their economies. As seen in the image below, six cities make up over 20 percent of their countries' GDP. Libreville in Gabon makes up almost half of its countries' total GDP. While this is not the case in every country—South Sudan's Juba makes up only a small fraction of its GDP—the trend is moving towards higher city contribution.



Note: These calculations were done using data from the World Development Indicators on country populations, populations of the largest cities, and GDP per capita. We compared these estimates to results from a recent report from the McKinsey Global Institute, which uses different estimations for GDP per capita in specific cities, and results were comparable for Accra and Luanda, but different for other cities. The McKinsey Global Institute uses an econometric model to predict the GDP of a city using the city population and the average per capita GDP for cities in the region. Efforts to improve the quality of the data on the GDP of cities are needed.

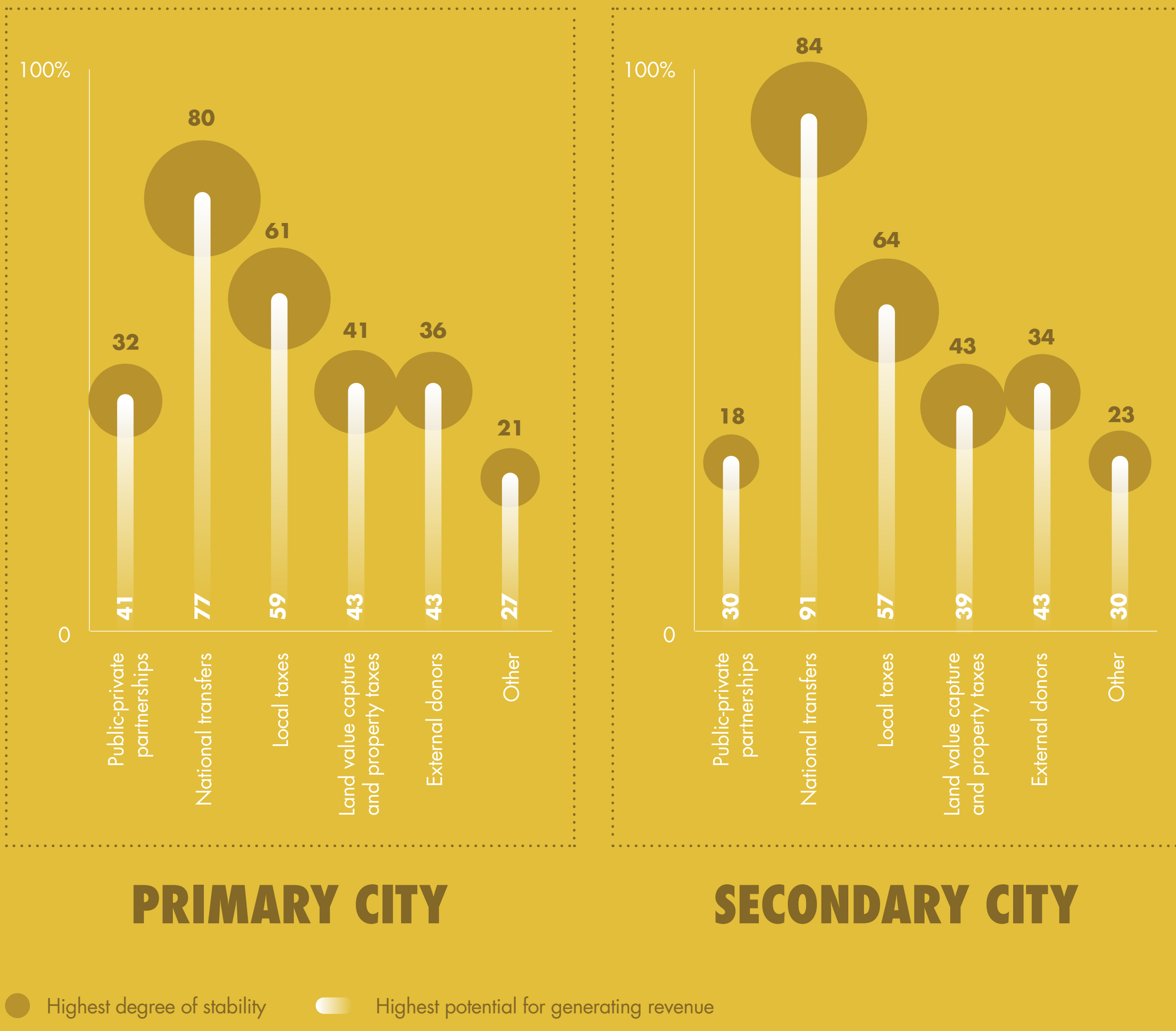
Sources: Country Populations: World Development Indicators, which use: (1) United Nations Population Division. World Population Prospects, (2) Census reports and other statistical publications from national statistical offices, (3) Eurostat: Demographic Statistics, (4) United Nations Statistical Division. Population and Vital Statistics Report (various years), (5) U.S. Census Bureau: International Database, and (6) Secretariat of the Pacific Community: Statistics and Demography Programme.
City populations: World Bank World Development Indicators, which use the United Nations, World Urbanization Prospects.
GDP data from World Bank World Development Indicators.
City GDP data from McKinsey Global Institute Cityscope. Available at: http://www.mckinsey.com/global-themes/urbanization/urban-world-mapping-the-economic-power-of-cities.

FIGURE 4.5.

FINANCING TOOLS FOR CITIES:

THE REVENUE POTENTIAL AND STABILITY OF MUNICIPAL FINANCING TOOLS IN AFRICA

Various tools to raise revenues are available to African cities, though their potential success and stability vary. The African Development Bank asked experts to rank financing tools on these factors in order to shed light on their reliability. National transfers were ranked at the top for having the greatest potential for mobilizing funding as well as the most stability, and local taxes were second. Notably, donors, while ranked third for potential revenue actually drops to fourth in terms of stability. Other potential sources highlighted include property taxes and public-private partnerships (PPPs), as well as minor sources such as remittances, local government bonds, and private loans (noted in "other").



Note: "Other" includes local government bonds, remittances, and loans from local development banks and from private financial institutions. Survey answered by country economists of the AfDB and UNDP in 45 country offices in Africa. Response is weighted to one answer per country.

Source: African Development Bank. African Economic Outlook. 2016. AEO experts' survey, 2016. Available at: https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AEO_2016_Report_Full_English.pdf. Data available at: http://dx.doi.org/10.1787/888933350945.

The solutions to these problems may well be unexpected. As some advanced democracies politically close themselves off to the world, a shrewd mayor could rebrand the most culturally diverse continent as a haven for those desiring more open politics, potentially attracting a broad range of skills, while some devolution of fiscal and decision power to increasingly important big and small cities may provide fertile ground for training up new leaders. The AU, emboldened by the success of mobile money in East Africa and taking advantage of a young early adopter population, may move to introduce a common cashless currency. This could make the informal/formal divide far less relevant, help streamline burdensome taxation regulation, and ensure Africa stops being a net creditor to the world (when including illegal financial outflows) by making it more difficult to siphon off money offshore.

Africa is likely to become less willing to keep subsidizing polluting nations unless it finds out that this arrangement is somehow good for Africans.

Africa has so little built today that its trajectory might look quite different from what's come before in other parts of the world. Some smart city manager may even use evidence of the link between urban form and emissions to trade carbon credits to fund better city making. A billion more people will be living in Africa's cities by 2063. The world certainly has a vested interest in ensuring Africa remains the most sustainable region. However, Africa is likely to become less willing to keep subsidizing polluting nations unless it finds out that this arrangement is somehow good for Africans. Given that urbanization is partly caused by the disproportionally high effects of climate change on Africa, this seems unlikely. Expect Africa's cities to make bigger demands on global players.

Housing Africa

Vera Songwe

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Adequately housing Africa's growing and urbanizing population is an increasing challenge for policymakers and the private sector: According to a recent study by McKinsey,[1] by 2025 over 35 million housing units will be needed in Nigeria, Egypt, and South Africa alone, and over 90 percent of Africa's young population will live in urban areas. In 2017, policymakers should begin to focus on how to successfully prepare for this growing need.

Addressing the housing challenge is critical for growth. The real estate sector has underpinned economic recovery in many developed countries and can help Africa weather its continued slow growth by generating domestic demand, creating jobs, and increasing wealth. However, following the 2008 financial crisis there has been a latent aversion to housing finance systems. Mortgage systems are under scrutiny, and the debate around adequate regulatory structures and appropriateness of instruments to whom and in what markets persists. Meanwhile, incomes are indeed rising on the continent, but most citizens cannot afford to independently finance mortgages. On the private sector front, mortgage markets are shallow and the perception of credit risks in the sector remains high.

Some public programs, concessional financing, and a much improved regulatory environment are crucial to attract more private financing needed to support government's ability to keep pace with the demand. In 2017, then, policymakers must consider several important steps.

First, governments, working with the private sector, must develop and adopt an adequate legal and regulatory framework for housing finance. Fundamental to which is reducing financing risks to all parties, which requires first and foremost strengthening the land titling systems and enforcing property rights to ensure robustness of security and collateral. At the same time, a robust housing finance system relies on availability of good credit information. Accordingly, governments should accelerate the development of credit information bureaus. Finally, there must be clarity regarding the role of all institutions engaged in housing finance, private banks, micro-finance institutions, pension funds, insurance companies, and others in order to ensure all systemic risks are managed.

Second, the financing role of the government must be clearly defined and should support market creation. A stable and predictable agreement on the division of risks and financing between the public and private sector must be reached, allowing for the possibility of providing blended financing to accelerate housing development. The public sector can guarantee demand-related risks by underwriting, for example, payment of housing units. Similarly, the private sector can assume all costs and quality related risks.

Finally, capital markets development must be accelerated to provide instruments needed to support the development of housing finance. There is an increasing need for local currency long-term financing and development of secondary mortgage finance markets. These markets can help smooth default and financing risks and provide banks with an outlet to trade housing loans in order to adequately manage exposure to the housing sector. With a more developed housing finance market, financial institutions can begin offering longer-term financing, which will also support demand.

[1] McKinsey Global Institute. *Lions on the move II: Realizing the potential of Africa's economies.* September 2016. Available at: http://www.mckinsey.com/global-themes/middle-east-and-africa/lions-on-the-move-realizing-the-potential-of-africas-economies.

Supporting secondary cities

Eyerusalem Siba
Former Research Fellow, Africa Growth Initiative, Global Economy and Development, Brookings Institution

Rapid urbanization is inevitable in Africa given its demographic structure and vulnerability to climate change. Thus, city planners are often left with the challenge of managing urbanization rather than designing optimal city size, since both pull and push factors affect urbanization.

Successfully managing Africa's urbanization thus involves finding the balance between getting the basics right in megacities and promoting population and industrial de-concentration into secondary cities.

In settings where there are not as many primary cities, the negatives of population density (such as congestion, high prices, and rents) hardly offset the economic incentives of locating in urban clusters (such as knowledge spillover, lower transaction costs, and cheaper provision of public goods), creating a strong inertia on businesses and workers to concentrate in primary cities. Political economy of resource allocation and public good provision across municipalities also dictate geographic concentration of population in primary cities. The problem is, though, there are not as many primary cities in a typical low-income sub-Saharan African country. Thus, productive job creation should be integral part of urban planning. Without it, urban clusters get overcrowded and informal employment rapidly expands.

Perhaps one of the biggest challenges for governments is to promote population and industrial de-concentration through secondary towns, which includes policies supporting infrastructure provision and job creation as well as ensuring connectivity not only to primary cities but also to key industries in agricultural value chains. Studies have shown that this is a very slow moving process, though promotion of special economic zones (SEZs) and improved transport networks have proven promising in promoting the growth of secondary cities. Clearly defined land rights are also bedrock for promoting the formal housing market, curbing urban sprawl and informal settlements, and promoting free movement of labor across occupations, regions, and labor markets.

The task seems to be daunting for a typically resource-constrained developing country government. But the returns are great—ranging from structural transformation to poverty reduction in both urban and rural areas. In addition, a bit of empowerment and transfer of resources to local governments can go a long way in instilling competition among municipal governments as they improve their business environments and tax incentives in order to attract businesses and as they enter into creative partnerships with the private sector to create local solutions for local problems.

Successfully managing Africa's urbanization thus involves finding the balance between getting the basics right in megacities and promoting population and industrial de-concentration into secondary cities.

CONFRONTING CLIMATE CHANGE:

Africa's leadership on an increasingly urgent issue

Chapter 5

African leadership in a time of climate risk

ISSUE BRIEF FROM THE AUTHOR

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Africa's "growth miracle" and its associated resurgence has been challenged. Plunging commodity prices related to a global economic slowdown have dampened economic prospects. Human development indicators remain well below developing-country averages. At the same time, climate change and other environmental stresses are taking an increasing toll on many countries. For example, the recent drought in Southern Africa has meant that currently over 20 million people require emergency assistance in Malawi, Zimbabwe, Mozambique, Madagascar, Lesotho, and Swaziland.

In a sample of 30 African countries, two-thirds are warming faster than the world as a whole—a trend expected to continue in coming decades.

Climate risk is a challenge to both current and future development progress. In a sample of 30 African countries, two-thirds are warming faster than the world as a whole—a trend expected to continue in coming decades. Predictions of future climate change are inherently uncertain, and the future impacts are difficult to predict. This places emphasis on acting early and ensuring that systems are in place to deal with negative climate events.

There will also be significant economic implications, particularly in agriculture, where the poor will feel impacts disproportionally. Estimates suggest that yield and output losses for major crops could be 20–30 percent or more by 2050. If the transformation of the agriculture sector is a pre-requisite for realizing poverty reduction and wider structural change, responding to climate risk is crucial. The huge variation of different climatic conditions across the continent—arid, tropical, and temperate climates—necessitates tailored local responses.

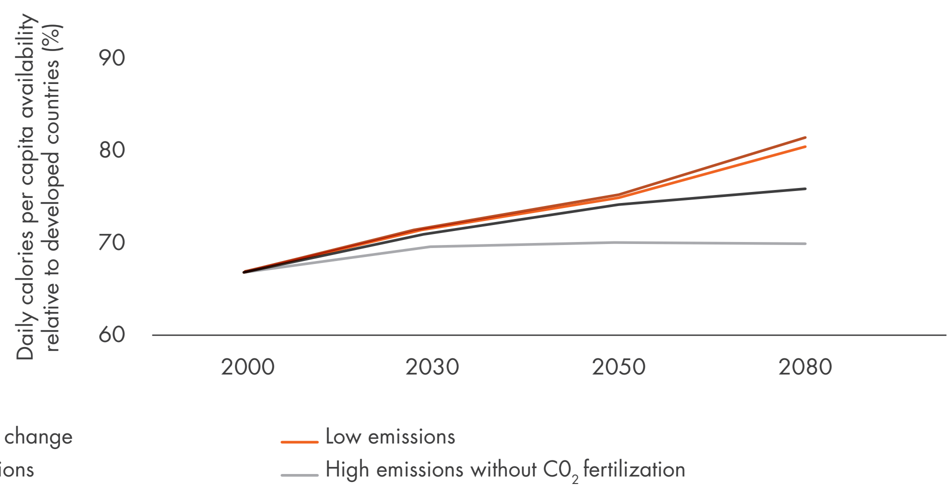
National and international responses to climate change so far

As we enter 2017, there has been global cooperation to deal with climate change, which complements the broader Sustainable

FIGURE 5.1. FOOD AVAILABILITY WILL FALL AND AGRICULTURAL PRICES WILL CLIMB IN SUB-SAHARAN AFRICA UNDER CLIMATE CHANGE

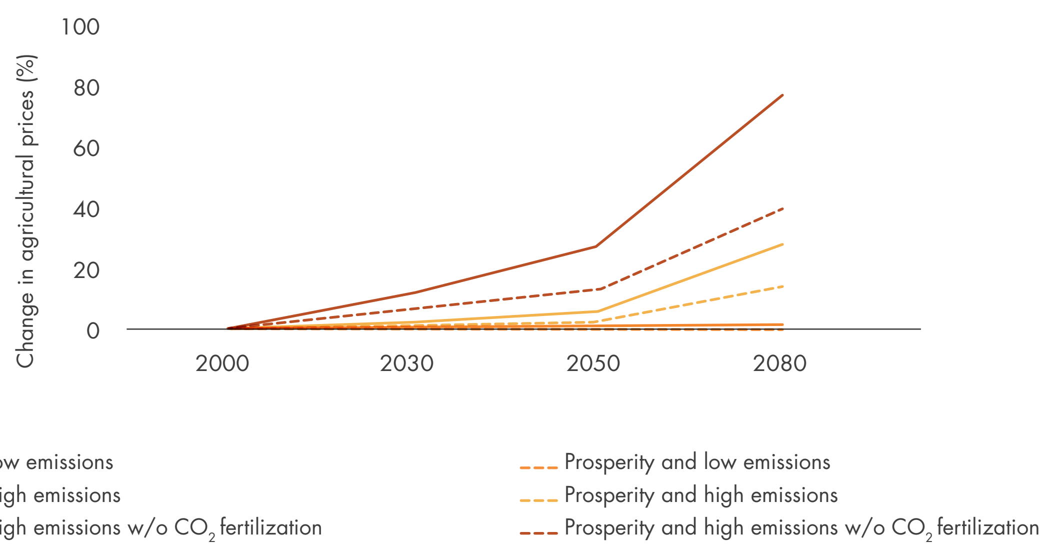
Climate change will have powerfully adverse effects on agricultural and related activities. Temperature changes, natural disasters, and soil degradation—among other obstacles—will stifle agricultural production. This trend is a particular problem for the poor, many of whom rely heavily on subsistence agriculture and often face food insecurity without these complicating factors. The two graphs below show the anticipated drop in caloric intake due to climate change complications as well as the likely increase in food prices, which compounds the food insecurity facing the poor.

Available daily caloric intake



Note: Results are based on simulations from the Global Biosphere Management Model (GLOBIOM) in a scenario with large population growth and little economic growth.

Agricultural prices



Note: According to the World Bank, the "prosperity" scenario assumes extreme poverty eradication and shared prosperity by 2030, slower population growth in the developing world, and severely increased education and labor productivity. The "poverty" scenario" assumes continued high population growth, high inequality, and low economic growth.

Source: Havlík, P., Valin, H., Gusti, M., Schmid, E., Leclère, D., Forsell, N.; Herrero, M., Khabarov, N., Mosnier, A., Cantele, M. & Obersteiner, M. (2015), Climate change impacts and mitigation in the developing world: An integrated assessment of the agriculture and forestry sectors, Policy Research Working Paper 7477, Washington DC: World Bank Group.

Available at: http://documents.worldbank.org/curated/en/866881467997281798/Climate-change-impacts-and-mitigation-in-the-developing-world-an-integrated-assessment-of-the-agriculture-and-forestry-sectors.

Small-scale, high-impact policies for fighting climate change in 2017

Ousseynou Nakoulima
Director of Country Programming, Green Climate Fund

The proliferation of small-scale, high-impact climate actions can drive a dramatic shift in Africa's response to climate change, provided policymakers set up the right incentives. And in 2017 the continent will show it is on its way.

The rapid growth of African urban centers like Nairobi, Lagos, or Abidjan opens an opportunity for the development of **distributed solar generation**, thereby accelerating access to clean electricity as experienced by Mexico and other large cities in Latin America. In rural areas too, electricity generation from mini-grids is picking up as distribution to rural communities from the national grid is generally not financially attractive for power utilities. *The Economist*[1] indicated recently that the number of households receiving electricity through off-grid solar PV could double in 2017.

Similar developments are happening in agroforestry. According to the Intergovernmental Panel on Climate Change, agriculture, forestry, and other land use accounts for 21 percent of greenhouse gas emissions, and its exposure to climate change represents a significant risk to food security, especially in Africa. Solutions are shaping up through integrated approaches that combine agriculture and conservation of forests with a reliance on small holder farmers. Political will is there: Côte d'Ivoire, for instance, is committed to agriculture with zero deforestation after its forests have been depleted from 12 million to 2 million hectares in the last 50 years.

The number of households receiving electricity through off-grid solar PV could double in 2017.

To turn these actions into a green revolution, Africa needs to leverage the growing ecosystem of local financial institutions. Commercial bank networks are expanding rapidly (15 percent per annum for retail banking according to the initiative *Making Finance Work for Africa*). So are specialized investment funds backed by reputed limited partners, like Althelia in Madagascar. **Regulators and banking associations** have a key role to play in this process. First, they can define standards for small-scale green investments and treat them favorably. Second, they should advocate for fiscal incentives to aggregators and financial vehicles so that cash flows resulting from these activities can be pooled efficiently to entice institutional investors. Finally, they should promote the adoption of best practices to attract international climate finance flows. The establishment of a green credit policy in China in 2007 and the sustainable banking principles adopted in Nigeria in 2012 are examples African regulators can draw upon.

Such measures have the potential to drive a paradigm shift in climate action in Africa.

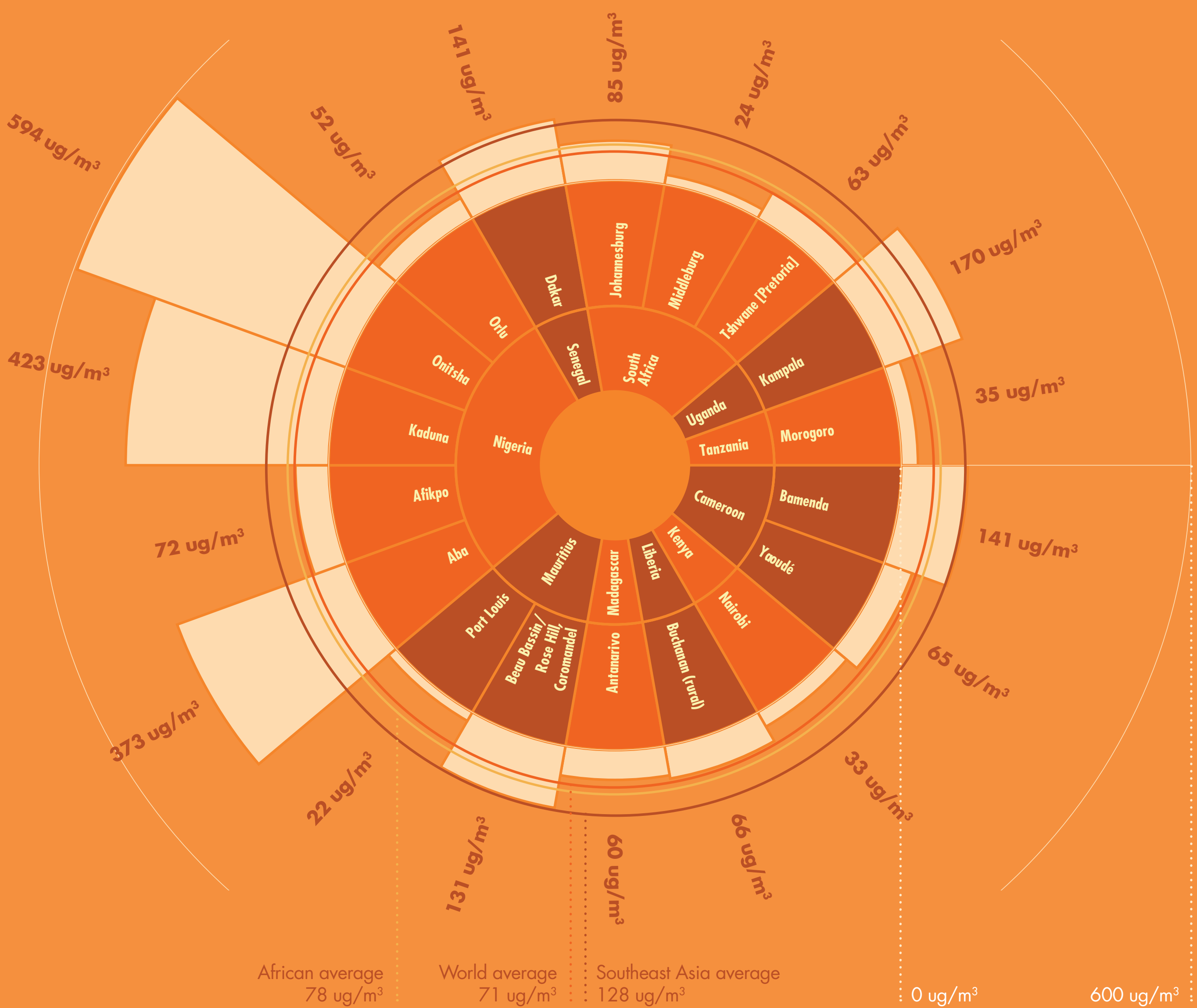
[1] "Africa Unplugged: Small-scale Solar Power Is Surging Ahead." *The Economist*. The Economist Newspaper, 29 Oct. 2016.

FIGURE 5.2.

POLLUTION IN SELECT AFRICAN CITIES

ANNUAL MEAN CONCENTRATION OF PARTICULATE MATTER

Pollution is becoming problematic in many African cities, though its prevalence varies from city to city. The following shows the annual mean concentration of particulate matter from selected African cities. In many cities the annual mean concentration of particulate matter smaller than 10 microns in diameter (PM10), a measure of pollution, is higher than the average city globally as well as similarly developing cities in Southeast Asia. Notably, population doesn't always determine pollution levels; for example, Nairobi, with 3.14 million citizens has far less particulate matter than Kampala's 1.6 million. In the below image the concentration of air pollutants are given in micrograms per cubic meter of air (ug/m^3).

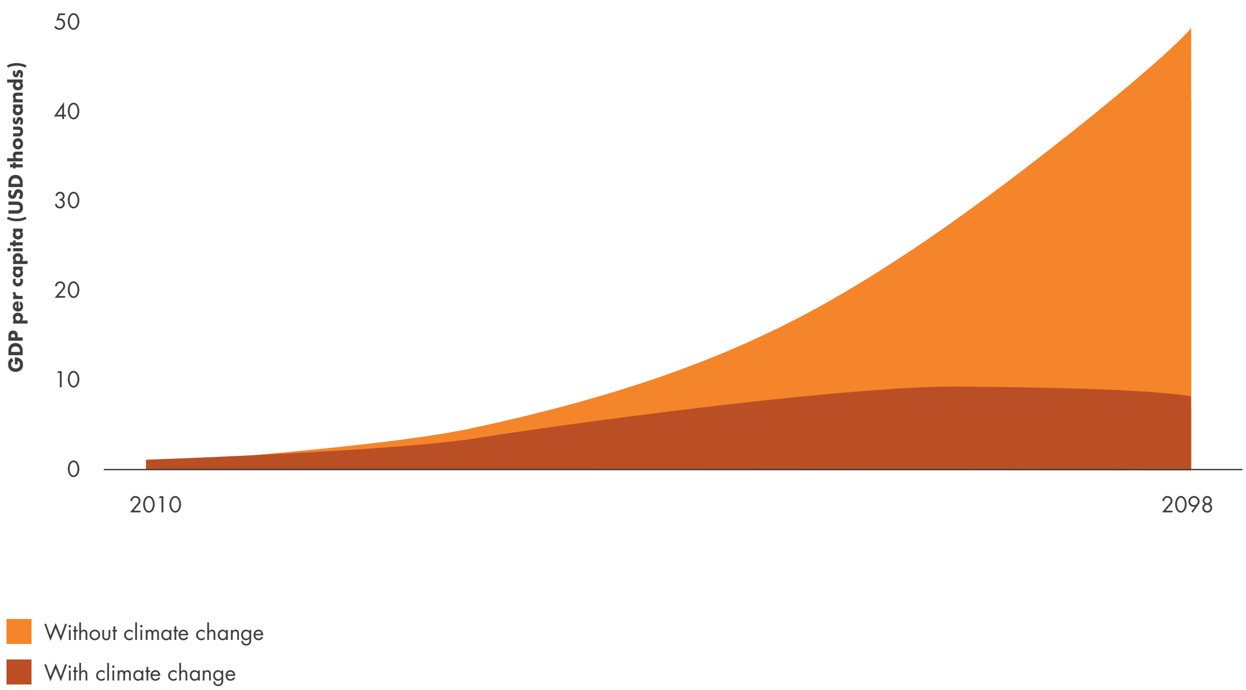


Note: The concentration of air pollutant is in micrograms per cubic meter of air (ug/m^3).

Source: African Economic Outlook 2016 (available at: https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AEO_2016_Report_Full_English.pdf) Ambient Air Pollution Database, WHO, 2014. Accessed on November 27, 2016. Primary source of data are official reporting from countries to WHO, official national/ subnational reports and national/subnational web sites containing measurements of PM10 or PM2.5 and the relevant national agencies. Furthermore, measurements reported by the following regional networks were used: Clean Air Asia for Asia, and the Air quality e-reporting database from the European Environment Agency for Europe. In the absence of data from the previous sources, data from (a) U.N. agencies, (b) development agencies and (c) articles from peer reviewed journals and (d) ground measurements compiled in the framework of the Global Burden of Disease project were used. The dates for the data are not uniform and range from 2008-2014.

FIGURE 5.3. PREDICTED EFFECTS SUB-SAHARAN AFRICAN COUNTRIES' GDP PER CAPITA (BY YEAR 2098)

Sub-Saharan Africa is predicted to bear the brunt of climate change going forward. Not only will this phenomenon create droughts, floods, famines, and other disasters, unsurprisingly, is it also predicted to greatly and negatively impact the region's economic growth. The below graph displays the dramatic difference in the region's average GDP per capita with and without climate change.



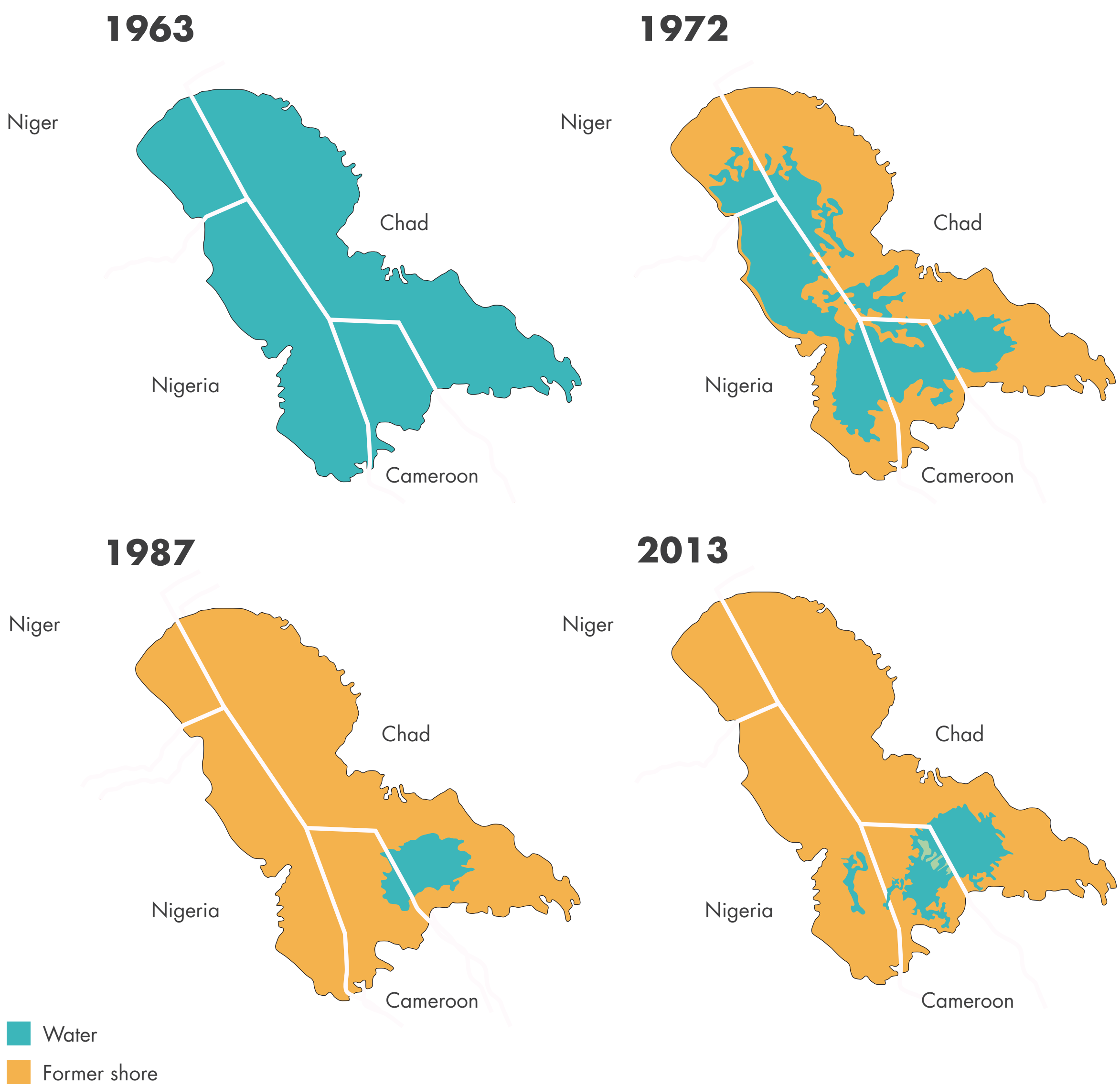
Note: Climate change as defined in these projections done by Marshall Burke, Sol Hsiang, Ted Miguel (2015) use scenarios that are "consistent with RCP8.5 'business as usual' climate change," which is defined by Riahi, K., Rao, S., Krey, V. et al. Climatic Change (2011) 109: 33. doi:10.1007/s10584-011-0149-y as a model that "combines assumptions about high population and relatively slow income growth with modest rates of technological change and energy intensity improvements, leading in the long term to high energy demand and GHG emissions in absence of climate change policies. Compared to the total set of Representative Concentration Pathways (RCPs), RCP8.5 thus corresponds to the pathway with the highest greenhouse gas emissions.

Source: Data from Marshall Burke, Sol Hsiang, Ted Miguel (2015), used in their paper "Global non-linear effect of temperature on economic production," published in Nature. Data available at: https://web.stanford.edu/~mburke/climate/data.html.

Development Goals agenda. The international response to climate change negotiated in 2015—the Paris Agreement—came into force in November 2016. The Paris Agreement aims to keep global temperature rise this century to below two degrees Celsius above pre-industrial levels—a goal looking increasingly unlikely given the greenhouse gases already in the atmosphere. Over 100 countries, accounting for over 80 percent of global greenhouse gas emissions, have ratified the agreement. Each country has developed a unilateral national commitment on what each is willing to do, which if ratified is known as a Nationally Determined Contribution (NDC).

FIGURE 5.4. LAKE CHAD, CLIMATE CHANGE, AND VULNERABLE POPULATIONS

According to the United Nations Environment Program (UNEP), the "ecological catastrophe" that is Lake Chad has decreased from approximately 25,000 km² in 1963 to less than to less than 2,500 km², threatening the resources and livelihoods of the 50 million people (likely to double by 2030) that live there. Not only that, but due to insecurity from Boko Haram, there are nearly 2.8 million refugees displaced in the Lake Chad area and an estimated 9.2 million people in need of humanitarian assistance there. According to the UNDP Africa's Disaster Risk Reduction and Climate Change team leader, climate change can exacerbate current tensions and conflict. Radicalization arises from religious, ideological, economic, and historical situations where social, employment, poverty, and governance problems, among others, have created social exclusion and mistrust. He adds, "Climate change, on the other hand, affects our natural capital (water, food, land, forest, biodiversity, etc.). Compounded with more frequent occurrence of natural disasters (drought, floods, landslides, cyclones, etc.), it leads to disruption, as livelihoods are affected and local economic opportunities lost. The inability of fragile governments to meet the needs of their population or provide protection in the face of climate change-induced hardship can trigger frustration, lead to tensions between different ethnic and religious groups within countries and to political radicalization. This could destabilize countries and even entire regions."



Source: United Nations Environment Program and DIVA-GIS in Kingsley, P. "The small African region with more refugees than all of Europe." *The Guardian*. 26 November 2016. Available at: https://www.theguardian.com/world/2016/nov/26/boko-haram-nigeria-famine-hunger-displacement-refugees-climate-change-lake-chad.

Does climate change cause conflict?

A research paper, "Warming increases the risk of civil war in Africa," presented to the U.S. National Academy of Sciences claims that temperature rises in Africa have coincided with significant increases in the likelihood of war.[1] U.N. Secretary-General Ban Ki-moon has described the conflict in Darfur as the world's first climate change conflict.[2] The assumption is that water scarcity from changed rainfall patterns resulting from climate change contributed to the conflict in Darfur. This reflects findings that the incidence of conflict is likely to be higher in years of lower precipitation. Marshall Burke and his colleagues from U.S. universities published "the first comprehensive examination of the potential impact of global climate change on armed conflict in sub-Saharan Africa" using regression analysis of historical data, and find a relationship between past internal conflict in sub-Saharan Africa and variations in temperature (but not precipitation) showing "substantial increases in conflict during warmer years." In numerical terms, a 1 percent increase in temperature leads to a 4.5 percent increase in civil war in the same year and a 0.9 percent increase in the following year. By year 2030, based on averaged data from 18 climate models, this amounts to a 54 percent increase in armed conflict incidence in the region. The researchers argue that conflict will derive from economic uncertainties resulting from temperature-related yield declines in societies heavily dependent on agriculture. Research to date found that economic welfare is the single factor most consistently associated with conflict incidence.

But not everyone accepts the causal link between climate change and conflict with much of the doubt resulting from inherent complexities of defining conflict. With many political, social, economic and environmental factors playing either a preventing or a stimulating role, applying quantitative analysis to conflict and predicting the chance of future conflicts is problematic.

It is true that impoverishment and human insecurity may arise as a result of climate change, if preventive measures are not undertaken. But there is missing evidence that global warming directly increases conflict. The temperature has risen in the last three decades, but the number of conflicts has significantly dropped since. A prominent study by scholars from the International Peace Research

It is true that impoverishment and human insecurity may arise as a result of climate change, if preventive measures are not undertaken. But there is missing evidence that global warming directly increases conflict.

[1] Burke, Marshall B., Edward Miguel, Shanker Satyanath, John A. Dykema, and David B. Lobell. 2009. "Warming increases the risk of civil war in Africa." Proceedings of the National Academy of Sciences 106 (46): 10670-20674. http://www.pnas.org/content/106/49/20670.full.pdf.

[2] Ki-moon, Ban. 2007. "A Climate Culprit In Darfur." Washington Post, June 16. http://www.washingtonpost.com/wp-dyn/content/article/2007/06/15/AR2007061501857.html.

Vesselin Popovski

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Institute, Oslo, claims that "the causal chains suggested in the literature have so far rarely been substantiated with reliable evidence."[3]

In my previous publications I argue that causes of conflict are primarily political and economic, not climatic. Warlords, who foster conflict, may exploit drought, flooding, starvation, agricultural, or natural disasters in their strategies, like they did in Somalia and Darfur. But what will drive their fight is not the rain, the temperature, or the sea level: They will always fight for goals such as power, territory, money, revenge, etc.

I question the idea that scarcity always leads to conflict. Scarcity of water or other resources might, on the opposite, encourage cooperation, as it has done in the Nile or in the Lake Chad Basin.[4] When people face climate dangers and scarcity, they may decide to fight, but similarly they may decide to co-operate. After the 2004 tsunami in Southeast Asia we witnessed more co-operation and peace in Aceh, not more conflicts.

Climate change will force people to move to less arid or drought-prone areas inhabited by other people, as predicted in the Horn of Africa. People have always moved to better livelihood places, either as a result of human or naturally induced pressures. The world has to be prepared to meet the challenge of human migration and dislocation, being those produced by civil wars or climate change. Operationally there is not much of a difference—humanitarian agencies need to offer to people on the move the same elements of survival and safety—food, shelter, medicines, trauma relief, etc. However, when addressing the root causes of human suffering, one should not confuse armed conflict and climate change. The causes of armed conflict are different from the causes of climate change and need to be addressed differently. But the consequences of the two types of disasters are similar—dislocated people—who need the same rescue.

The world has to be prepared to meet the challenge of human migration and dislocation, being those produced by civil wars or climate change.

Bradford Plumer notes that the idea that climate change will lead to widespread conflict and chaos around the world is increasingly employed as a means to convince people about climate change where other rationales have not been successful.[5] Further research is required to fully understand the relationship between climate change and conflict. The evidence will take many years to compile and the cooperation of experts across a range of disciplines is needed to reduce both conflict and climate disasters.

[3] Nordas, Ragnhild, and Nils Petter Gleditsch. 2007. "Climate change and conflict." Political Geography 26: 627-638. http://n.ereserve.fiu.edu/010034599-1.pdf.

[4] Notaras, Mark, and Obijiofor Aginam. 2009. "Sucking Dry an African Giant." Our World, Brought to you by United Nations University, March 23. http://ourworld.unu.edu/en/sucking-dry-an-african-giant.

[5] Plumer, Bradford. 2009. "Global Warring." *New Republic*, November 20. https://newrepublic.com/article/71332/global-warring.

Africa as a continent is taking leadership internationally. Coordinating for progressive action, the African Union has supported coordinated negotiating positions through the Conference of African Heads of State and Government on Climate Change (CAHOSCC). In addition, African countries have been a leading voice in the Group of 77, the collection of over 130 developing countries, at the U.N. climate change conferences. Concerns for developing countries, however, remain—particularly around finance, technology transfer, and mechanisms for equitable contributions for dealing with climate risk.

Every African country other than Libya has submitted a pledge internationally.

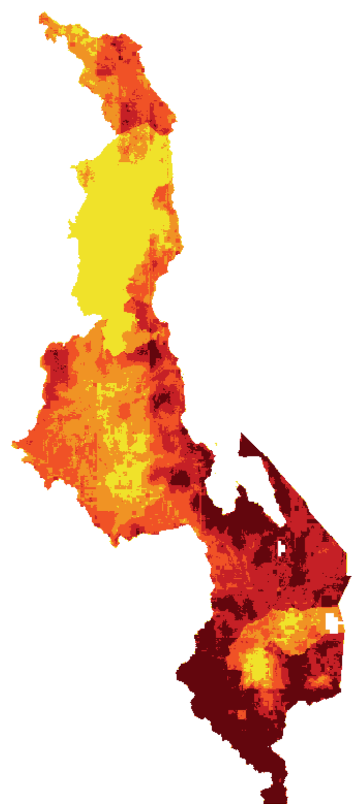
There has also been national leadership from African countries. Every African country other than Libya has submitted a pledge internationally. Some countries have been taking climate change issues seriously in national development planning and implementation across multiple sectors for some time—Ghana, Ethiopia, Morocco, and South Africa stand out—and others can learn from their experiences. For example, Ethiopia in 2011 developed a Climate Resilient Green Economy Strategy and has since set up a climate finance fund within its ministry of finance for climate compatible investment. Part of the reason for this leadership is the recognition that climate action and wider approaches to development can go hand in hand—not just for adapting to climate change but also promoting low-carbon growth. Good policies that recognize the close links between economic, social, and environmental priorities can unlock major benefits over the long run.

FIGURE 5.5. TRACKING MALAWI'S VULNERABILITY TO CLIMATE CHANGE THROUGH ADVANCED TECHNOLOGY

While climate change remains a threat around the world, Africa is uniquely placed to unfortunately bear more of the effects than many other parts of the world. Thankfully, new technologies allow for policymakers to anticipate and thus mitigate potential disasters. One such tool is the Malawi Hazards and Vulnerability Atlas, which identifies communities vulnerable to a variety of climate-related disasters such as floods, droughts, fires, and diseases exacerbated by climate change such as malaria. The "Malawi Vulnerability Index" shows that high exposure, high sensitivity, and low adaptive capacity to climate-related phenomenon creates an environment of high vulnerability in several areas in the country.

Vulnerability

- Very low
- Low
- Medium
- High
- Very high



Source: The Malawi Hazards and Vulnerability Atlas is a joint project among NASA/USAID's SERVIR-Eastern and Southern Africa initative and the Regional Centre for Mapping of Resources for Development. The atlas can be found at http://52.3.210.28/vulnerabilitytool/ and more information can be found on similar efforts can be found at http://www.servirglobal.net.

Strategies for policymakers in 2017

So in 2017, as African economies look to implement sustainable development, what should they focus on? Here are five action areas:

- **Transform agriculture and land use.** Some 60 percent of employment is still in agriculture, a sector with low levels of productivity by international standards. Low crop yields and rapid population growth have pushed the expansion of cropland to address food security challenges, but this has simultaneously contributed to deforestation and increased vulnerability to climate change. Policymakers should look to intensify agriculture to boost yields and explore climate-smart farming techniques.

- **Diversify into manufacturing and other high productivity sectors.** As countries look to higher productivity sectors such as industry and high-value services to drive growth, they should look to exploit opportunities to "green" existing production processes where it is economically beneficial. New markets domestically, regionally, and internationally could also open up, and there may be opportunities for import substitution. Strengthening infrastructure, particularly around energy and transport will be crucial.

- **Manage urbanization.** By 2050, the population of sub-Saharan Africa's cities will increase by almost 800 million people. This is nearly half of the projected rise in numbers of the urban population globally. Many cities are experiencing the effects of poor urban development and urban sprawl. Weak city governments lack resources to fund the required urban infrastructure and public services. For example, Nairobi and Dakar have only $10–15 per year per inhabitant for capital expenditures, and most cities have much less—meaning some areas will get only inadequate basic services. A shift towards more compact, connected, and coordinated urban development will assist in creating a better model for urban growth.

- **Foster a modern energy transition.** Sub-Saharan Africa's per capita energy consumption is 15 percent of that in OECD countries, and the increasing demand for energy over coming decades will be vast. This will require both grid and off-grid solutions. While fossil fuels will be part of the story, the continent has an enormously rich portfolio of clean energy assets, which are increasingly cost competitive even without considering the wider social and environmental benefits. For example, sub-Saharan Africa has about 1,100 gigawatts (GW) of solar capacity, 350 GW of hydro, and 109 GW of wind. There is also an opportunity to exploit current technologies to promote energy efficiency to reduce the required expansion of supply.

Climate action and wider approaches to development can go hand in hand—not just for adapting to climate change but also promoting low-carbon growth.

FIGURE 5.6.

WAYS IN WHICH CLIMATE CHANGE IS ALREADY AFFECTING AFRICA

AFRICA CONTAINS 7 OUT OF 10

of the countries that are considered the most threatened by climate change globally: Sierra Leone, South Sudan, Nigeria, Chad, Ethiopia, the Central African Republic, and Eritrea.

Sources: Ede Ijjasz-Vasquez Christoph Pusch. "On the road to resilience: Reducing disaster and climate risk in Africa," 22 November 2016. World Bank Blog. Available at: http://blogs.worldbank.org/africacan/on-the-road-to-resilience-reducing-disaster-and-climate-risk-in-africa.
"Africa and the challenges of climate change," African Development Bank. Available at: http://www.afdb.org/en/cop22/focus-africa/implications-for-africa.

Africa Adaptation Gap Technical Report: Climate-change impacts, adaptation challenges and costs for Africa, United Nations Environment Programme (UNEP), 2013. Available at: http://www.unep.org/pdf/AfricaAdapatationGapreport.pdf.

Africa Climate Change Impacts Map, United Nations Framework Convention on Climate Change, Available at: http://unfccc.int/essential_background/the_science/climate_change_impacts_map/items/6224.php.

State of the World's Cities 2008/9: Harmonious Cities, UN-Habitat, United Nations Human Settlements Programme, 2008.

1 ACCESS TO WATER

Scientists predict that between **90 million to 220 million people** will be exposed to increased water stress due to climate change by the year 2020. This would be devastating for a region that is already prone to water-related issues.

2 FOOD SECURITY

Agricultural production in many African countries and regions is predicted to be negatively affected by climate change. Crop yields from agriculture that is rain fed could **decrease by up to 50 percent by 2020**, and 94 percent of the continent's agriculture is already rain-dependent. This would also have severly negative impacts on food security on the continent.

3 HUMAN HEALTH

Climate change is also predicted to change infectious disease occurrence, with Africa seeing **increases in rates of malaria** and the spread of malaria occurrence to areas where it previously was not endemic. Highland areas of Ethiopia, Kenya, Rwanda, and Burundi are expected to start experiencing malaria around 2050.

4 RISING SEA LEVELS

Projections for rising sea levels vary globally, but as Africa is within a predominantly tropical area, it's expected to have higher than average levels of sea rise. In West Africa, **56 percent of GDP is generated near the coast**. In addition, there are at least **three cities with populations over 8 million** located in coastal areas of Africa. Analysts predict that rising sea levels will have significant adverse impacts on concentrations of vulnerable populations living in urban coastal areas. There are many large coastal African cities that could be very negatively affected by rising sea levels. A report by UN-Habitat listed the following cities that could be affected: Abidjan, Accra, Alexandria, Algiers, Cape Town, Casablanca, Dakar, Dar es Salaam, Djibouti, Durban, Freetown, Lagos, Libreville, Lome, Luanda, Maputo, Mombasa, Port Louis, and Tunis. Of these, Lagos is considered a megacity (over 10 million people) and Dar es Salaam is on its way.

5 COST TO DEVELOPMENT

According to the African Development Bank, climate change is already negatively affecting the GDP of African countries by **approximately 1.4 percent**. The costs of adaptation are expected to reach **3 percent of annual GDP by 2030**.

6 EXTREME WEATHER EVENTS

The Intergovernmental Panel on Climate Change predicts that extreme weather events, like floods and droughts, are going to be experienced with more frequency and intensity in Africa due to climate change. According to the World Bank, Africa has experienced more than **2,000 natural disasters** since 1970, with almost half taking place in the last decade. From 1995 to 2015, there were many extreme weather events on the continent, specifically **136 episodes of drought—77 in East Africa alone**. In 2015, South Africa also experienced its worst drought in 100 years. Niger, Mozambique, the Democratic Republic of the Congo, Madagascar, Angola, and Malawi all experienced extreme flooding. In 2016, Southern Africa experienced severe drought that caused failed crops, decreased yields, and spikes in food prices.

- **Keep working on the "basics."** A number of areas are critical whatever the future development trajectory looks like. For example, while gender inequality has fallen in Africa, it stills remains higher than elsewhere in the world. Such an outcome directly raises women's inclusion and welfare, and also benefits economic productivity—for example by breaking down barriers to education.

The other looming challenge: Financing

How will this development be financed? So far, $100 billion dollars per year by 2020 have been pledged to developing countries to support action. Much will be channeled through vehicles such as the Green Climate Fund and the African Development Bank. Ensuring that developing countries, including those in Africa, actually receive this funding is an important part of ensuring the credibility of the climate

EVENT TO WATCH

MAY 22-26, 2017

2017 Global Platform for Disaster Risk Reduction

The 2017 Global Platform for Disaster Risk Reduction will serve as a forum for more than 5,000 senior government officials and leaders from the private sector, civil society, and science to discuss the development and implementation of international instruments on disaster risk reduction. In particular, the global platform will review international progress in the implementation of the Sendai Framework for Disaster Risk Reduction, which was adopted at the Third U.N. World Conference on Disaster Risk Reduction in Japan in 2015. It will also identify strategies for countries to address vulnerability to disasters, going beyond disaster management to touch on issues including poverty, unplanned urbanization, environmental degradation, and poor risk governance. The timing of this conference is significant, especially since in 2016 (and continuing in 2017) millions of people in parts of East and Southern Africa are food insecure due to the strong, lingering effects of El Niño.

Recognizing the importance of increasing the resilience of people who experience to natural disasters, at the 2016 AU Assembly meetings, member states agreed to support an architecture for risk reduction in Africa at the national, regional, and continental levels and requested that the AU Commission submit a roadmap to establish a Center of Excellence for Disaster Risk Research, Prevention, and Management.

change negotiation process. This should look to complement the larger pools of private finance to transform Africa's societies, which will need to be an order of magnitude larger.

In sum, climate change presents a risk to African countries' long-term economic transformation, which remains a priority. However, transformation itself would build resilience to climate impacts, and there is potential that it could be low carbon.

UPHOLDING GOOD GOVERNANCE:

Democracy, elections, and local institutions under political and social uncertainty

Chapter 6

We need to learn from recent crises in West Africa:

Local governance and civil society solutions

ISSUE BRIEF FROM THE AUTHOR

MIKE JOBBINS
Director of Global Affairs and Partnerships, Search for Common Ground

In 2016 we saw major progress in addressing two crises that racked West Africa in recent years. First, cooperation between African governments, communities, civic organizations, and international partners overcame initial struggles and succeeded in ending the latest Ebola outbreak in Guinea, Liberia, and Sierra Leone. On March 29, the World Health Organization declared the crisis over. Second, while there is still much to be done, there has also been significant progress in the struggle to secure the Lake Chad Basin from the threat posed by Boko Haram. Although the threats from the group remain, the governments of the region have regained control of much of the territory previously held by Boko Haram.

As we enter 2017, African governments and their international partners should reflect on the structural challenges that led each of these crises to escalate and on what lessons should be learned for future crisis prevention and response.

Multilayered threats in a changing world

Ebola and the Boko Haram insurgency emerged from very different places but shared three similar features:

1. **Center-periphery divisions and local grievances persisted in the context of growing economies.** Both crises were complex regional threats that emerged in the border regions of relatively wealthy African states, but among populations that had deep-seated, and often well-founded, mistrust of their national governments. Ebola broke out in Guinea's Forest region, an area that is home to some of the world's richest iron mines but where minority ethnic and cultural groups have been historically marginalized and have seen few benefits from the region's vast

Both crises were driven in part by factors outside the region, whether the migration of the Ebola virus to West Africa, the impact of state collapse in Libya on weapons availability across the Sahel, or the increased activity by international extremist groups such as ISIS to whom Boko Haram has ultimately claimed allegiance.

mineral wealth. Just six months before the Ebola outbreak, the region experienced ethnic riots against outsiders migrating to the region, who locals saw as benefiting from government support. The riots quickly spread to neighboring regions of Sierra Leone and Liberia, which share similar ethnicities, cultures, and landscapes. Meanwhile, Boko Haram originated in Maiduguri, a center for learning and trade in the Lake Chad Basin, but one of the poorest regions of Nigeria. The movement's radical message gained traction in an area racked by desertification, poor infrastructure, and little hope for its youth to achieve their economic and social potential.

2. **Global connectivity drove the crises and the international response.** Proponents of international development have long held that health systems and security in Africa cannot be segmented from the concerns of the wider world. The last three years have shown it to be true. Both crises were driven in part by factors outside the region, whether the migration of the Ebola virus to West Africa, the impact of state collapse in Libya on weapons availability across the Sahel, or the increased activity by international extremist groups such as ISIS to whom Boko Haram has ultimately claimed allegiance. Even as fears of global terrorism and pandemics triggered international concerns and mobilized a significant response, these fears also reversed the economic gains of a region struggling to shake an image of poor governance and civil strife, stretching government budgets and decreasing tax revenue.

3. **A whole-of-society approach to crisis management was required, but adopted too late.** The rapid ascent of Boko Haram and the inefficiency of the initial response to Ebola demonstrated the weaknesses of how national—and then international—systems respond to crises. Ineffective communication with mistrustful communities in Ebola-affected areas led citizens to attack—and even kill—health workers. Eighteen months into the Ebola outbreak, health workers still faced attacks and blockages when they struggled to reach some communities. Abuses by Nigerian and regional militaries in responding to Boko Haram drove recruitment in the early days, and anti-terrorism operations were shrouded in secrecy. As late as mid-2015, many government and security officials working in northeast Nigeria had never held a public forum to discuss security or explain their work to civilians living in the affected areas. But despite this mistrust and the initial weaknesses in the state response, neither crisis was suitable for the kind of massive U.N.-coordinated mobilization of peacekeepers and agencies to replace fragile governments that we see in places like the Central African Republic, South Sudan, or in the eastern Democratic Republic of the Congo. It was only when government strategies shifted to working more directly with other structures in these regions, including traditional leaders, religious groups, and civil society, that the response was able to reverse the trends in the crises.

Putting social cohesion and accountability at the center of governance

As we go into 2017, African governments, civil society, and the international community should draw three key lessons about the challenges that led to these crises and the measures that ultimately turned the tide.

1. **Governments cannot do it alone, yet the role of non-state actors is often neglected and under-resourced in crisis response.** While governments play a critical role in providing basic services across the continent, services are not exclusively the responsibility of the government. These are ultimately social issues, everyone has their role to play, and government needs to collaborate with citizens and communities to ensure a whole-of-society response. Community radio stations, religious leaders, town criers and griots, and youth clubs stepped up in the fight against Ebola where pre-recorded radio recordings and "sensitization" campaigns by international agencies and ministries of health were not successful. In Nigeria and Cameroon, traditional hunters and security groups, community organizations, and civilian government officials have played a key role in improving security and responding to the threat of Boko Haram, while in Niger, local "social cohesion" committees work with governments and aid agencies to organize the reception and assistance to refugees fleeing the violence.

Civil society groups have seen success when coordinating with local groups:

"Youth leaders played a big role in the activities to prevent and fight Ebola. People are now open to talk about Ebola today thanks to their intervention. **Eight months ago, you wouldn't dare come here in your 4x4 vehicle. People would have burned it."**

- A health worker in Boffa, Guinea discussing efforts by UNICEF, Search for Common Ground, and traditional communicators to address Ebola in hard-to-reach areas.

"When Ebola came to our village, the State sent strangers to sensitize us. The people were reticent, and so we chased them away. After that, the network of Traditional Communicators (RENACOT) began to come. We know them already, and they communicate in our languages. They were able to mobilize many people."

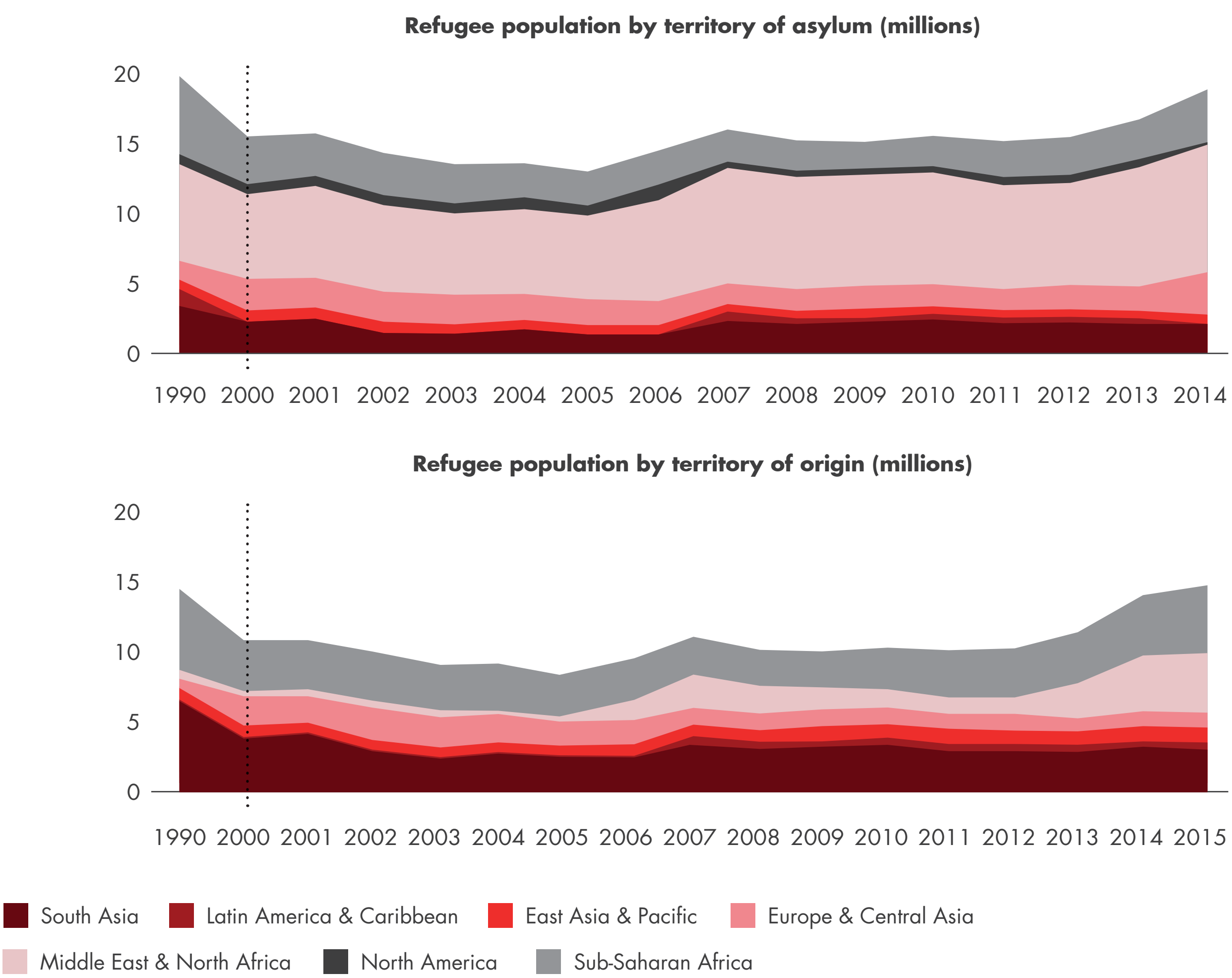
- A woman in Bosso, Guinea.

Non-state actors must play a role not only in criticizing inaction or abuses of power, but also as active partners in crafting and implementing policies to respond to new challenges.

2. **Civil society engagement is often limited to a "watchdog" role at the policy level.** Non-state actors, whether in formal associations, community-based organizations, or in other institutions (religious, traditional, academic, business), can be key interlocutors to channel citizen input to governments and contribute to policy formulation. Yet, dominant models of civil society-led action and assistance typically overemphasize the adversarial role of civil society in checking state overreach, rather than supporting forums for dialogue and joint policy formulation. While civil society groups can play a key role in generating political will for change, public needs often exceed the capacity of governments to deliver services. Non-state actors must play a role not only in criticizing inaction or abuses of power,

FIGURE 6.1. UNDERSTANDING REFUGEE FLOWS FROM AND IN AFRICA

Unfortunately, the number of global refugees has been on the rise in the past few years. Consequently, much media attention has focused on refugees from Africa and the Middle East moving towards Europe and other developed countries. Notably, though, the large majority of African refugees are in other African countries. In addition, the number of refugees hosted by Africa is much larger than the number hosted by European countries.



Source: World Bank's World Development Indicators, which uses the United Nations High Commissioner for Refugees (UNHCR), Statistical Yearbook and data files, complemented by statistics on Palestinian refugees under the mandate of the UNRWA as published on its website. Available at: databank.worldbank.org/wdi.

VIEWPOINT

Democracy in Africa in 2017

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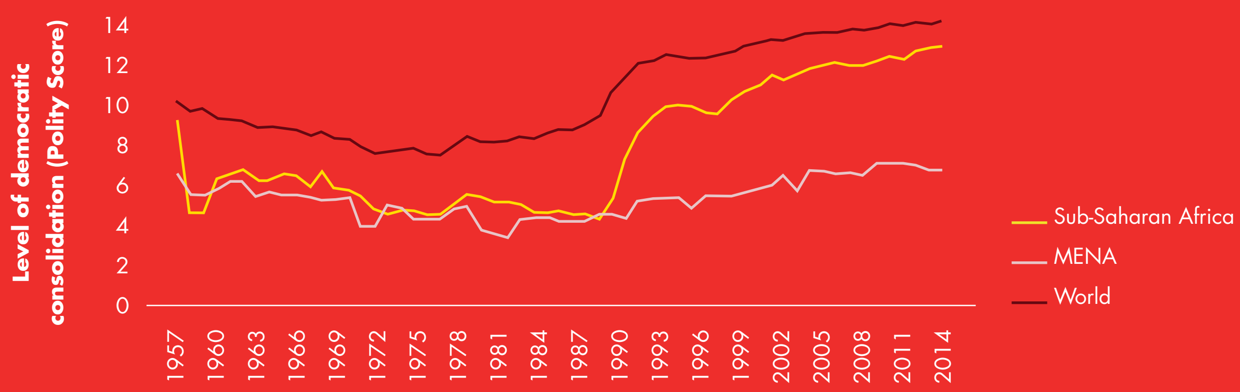
2017 will be an important year for the advancement of democratic government in Africa. Several key elections will determine whether the region experiences democratic erosion or consolidation. As is shown Figure 6.2, on average, the region has made tremendous gains over the last 25 years. And according to Freedom House, in 2016, a majority of people in sub-Saharan Africa (61 percent) lived in countries that were classified as either free (12 percent) or partly free (49 percent). Among the countries classified as not free (39 percent of the population), the majority (65 percent) have a history of civil conflict; while the remaining proportion missed the political transitions that their regional peers went through beginning in the mid-1990s (see Table 6.1). In addition, only Djibouti has become not free due to a significant democratic erosion over the last 15 years. Simply stated, the general trend so far is one of sub-Saharan Africa as a region moving in fits and starts towards greater democratic consolidation.

In 2017 the trend shown in Figure 6.2 is likely to hold. Several of the countries scheduled to hold elections will either improve their scores of democratic consolidation or hold steady. In other words, elections will continue to mirror the divergent trends in democratic consolidation in the region, but with greater gains for the regional score.[1] For example, in Rwanda and Angola, post-conflict incumbent presidents will seek to consolidate their hold onto power, having done away with term limits. But a different set of post-conflict states—Sierra Leone and Liberia—will have open contests as the current incumbent presidents will be term-limited. In Kenya and Senegal, competitive general and

FIGURE 6.2. TRENDS IN DEMOCRATIC CONSOLIDATION IN AFRICA

Progress towards democracy in sub-Saharan Africa has been on the upswing, especially since the 1990s, though the way has not been smooth.



Source: Marshall, Monty G. , & Jaggers, Keith. 2000. "Polity IV project: Political regime characteristics and transitions, 1800-1999," Unpublished manuscript, University of Maryland, Center for International Development and Conflict Management.

[1] K. Ochieng' Opalo, "African Elections: Two Divergent Trends," Journal of Democracy, Vol. 23, No. 3 pp. 80-93 (2012).

legislative elections, respectively, will likely lead to greater levels of intra-elite political accountability and democratic consolidation.

Due to the high stakes involved, there is the likelihood that elections in Kenya, Liberia, and Sierra Leone will be marred by violence. In Kenya, the key hotspots will likely be at the sub-national level—especially in the gubernatorial elections. Liberia and Sierra Leone are both weak post-conflict states that will face the normal challenges of holding elections under weakly institutionalized systems of electoral management. Lastly, in Chad, the Gambia, and the Republic of the Congo, elections will serve the purpose of consolidating autocratic rule.

In the countries not holding elections in 2017, government effectiveness in providing public goods and services and horizontal accountability (through legislatures and courts) will be crucial for continued democratic consolidation. Government failure may precipitate protests that will likely be met by state repression, thereby eroding the values of accountable democratic government. Yet another challenge to democracy in 2017 will be insecurity (either due to urban crime, terror attacks, or insurgencies) and the extent to which elected governments in the region will be willing to use insecurity as a reason for curtailing freedoms of speech and movement in the region. In this regard, the regional forecast of 4.5 percent growth (by the African Development Bank)[2] suggests that anticipated positive economic outcomes may obviate the need among the more autocratic African governments to revert to coercion, as opposed to good performance, as a way of staying in office.

TABLE 6.1. FREEDOM HOUSE RANKINGS IN 2016

Democracy, rule of law, and respect for freedom continue to deepen in Africa: A majority of people in sub-Saharan Africa (61 percent) live in countries that are classified as either free or partly free.

Free	Partly Free	Not Free
Benin	Burkina Faso	Angola*
Botswana	Côte d'Ivoire	Burundi
Cabo Verde	Guinea	Cameroon
Ghana	Guinea-Bissau*	Chad*
Namibia	Kenya*	Central African Republic
Mauritius	Lesotho	Democratic Republic of the Congo
São Tomé and Príncipe	Liberia*	Djibouti
Senegal*	Madagascar	Equatorial Guinea
Seychelles	Malawi	Ethiopia
South Africa	Mali	Gabon*
	Mozambique	The Gambia*
	Niger	Republic of the Congo*
	Nigeria	Mauritania
	Sierra Leone*	Rwanda*
	Somaliland*	Somalia
	Tanzania	South Sudan
	Zambia	Sudan
	Zimbabwe	Swaziland
		Uganda

Note: Asterisks indicate countries that will hold national elections in 2017. Angola, Kenya, Liberia, Sierra Leone, and Somaliland will hold general elections. Chad, the Republic of the Congo, the Gambia, Gabon, and Senegal will hold legislative elections. Rwanda will hold a presidential election. A number of countries—Guinea, Niger, Swaziland, and Togo—will hold local elections. These data are from the Electoral Institute for Sustainable Democracy in Africa, EISA.

Source: Freedom House rankings are available at: https://freedomhouse.org/regions/sub-saharan-africa. Election data are from the Electoral Institute for Sustainable Democracy in Africa, EISA, as of January 3, 2017. Available at: https://www.eisa.org.za/index.php/2017-african-election-calendar/.

[2] African Development Bank. African Economic Outlook. 2016.

https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AEO_2016_Report_Full_English.pdf but also as active partners in crafting and implementing policies to respond to new challenges. In Nigeria, we are supporting "Community Security Architecture" for ordinary citizens to identify security risks, take local action, and jointly approach government agencies where necessary.

3. **All actors must reinforce a long-term emphasis on social accountability.** Both crises underscored the legacy of deep distrust between state actors and the communities that they serve. The legacy of colonial and authoritarian rule deeply undermined the role of government agencies and personnel as public servants, particularly in remote and historically marginalized areas. Measures such as the Open Government Partnership that increase fiscal transparency and create opportunities for citizen input into public policy are welcome. However, inculcating a culture of accountability within the civil service and security structures also requires fundamental shifts in the way that institutions operate, more active communication with citizens, and engaging with regions and communities that do not trust their governments. Initiatives, such as the World Bank-convened Global Partnership for Social Accountability, which link governments and civil society actors, are promising in their focus on the strengthening the practice of socially accountable, inclusive governance among ordinary citizens.

These two recent crises have shown that even in relatively strong states like Nigeria and Guinea, the relationship of the state with communities living at the periphery can be a threat to national, regional, and international stability.

These two recent crises have shown that even in relatively strong states like Nigeria and Guinea, the relationship of the state with communities living at the periphery can be a threat to national, regional, and international stability. As we enter 2017, African governments, aid agencies, multilateral institutions, global civil society, and the broader community of people who care about ensuring effective and inclusive democratic governance should place social cohesion at the center of their programming and policies.

Africa, Trump, infrastructure

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Global Economy and Development,
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The Trump policy towards Africa will not be clear for several months at least, if we are to judge by the time it has taken past administrations to put their teams in place and articulate their objectives. While it is apparent that the president-elect has had very little contact with the continent, the same was true for Presidents Clinton and Bush. Similarly, President Obama—who later emerged as a champion of African-U.S. private sector investment—did not develop a strategy for the continent until the end of his first term.

So, what might lay ahead for Africa?

One of the most interesting initiatives to appear in the transition is the formation of Trump's President's Strategic and Policy Forum. The purpose of this group is to provide the president with private sector expertise on creating jobs and accelerating economic growth.

The group is made up of 16 CEOs and, notably, many lead companies that are active in Africa. They include: Blackstone, General Motors, Wal-Mart, Boeing, IBM, Ernst & Young, and GE. The forum's first meeting is planned for February at the White House.

Clearly the focus of the forum will be on the private sector's role in rebuilding America's infrastructure, which Trump announced as a priority on election night. This goal has great relevance and potential for Africa. For instance, one proposal would be to create an economic subcommittee of the forum to look at infrastructure opportunities for American companies in Africa that would utilize American-made components. Enhancing the U.S. role in addressing Africa's infrastructure deficit with American machinery and other products would increase U.S. exports to the region. In 2015, the export of U.S. goods to Africa was valued at $18 billion, which supports an estimated 121,000 jobs in the U.S., according to the Commerce Department.

To facilitate its work, an African subcommittee of the forum could coordinate its work with the President's Advisory Committee on Doing Business in Africa (PAC-DBIA), which reports to the president through the secretary of commerce. Over the course of three meetings, the PAC-DBIA has made a number of recommendations related to enhancing the role of the Unites States in developing Africa's infrastructure. These recommendations include creating a U.S.-Africa Infrastructure Center and prioritizing U.S. companies and products in building out Africa's transportation, energy, and health infrastructure.

The last three presidents have left positive legacies related to Africa. This includes President Clinton's signing into law of the African Growth and Opportunity Act; President Bush's support for the President's Emergency Program for AIDS Relief and the Millennium Challenge Corporation; and Power Africa, the Young African Leaders Initiative, and the U.S.-Africa Leaders Summit of the Obama administration. A strategy that incentivizes American companies in such a way that it increases U.S. exports and jobs to reduce Africa's infrastructure deficit would contribute to a legacy in Africa for President-elect Trump on par with his predecessors, if not more so.

To make this happen, African leaders should engage the Trump administration actively and with an open mind. They should also endeavor to point out ways in which a substantial infrastructure program could benefit Americans as much it would those on the African continent.

Election spotlights:

Kenya and Rwanda

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General overview

Despite a few setbacks, many post-election transitions in 2015-2016 (e.g., Nigeria, Tanzania, Burkina Faso, and Zambia) have been generally peaceful. These peaceful post-election regime changes augur well for the deepening and institutionalization of democracy in the continent.

However, that was not true everywhere: In Burundi, incumbent President Pierre Nkurunziza sought and obtained a controversial constitutional amendment that paved the way for him to win another term in office, plunging the country into a political, economic, and humanitarian quagmire. Gabon's 2016 closely fought (and somewhat suspicious) presidential election in which the opposition candidate lost by only 6,000 votes produced massive post-election violence. Although the riots have abated considerably, the opposition parties have yet to enter into negotiations with the government. Sudan's 2015 election was boycotted by a significant part of the opposition and was highly criticized by the international community on claims of an environment not conducive to fair, free, and credible elections. Now the Gambia is struggling with a president that conceded the election before rejecting the election results a week later.

In 2017, two elections—Rwanda and Kenya—are likely to have significant impact on peace and security, governance, and economic growth and development in this important region.

Kenya

August 8, 2017

Why are we talking about Kenya?

Kenya is an important partner of the United States and other countries that are fighting transnational terrorism, especially al-Shabaab. Kenya is also a member of the Intergovernmental Authority on Development (IGAD) and has played a critical role in IGAD's efforts to improve security and peace in South Sudan. Additionally, Kenya is a leading center for

FIGURE 6.3.

ELECTIONS IN 2017

2017
Libya
General

03/27/2017
Somaliland
General

04/12/2017
The Gambia
Legislative

2017
Chad
Legislative

07/2017
Congo, Rep.
Legislative

08/08/2017
Kenya
General

10/10/2017
Liberia
General

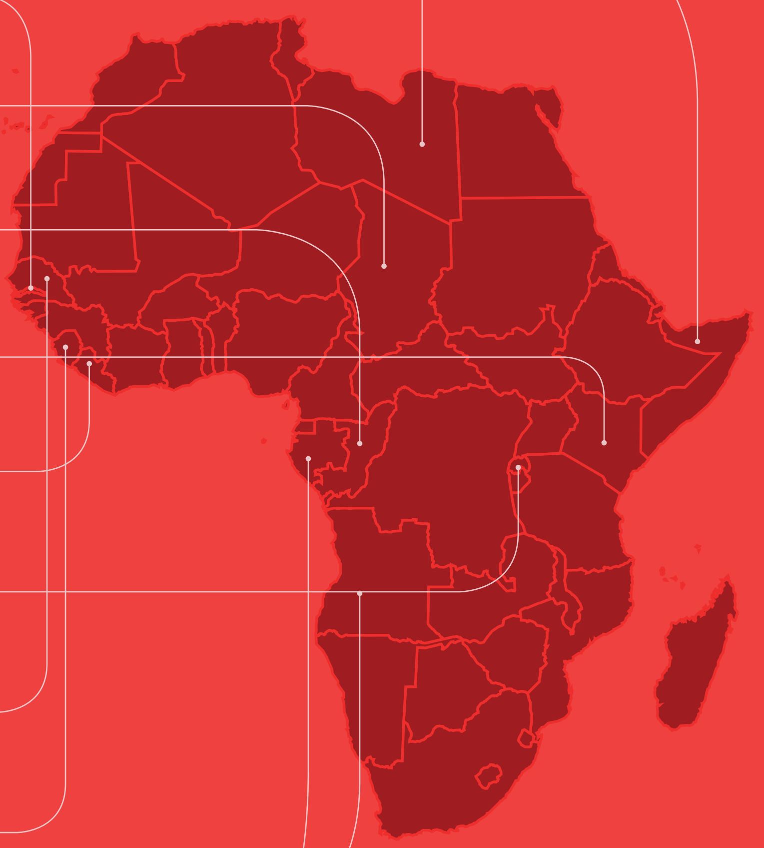
08/2017
Rwanda
Presidential

07/2017
Senegal
Legislative

11/2017
Sierra Leone
General

08/2017
Angola
General

7/29/2017
Gabon
Legislative



General Presidential Legislative

Source: Data are from the Electoral Institute for Sustainable Democracy in Africa, EISA, as of January 3, 2017. Available at: https://www.eisa.org.za/index.php/2017-african-election-calendar/.

industrial production and is an economic powerhouse for the East Africa region. Nairobi is the regional headquarters for many transnational corporations and international organizations, and the country has a strong influence on its less stable or more burdened neighbors.

However, Kenya is also struggling to maintain domestic stability because of the uncertainties created by extra-judicial killings, feelings of political marginalization by some ethnic groups, hopelessness among many unemployed youth, and a fear of a repeat of the ethnic-induced violence that gripped the country shortly after the 2007 presidential election.[1]

Although the 2013 presidential election was peaceful, many Kenyans remain without hope, distrust the government, and feel marginalized.

After the extreme ethnic-induced violence of the 2007 election, the International Criminal Court charged now-President Uhuru Kenyatta with crimes against humanity, but has since dropped them. Although the 2013 presidential election was peaceful, many Kenyans remain without hope,[2] distrust the government, and feel marginalized by the policies of Kenyatta's Jubilee government. In addition, many feel that the Kenyatta administration has performed quite poorly in reducing corruption, safeguarding the rule of law, fighting terrorism and improving domestic security, and eradicating poverty, especially among urban youth, rural inhabitants, and other historically marginalized groups. Political rivals, such as Raila Odinga, leader of the opposition Orange Democratic Movement and the Coalition for Reforms and Democracy (CORD),[3] have stated that the Kenyatta government has not been able to deal effectively with the conditions that produced violence after the 2007 election.

As 2017 approaches, Odinga, the most viable challenger in 2013, has once again indicated his interest to contest for the Kenyan presidency. He has publicly stated that a win for him and the CORD will ensure that two ethnic groups, the Kikuyu and Kalenjin, do not continue to monopolize political power in the country. Given that Odinga's presidential losses in 2007 and 2013 have been to ethnic Kikuyus or a coalition dominated by the latter, this argument has an audience.

Odinga, who is 71 years old, has mostly dismissed calls to step aside to make way for a younger and more vibrant candidate. Nevertheless, both Kalonzo Musyoka and Moses Wetang'ula—leaders of major parties within CORD—have announced that they too plan to independently seek the presidency in 2017. Following rumors that the CORD coalition is in the brink of collapse, Odinga has insisted that when the time comes the coalition would unite behind one candidate.[4]

[1] Gatehouse, Gabriel. "Kenya Violence: Survivors' Tales." BBC News. BBC, 10 Sept. 2013. http://www.bbc.com/news/world-africa-24021833.

[2] Alingo, Peter, Hawa Noor. "Signs of Violence Ahead of Kenya's 2017 Elections." ISS Africa. Institute for Security Studies, 17 June 2016. https://www.issafrica.org/iss-today/signs-of-violence-ahead-of-kenyas-2017-elections.

[3] The CORD is a coalition of political parties created to oppose the Jubilee Alliance during the 2013 elections. It includes the Orange Democratic Movement, Ford Kenya, and Wiper Democratic Movement-Kenya.

[4] Some observers believe that the strategy by the three CORD principals to run independently for the presidency in 2017 may be a ploy to prevent Uhuru, the presumptive Jubilee candidate from capturing the 50 + 1 votes (i.e., 50% of total votes cast + 1 vote and 25% in half of the country's 47 counties) needed to avoid a runoff. The hope for this strategy, of course, is that after the first round, Raila would get a chance to go head-to-head with Uhuru and, with the support of the other two CORD principals, he would be able to emerge as Kenya's 5th president.

FIGURE 6.4. THE INTERNATIONAL CRIMINAL COURT AND AFRICA: INDICTMENTS AND WITHDRAWALS

In 2016, three sub-Saharan African countries—Burundi, the Gambia, and South Africa—announced their intention to withdraw from the International Criminal Court. The year 2017 could see more withdrawals too, as other countries, such as Kenya, Namibia, and Uganda have discussed leaving the Rome Statute. African leaders cite not only a bias in the ICC, but also paternalism and even neo-colonialism: The majority of its investigations and indictments have been in African countries. In fact, only two countries outside of sub-Saharan Africa—Georgia and Libya—have faced ICC investigations or charges. Given the sensitivites around the crimes examined by the ICC as well as recent civil wars on the continent, the topic is certainly a controversial one.

	Number of countries that are Rome Statute Signatories*	Countries that have had citizens indicted or investigated by the ICC**	Countries attempting to withdraw***
SUB-SAHARAN AFRICA	**40** Equatorial Guinea, Ethiopia, Mauritania, Rwanda, Somalia, South Sudan, Swaziland, and Togo are *not* signatories.	**7** These include the Central African Republic, Côte d'Ivoire, Democratic Republic of the Congo, Kenya, Mali, Sudan,**** and Uganda.	**3** These include Burundi, the Gambia, and South Africa.
REST OF THE WORLD	**114**	**2** These include Georgia and Libya.	**0**

*Including those signatories pending approval/acceptance/accession/ratification. Not included are Israel, Russia, and the United States who originally signed but have expressed their desire to not pursue approval/acceptance/accession/ratification.

**This does not include situations under preliminary examination. According to the ICC, before an official investigation can be launched, "the Office of the Prosecutor must determine whether there is sufficient evidence of crimes of sufficient gravity falling within the ICC's jurisdiction, whether there are genuine national proceedings, and whether opening an investigation would serve the interests of justice and of the victims. If the requirements are not met for initiating an investigation, or if the situation or crimes are not under the ICC's jurisdiction, the ICC's Prosecution cannot investigate." Available at: https://www.icc-cpi.int/about/how-the-court-works/Pages/default.aspx#legalProcess.

***Includes those countries that ratified the statute but have given notice to withdraw.

****According to the United Nations Treaty Collection: "In a communication received on 26 August 2008, the Government of Sudan informed the Secretary-General of the following: '....., Sudan does not intend to become a party to the Rome Statute. Accordingly, Sudan has no legal obligation arising from its signature on 8 September 2000.'"

Source: United Nations Treaty Collection Online. Available at: https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XVIII-10&chapter=18&clang=_en.

What makes the 2017 election important?

There is fear that a win by Kenyatta's Jubilee Alliance would be interpreted as further political marginalization of the Luo and other ethnic groups. As is the case in many other African countries, the politicization of ethnicity does not augur well for the institutionalization of democracy and the rule of law in Kenya.

At the same time, many Kenyans remain concerned about government impunity like extra-judicial killings and high levels of corruption. For example, in early 2016, human rights lawyer Willie Kimani together with his client and their driver were brutally tortured and murdered. The client had filed a complaint against a police officer over corruption.

Then again, both sides have made moves towards cooperation. In response to increased riots and a worsening security situation, the government agreed to engage in dialogue with opposition principals—mainly the CORD. And in response to intense criticism from Odinga and his supporters about corruption and election rigging, the entire board of the country's Independent Electoral and Boundaries Commission resigned and has been replaced by members from both sides—an action that has helped legitimize the government's efforts to bring transparency[5] to the electoral process and has improved the CORD's position as the main opposition.

What might happen in 2017?

As the incumbent government, Kenyatta and the Jubilee Alliance must show Kenyans that they have successfully delivered on at least some of the promises that they made when they came into power in 2013 and that, if given the opportunity in 2017 to govern again, they would significantly improve the security situation in the country, eliminate extra-judicial killings and other forms of government impunity, eradicate corruption, deal with the frustrations of the many citizens who are forced by circumstances to live a life of hopelessness and poverty in dilapidated urban enclaves and rural villages, significantly improve economic conditions, including creating jobs, especially for urban youth, and produce a viable long-term plan to deal fully and effectively with the factors (e.g., a feeling of marginalization by some ethnic groups) that led to violence in the aftermath of the 2007 elections. The Kenyatta government must, of course, also convince Kenyans of how it plans to deal with continuing security threats from al-Shabaab.

[5] Ngila, Diana. "IBEC chairman and commissioners resign." Daily Nation. 6 Oct 2016. http://www.nation.co.ke/news/1056-3406560-5j3ynkz/.

If the CORD is to win the 2017 election, it and its flagbearer must convince the majority of Kenyans, not just their ethnic-based supporters, that they can do a better job of solving the nation's problems than the Jubilee Alliance. As part of that strategy, they must convince Kenyans that they are not simply an ethnic-based coalition, designed to capture power and maximize the interests of their ethnic groups, but that they are a national party determined to promote democracy and the rule of law in the country and provide all citizens, regardless of their ethnic background, viable opportunities for self-actualization.

Rwanda

August 2017

Why are we talking about Rwanda?

Rwanda is a key player in political stability and economic growth and development in the African Great Lakes Region.

Rwanda's 2017 election is worth watching for many reasons: Rwanda is a key player in political stability and economic growth and development in the African Great Lakes Region. President Paul Kagame has improved stability and economic growth in post-genocide Rwanda and many believe that another term in office will allow him to move the country, and perhaps the region, to middle-income status and stable democracy. Then again, many international organizations, including Human Rights Watch, believe that Rwanda under Kagame has evolved into a one-party state. There is a growing fear that Kagame, despite his economic achievements, has become increasingly intolerant of political opposition and has used "genocide prevention" as a strategy to limit competitive politics in the country.

Cognizant of the ethnic-induced genocide, the Rwandan constitution[6] specifically prohibits the formation of political organizations based on "race, ethnic group, tribe, clan, region, sex, religion or any other division which may give rise to discrimination." Many civil and human rights groups have argued[7] that this constitutional clause, and other laws enacted by the country's parliament, have granted the government enormous powers to stunt political development.

There is a growing fear that Kagame, despite his economic achievements, has become increasingly intolerant of political opposition.

In the aftermath of the 1994 Rwandan genocide, in which as much as 20 percent of the population—Tutsis and their Hutu sympathizers—were massacred, the Tutsi-backed Rwandan Patriotic Front (RPF), which had ended the genocide, transformed into the ruling political party. Kagame first served as vice president and minister of defense, then became president in 2000. In 2003, the country approved a new constitution and Kagame was elected president. Then in 2010 he was re-elected

[6] "The Constitution of the Republic of Rwanda" 26 May 2003. https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/64236/90478/F238686952/RWA64236.pdf.

[7] Human Rights Watch. "Rwanda: Human Rights Developments." Hrw.org. Human Rights Watch, https://www.hrw.org/legacy/wr2k3/africa9.html.

for a second seven-year term in an election that was peaceful, although somewhat criticized due to the government's suppression of opposition political parties. Kagame was expected to step down after his mandate ends in 2017; however, in December 2015, Rwandans approved a constitutional amendment allowing him to potentially remain in office until 2034.[8] Officially, the president has stated that the idea of the constitutional amendment was actually a grassroots initiative, with a petition said to have been signed by 60 percent of voters. Many critics, however, argue that it is difficult to determine whether the petition actually represents the voters' free will or not.

Who are the major players?

Today, Rwanda is one of the safest countries on the continent and has an economy that is relatively healthy and continues to grow.

Kagame has brought a lot of social and economic success to his country, including implementing free basic education, slashing maternal and child mortality by more than 50 percent, and improving opportunities for entrepreneurial activities, among many other accomplishments. Today, Rwanda is one of the safest countries on the continent and has an economy that is relatively healthy and continues to grow.[9] Some Rwandans argue that a third term would allow Kagame to consolidate those gains and deliver even more improvements. Many citizens believe he is the only person capable of maintaining peace within the country. Even opposition leaders acknowledge that Kagame and the RPF are very popular.[10]

These successes have come at a cost, though. Opponents fear that a third term for Kagame's suffocating and military-style approach to governance could derail the maturation of the country's embryonic democracy.

Many observers argue that the RPF has created a de facto one-party state. Officially, Rwanda has a lot of opposition political parties, though most are rarely critical of the RPF. Frank Habineza, founder and chairman of the Democratic Green Party (DGP), is the country's main opposition leader. The Greens have indicated that they want to become a genuine opposition party, capable of effectively challenging the government on public policies and eventually competing against the incumbent regime.

The DGP began facing many problems immediately after its founding in 2009, the most important being that it was unable to receive official recognition as a legitimate political organization. In 2013, the party was finally granted recognition,[11] but it continued to struggle financially

[8] "Paul Kagame's third term: Rwanda referendum on 18 December", BBC, BBC, Dec 2015. http://www.bbc.com/news/world-africa-3504988 and McVeigh, Tracy "Rwanda Votes to Give President Paul Kagame Right to Rule until 2034" *The Guardian*, Guardian News and Media, Dec. 2015 https://www.theguardian.com/world/2015/dec/20/rwanda-vote-gives-president-paul-kagame-extended-powers.

[9] Rosen, Jonathan. "Ahead of vote on term limits, Rwandans worry about presidential power grab", al-Jazeera America, al-Jazeera, Dec. 2015. http://america.aljazeera.com/articles/2015/12/16/paul-kagame-rwandas-president-for-life.html.

[10] Johannsen, Jesko. "Fighting for Recognition: Political Opposition in Rwanda." DW.COM. Deutsche Welle, 09 Sept. 2015. http://www.dw.com/en/fighting-for-recognition-political-opposition-in-rwanda/a-18703252.

[11] Ibid.

Opponents fear that a third term for Kagame's suffocating and military-style approach to governance could derail the maturation of the country's embryonic democracy.

and found that the police often interrupted the party's assemblies. In addition, several high-profile DPG leaders have disappeared[12] or been murdered[13] in the past few years.

The Greens have made an effort to function as an effective opposition to the government. In fact, the party brought action against the third-term constitutional amendment before the Rwandan Supreme Court. While the court rejected the argument, Habineza maintains that either the people were misled or there was simple fraud in obtaining the alleged 3.7 million signatures requesting that the constitution be amended.

What might happen in 2017?

Should Kagame choose to run in 2017, he would most likely win by a significant majority. Nevertheless, this could prove disastrous to the democratic legacy that he and his party have built since 1994.

Although the United States has been a strong supporter of Kagame, especially with respect to the president's ability to bring peace and economic growth to the country, the U.S. government has not supported efforts by Kagame to extend his term in office. U.S. officials, instead, are asking him to step aside. What happens between now and the August 2017 election could set an example for other countries in the region. Indeed, some observers believe that keeping Kagame in office could produce violence in the future, especially if it becomes evident to opponents that the new law would relegate them to the political periphery until at least 2034. Some critics even fear that Kagame's victory could provoke rivals to forcefully extricate him, an action which could lead to civil war.[14] Of course, it is not yet too late—despite the change in the constitution, the president can still step aside and allow a younger group of individuals to contest the presidency and lead the country. He can then retire to serve as an elder statesman.

The deepening and institutionalization of democracy in a country begins with civil servants and politicians. If they are not willing to respect the laws but are instead eager to either subvert or change them in order to maximize their personal interests, they should not expect ordinary citizens to adhere to the rule of law. The practice of constitutionalism can and does interfere with the personal ambitions of not just political elites, but of virtually all citizens. But that is the price that citizens must pay for all ethnocultural groups to live together peacefully with equal opportunity for self-actualization.

[12] Rwanda Today. "Rwandan Family Says Green Party Official Missing after Phone Call." *The East African*, 11 July 2014. http://www.theeastafrican.co.ke/Rwanda/News/Rwandan-family-says-Green-Party-official-missing/1433218-2381092-93laqa/index.html.

[13] Rice, Xan. "Rwandan Opposition Leader Found Dead." *The Guardian*. Guardian News and Media, 14 July 2010. https://www.theguardian.com/world/2010/jul/14/rwanda-opposition-politician-found-dead.

[14] Rosen, Jonathan W. "Ahead of Vote on Term Limits, Rwandans Worry about Presidential Power Grab." Ahead of Vote on Term Limits, Rwandans Worry about Presidential Power Grab. Al Jazeera America, 16 Dec. 2015. http://america.aljazeera.com/articles/2015/12/16/paul-kagame-rwandas-president-for-life.html.

JANUARY 2017

African Union Elective Summit

The African Union (AU) held elections on July 18, 2016 to determine the next African Union Commission chairperson, leader of the regional body's secretariat; however, seven rounds of voting failed to produce a winner from among the three main candidates. When none of the contenders garnered the requisite two-thirds majority of member states' votes to win—owing to numerous abstentions—the summit opted to postpone the elections to January 2017 and allow the commission to continue under the leadership of the chair Dr. Nkosazana Dlamini-Zuma until then. According to the AU assembly chair, President Idriss Déby of Chad, the 2017 election will open up the contest to new candidates.

2017

The Fifth European Union-Africa Summit

Following the fourth and most recent April 2014 EU-Africa Summit in Brussels, the fifth EU-Africa Summit will take place in Africa and convene European and African heads of states and governments to develop a new roadmap to guide the Africa-EU partnership from 2017 to 2020. The last roadmap (2014-2017) focused on joint priorities related to peace and security, democracy, good governance, human rights, human development, sustainable and inclusive development, continental integration, and global and emerging issues. Several prominent trends are expected to shape the dialogue in 2017, such as Africa's changing demographics and challenges to sustainable development, migration flows from Africa to Europe, and Europe's internal security and economic crises.

JUNE AND JULY 7-8, 2017

G-20 "Partnership with Africa" and Leaders' Summit

Germany's G-20 presidency will last from December 1, 2016 to November 2017 and will embody the motto "shaping an interconnected world." The three pillars of the German G-20 Agenda are: 1) ensuring stability, 2) improving viability for the future, and 3) accepting responsibility. The third pillar specifically relates to the G-20's responsibility to promote sustainable development in Africa. In particular, during the German presidency, the G-20 will aim to implement steps to improve standards of living, establish economic environments conducive to investment, and boost infrastructure development in Africa. Additionally, in June 2017, a G-20 conference entitled "Partnership with Africa" will be held in Berlin. Other global and African issues that the G-20 will discuss during these meetings include migration and refugee flows, the global fight against terrorism, and corruption and illicit financial flows.

Who we are

The Africa Growth Initiative (AGI) at Brookings conducts high-quality, independent research, which helps establish long-term strategies for economic growth and strong policies for development in Africa.

Our work & approach

Our interdisciplinary team of experts draws on the core strengths of Brookings—authoritative and nonpartisan research, a depth of practical expertise, and unparalleled convening power—to develop effective solutions that maintain the momentum and broaden the benefits of growth in Africa. AGI distinguishes itself by ensuring that the analysis it produces is:

- Quantitative: AGI uses data analysis and empirical research to inform its findings, providing an "economic lens" that is applicable to all discussions on Africa and can help pull together disparate narratives on security, humanitarian crises, geopolitics, and extractive industries.

- High Quality: AGI delivers research conducted with the most rigorous academic discipline and subjected to thorough peer review.

- Collaborative: AGI partners with experts throughout Brookings and the academic community, as well as with stakeholders around the world to draw on perspectives from business, government, and practitioners in the field.

Maintain the momentum

Continued economic growth in Africa can help improve efforts to address poverty and inequality. AGI is committed to strengthening and deepening the drivers of growth and opportunity, focusing on:

- More and better finance for development
- Big risks to Africa's growth
- Structural transformation
- Private sector support for official development objectives and improved public-private partnerships
- Trade and regional integration
- Institutions, economic governance, and transparency

Broaden the benefits

Strong economic development presents a powerful opportunity to improve the lives of people in Africa. AGI is committed to identifying practical ways to enable a more inclusive growth, with an emphasis on:

- Fragile, low-income, and conflict-affected states
- Infrastructure and cities
- Jobs and youth entrepreneurship
- Gender and economic development
- Transfer of skills, technology, and knowledge

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