Growing rapidly—Transforming slowly

Preview of the 2013 African Transformation Report
The African Center for Economic Transformation is an economic policy institute supporting Africa’s long-term growth through transformation. Our vision is that by 2025 all African countries will drive their own growth and transformation agendas, led by the private sector and supported by capable states with good policies and strong institutions. We work toward that vision through our analysis, advice, and advocacy. Please visit www.acetforafrica.org.

The 2013 African Transformation Report, set for release in October, draws on our comprehensive research program of country studies, sector studies, and thematic studies. See page 21 for a list of studies completed and in progress.

This preview highlights the structure and contents of the full report.
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Preview of the 2013 African Transformation Report
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Transforming African economies for good jobs and broad prosperity

The premise of the 2013 African Transformation Report, coming in October, is that economic growth alone will not sustain development on the continent. As this preview of the full report makes clear, economic transformation is Growth + DEPTH. It is growth through the structural shifts from traditional agriculture to modern agriculture, manufacturing, and high-value services. This is broadly acknowledged. But there’s more. It is growth through expanding the technical capabilities of people and institutions. It is growth through upgrading the technologies that people use on farms, in firms, and at government offices. It is growth through becoming internationally competitive and active participants in global value chains. And it is growth through spreading prosperity by supporting productive work and boosting consumption.

Thus it is that a transforming economy—more than just a growing economy—can weather the ups and downs of global product and service markets, the alternating liquidity and illiquidity of local and global financial markets, and the vicissitudes of commodity and construction booms. Thus it is that a Ghana can become a South Korea, a Senegal a Thailand, and a Kenya a Malaysia.

Growth + DEPTH

- Diversification
- Export competitiveness
- Productivity
- Technology
- Human well-being
Growing rapidly

Africa’s economic growth spurt of the last decade or so is well documented. Six of the 10 fastest growing economies in the 2000s were in Africa: Angola at 11.1% a year, Niger 8.9, Ethiopia 8.4, Chad 7.9, Mozambique 7.9, and Rwanda 7.6. Several others were above or near the 7% threshold for economic takeoff, set to double their economies in 10 years.

In 2011 Ghana led the pack with an economy growing at 12.5%. And according IMF projections for the top 10 growers through 2015, seven are again in Africa: Ethiopia at 8.1% a year, Mozambique 7.7, Tanzania 7.2, Congo 7.0, Ghana 7.0, Zambia 6.9, and Nigeria 6.8. This, in what promises to be a sluggish global economy.

That growth emanates from private farms and private firms, some large but mostly small. Nigeria’s Superflux, with around 300 workers, supplies checks to major banks in Nigeria and printing services to a range of clients in West Africa. M-Pesa, launched by Safaricom, the Kenyan mobile network operator, allows microfinance borrowers to receive and repay loans using mobile phones. It now has more than 17 million subscribers and has expanded to Tanzania, with 10 million subscribers. Much larger still, the Lagos-headquartered Dangote Group is West Africa’s largest manufacturing conglomerate, with businesses ranging from salt and sugar refining to polypropylene and to cement. It recently began construction of a $400 million cement plant in Zambia’s copperbelt.

Such private enterprise and national economic growth advance with support from governments—building infrastructure, easing regulation, and opening business to competition. Public-private partnerships are building toll roads in Senegal, power plants in Togo and Cameroon, and high-speed rail connecting Pretoria and Johannesburg in South Africa. Legislators and regulators are making it easier for firms to do business. The World Bank’s 2011 list of the 10 most-improved economies includes three in Sub-Saharan Africa—Rwanda, Cape Verde, and Zambia. They scored much better than in previous years on time to start a business, cost of enforcing a contract, steps to get a construction permit, and ways to protect investors.

The stereotype of a stifling African state is beginning to give way to the focused and fostering state, helping solve the private sector’s problems in finance, logistics, and entering foreign markets—retreating from areas of the economy where the private sector can do things better, expanding its roles only as its capabilities broaden.

To help local businesses, Kenya’s Export Promotion Council connects them to international markets for such nontraditional exports as soaps, shoes, fashions, and home furnishings. It was recently selected as the top developing country trade promotion organization by the International Trade Centre, a joint agency of the UN and WTO. Cameroon Customs, by introducing individual performance contracts and relying on verifiable indicators, has been improving trade logistics—and in the process collecting more revenue, facilitating trade, and combating corruption.

Still lagging and vulnerable

African GDP per capita growth traces a V, falling from 1970 to the mid-1990s and rising thereafter (with fluctuations around 0 in the 1980s and early 1990s; figure 1). Compare that with the performance of eight countries with characteristics similar to those in Africa today 30–40 years ago. Over 1970–2010 the comparators boosted GDP per capita 450%, the ACET-15 100%, and the full region only 50% (figure 2). But note the slow yet
steady increase in Africa since 1995. Reflecting the pickup, poverty in Sub-Saharan Africa, though still high, came down from 59% in 1990 to 43% in 2005.

The 1980s and first half of the 1990s saw growth slide, stagnate, and even reverse. Growth was also volatile, with downdrafts hitting the poor much deeper and longer, more than offsetting the gains during updrafts.

Exports were hit particularly hard in the early 1980s (figure 3). But by the late 1990s African countries saw a sharp rise in export competitiveness, as did the comparator countries. For the Africans a boom in commodity prices sparked the rise, and for comparators, a successful drive in manufactured exports.

To reduce their vulnerability to external shocks, African countries now have to move beyond one-off macropolicy improvements and reliance on commodity prices by transforming their economies.

**Figure 2** GDP per capita (index, 1 = 1970)

![Graph](Source: World Bank World Development Indicators)

**Figure 3** Growth rates of exports, relative to world rate (% five-year moving average)

![Graph](Source: World Bank World Development Indicators)

**Note to figures**

The 2013 African Transformation Report focuses on 15 Sub-Saharan countries; future reports will progressively expand the coverage to more African countries, including those in North Africa. The 15 countries (ACET-15) are: Burkina Faso, Ghana, Nigeria, and Senegal in West Africa; Ethiopia, Kenya, Rwanda, Tanzania, and Uganda in East Africa; Cameroon in Central Africa; and Botswana, Mauritius, Mozambique, South Africa, and Zambia in Southern Africa. Rather representative, they have 70% of the Sub-Saharan population, 76% of GDP, 85% of manufacturing value added, 65% of agricultural value added, and 80% of exports.

Putting the performance of African countries in perspective are eight comparators: Brazil, Chile, Indonesia, Malaysia, Singapore, South Korea, Thailand, and Vietnam. Thirty or forty years ago, they had several of the features that today characterize many African countries—poverty, primary-oriented low-productivity production and exports, and so on. But they have since ignited and sustained long periods of high GDP and export growth, technological upgrading, and big improvements in the lives of their people.
Transforming slowly

Better macroeconomic management, better governance, and better incentives for the private sector have produced higher growth in many African countries. But there has been little success in altering the structures and technology levels of African economies.

The facts: in almost all countries production is dominated by the primary sector, either in agriculture or in minerals. Except for South Africa and Mauritius, no country in the region has a viable manufacturing sector that is internationally competitive in any product. Agriculture is marked by low productivity with little application of science and technology, and almost all mining operations using modern technology are foreign-owned enclaves with few links to the rest of the economy. The same is true for services, except for tourism in a small number of countries (such as Botswana, Kenya, Mauritius, Seychelles, and South Africa).

Foreign trade mirrors the production structure: exports are dominated by primary commodities incorporating little application of science and technology while the bulk of manufactures and knowledge-based services are imported. Unsurprisingly, the structure of employment mirrors the structure of production, with low productivity and high unemployment and underemployment, accounting for widespread poverty.

Economic growth based only on rising commodity prices or on producing and exporting the same things more efficiently with the same technologies is not sustainable. Sustainability requires improvements in the economic structure, through diversification, increased capability to produce higher technology products and services, higher productivity, greater international competitiveness, and the expansion of formal sector employment. Growth accompanied by these structural changes is referred to as “economic transformation.”

Diversification reduces economic volatility, which the commodity-based African economies are prone to. It also provides greater scope for learning and technological upgrading. Increased technological capability enables a country to respond to economic challenges and global market opportunities and to raise productivity (as well as through efficiency). Greater international competitiveness allows higher scale production for exports, which increases employment and incomes, and expanding formal sector employment ensures that prosperity is widely shared.

Part of the reason for the recovery of growth in Africa is rising investment, starting in the mid-1980s (figure 4). And for the five years to 2010, investment was around 25% of GDP. This higher rate, while welcome, was still below the 30% that the East Asian tigers sustained during their transformation drives. With savings rates low in Africa, much of the rising investment has been financed by aid. Higher investment rates are needed not only to expand production capacity but also to acquire new machinery, a channel for upgrading technology and boosting productivity.

A diverse export base can minimize volatility in foreign exchange earnings, important for acquiring intermediate inputs and technology. But African exports have concentrated in a narrow range of mainly primary products over the past 40 years (figure 5). Although the concentration has fallen, the share of the top five exports remains at around 70% (54% for the comparators).

Productivity in manufacturing is low and stagnant (figure 6). But if adjusted by the wage rate, manufacturing productivity is actually higher than that for the comparators. So, if Africa could reduce its infrastructure and logistics disadvantages, it could compete on wage costs. Agricultural productivity is also low, with yields per hectare about half those for comparators in 2010.

Manufacturing has to move to higher levels of technology to compete, but the shares of medium and high technology in both production and exports are much lower than for comparators (figure 7). Indeed, those shares have been declining.
Sustaining growth typically requires investing at high levels together with efficiency improvements. Sub-Saharan Africa’s gross fixed capital formation is about 25% of GDP, trending toward the 30% that East Asian tiger economies achieved at the peak of their transformation drive. . . .

. . . But Sub-Saharan Africa’s 15% domestic savings rate is about half that of East Asia, illustrating that external capital accounts for the rest of investment. Most of that external funding is from foreign aid, which is unsustainable.

Exports in Africa are concentrated on a small number of commodities; in most countries the top five exports account for a large share of total exports.

Manufacturing value added per worker, an indicator of productivity in manufacturing, is low and stagnant.

Just having a manufacturing sector, even a large one, is not enough. Manufacturers have to advance their technology and productivity over time. But technology levels have been falling in Africa and rising sharply in the competitors.

The inaugural African Transformation Report introduces the African Transformation Index to show how countries are transforming over time and where they stand against each other on measures of five attributes of transformation:

- **Diversification**—to more manufactures and services.
- **Export competitiveness**—to rising shares of world exports in relation to world GDP.
- **Productivity**—to higher cereal yields and higher value added per manufacturing worker.
- **Technology**—to rising shares of medium- and high-technology products in manufacturing and in exports.
- **Human well-being**—to better jobs, higher incomes, and longer lives.
Building capabilities and partnerships

The state, private firms, organized labor, parliaments, the media, and civil society all have mutually reinforcing roles in promoting economic transformation.

Private firms—large and small, foreign and local, formal and informal—lead in producing and distributing goods and services, in upgrading technologies and production processes, and in expanding the opportunities for productive employment. But firms can be helped by a state that has strong capabilities in setting an overall economic vision and strategy, efficiently provides supportive infrastructure and services, maintains a regulatory environment conducive to entrepreneurial activity, and facilitates access to new technologies and markets.

Similarly, the state can gain much from having firms and entrepreneurs weigh in on setting a national economic vision and strategy—and on designing policies, investments, and incentives to support that strategy (see box on Rwanda). Indeed, state–business collaboration is at the heart of transformation. Engaging organized labor in setting the transformation strategy ensures labor’s buy-in and facilitates skills development, particularly up-skilling and continuing education. And strong third-party mechanisms of accountability should draw in parliaments, independent media, academics, thinktanks, and other parts of civil society to ensure that close collaboration between officials and firms does not degenerate into crony capitalism.

African states, given their institutional and financial capacities, should set priorities for what they can best do to support economic transformation. Some of the most established tasks are:

- Formulating a vision and strategy.
- Managing the macroeconomy.
- Planning and managing public spending.
- Making public procurement public.
- Administering ports and customs.
- Streamlining regulation.
- Beefing up statistics.

While the core functions outlined above are necessary for transformation, they are likely insufficient. In almost all countries that have transformed, the state has undertaken additional functions to support the private sector. These functions include: ensuring effective investment and promoting exports, providing localized world-class infrastructure and logistics (for example, in industrial parks or special economic zones) to overcome overall weak infrastructure, facilitating access to land for potential investors in modern commercial agriculture, conducting research and development to support small and medium-size domestic firms in targeted transformation areas, offering short-term skills development and upgrading programs aligned to the needs of the targeted transformation areas, and opening facilities to enhance the access of private domestic firms (almost all of them small and medium-size) to long-term and export finance. How best to meet them? A good way to start is by developing centers of excellence and setting up a central coordinating office.

Rwanda’s public-private dialogues

“Work hard,” Rwanda’s president, Paul Kagame, tells business people. But the hundreds gathered at the Amahoro mini stadium have hardly come for a lecture. They have come to speak out. The president encourages them to do that, too: “You must to speak up about challenges you face.” The event is Rwanda’s annual Public Private Dialogue, a structured platform for joint solutions to lift the constraints on business and growth.

Informed by similar platforms in Malawi, Mauritius, and Singapore, the dialogue is a joint initiative of the Rwanda Development Board and the Private Sector Federation. As an integral part of the nation’s 2020 transformation strategy, it fits in a broader framework for state–business collaboration. The state funds 30% of the budget, with a goal to build capacity and conduct research that feeds back into government policy for removing challenges to enterprise development. As President Kagame reminds the business people, “This dialogue isn’t just about increasing private sector profit; it is about transforming our society.”

The dialogue is an improvement on previous mechanisms that did not work as planned. And it takes lessons from other countries’ experiences. Singapore stands out as a stellar example.

Across the globe, dialogues are initiated by governments, entrepreneurs, or third parties. One cross-cutting lesson is that the most tangible outcomes from dialogues are policy reforms. In Rwanda, the president’s leadership on dialogue gives it as good a chance as any to produce real reforms and remove the constraints on growth and transformation.
Centers of excellence

In the bodies responsible for core economic functions, appointments should be based on competence and the ability to deliver results and leadership and senior staffing, should be on par with the best in the world (see box on Kenya).

Many countries have the talent—in government, academia, the private sector, and the diaspora—that national leaders can tap.

For such bodies as customs, ports, investment promotion, and export promotion, the terms and conditions of service should improve on those for the civil service, set to attract the best. Appointments should be based on performance contracts, with performance against objective criteria, not the whims of leaders or changes in government, determining contract renewals.

Senior staff in the core (transformation) ministries could be strategically appointed to the boards of statutory bodies where they could spread their expertise and earn allowances to supplement their low civil service pay. And those core ministries could be beacons for others in the civil service to emulate.

Central coordinating office

Coordination is essential, since any serious transformation initiative would cut across several ministries and agencies. And only an office whose authority is accepted by ministers and staff in other ministries and agencies can do this.

In some cases that would be a minister of planning, finance, or trade and industry whom colleagues see as senior to them. In others it would be an office directly under the president, vice president, or prime minister. Seen as having a higher rank, the office can convene various arms of government, assign tasks, monitor implementation, and discharge rewards and sanctions as occasions warrant.

The office also needs top-class professional staff to earn and maintain the respect of other units in the government. Early archetypes would be South Korea’s Economic Planning Board, Taiwan’s Council for Economic Planning and Development, and Singapore’s Economic Development Board, initially under the Ministry of Finance and later the Ministry of Trade and Industry. Later ones include Malaysia’s Economic Planning Unit, in the prime minister’s office, and India’s Planning Commission, chaired by the prime minister and run by a senior cabinet minister as the vice chair.

Meritocracy on the rise in Kenya

Over the past decade Kenya has streamlined the executive, judicial, and legislative branches, introducing performance contracts for ministries and other government bodies, cascading down to local government. All government jobs are now advertised, with selection based on merit. For more senior public sector jobs, candidates are further vetted by parliamentary commissions.

The changes ensure that only qualified (and clean) candidates are selected, reducing corruption and producing a civil service conscious of “service.” Indeed, many former business executives have taken public sector jobs, something never seen before.

Equivalent pay is part of the reason. As Francis Kimemia, head of the public service commission, remarked, “The pay and benefit structure of public servants improved tremendously, with salary increments averaging over 300% in a decade. The gap between the public and private sectors, which initially stood at about 400%, has been tremendously reduced, thereby making the public service the first employer of choice for many Kenyans.”

Spearheading the effort: the Public Service Transformation Department’s national transformation program, Transforming Kenya, to meet the needs and aspirations of all citizens. The program is set in the 2010 constitution, with a desire to get things right from the start.

The rise of the meritocracy continues with the new government elected this year, with plans to reduce the number of ministries from 42 to 18.
Promoting exports

Working with private firms, African governments can launch export drives by coming up with export plans that have explicit targets and the undivided attention of top decisionmakers.

The advantages of African exporters relative to those in East and South Asia are abundant low-wage labor and abundant land and natural resources—advantages that are likely to increase. By mid-century 20.8% of the global working-age population will be in Sub-Saharan Africa (and 23.4% in Africa). Half the world’s acreage of cultivable land not yet cultivated is in Africa. And with further exploration over the next decades, Africa’s known reserves of oil, gas, and minerals are set to grow exponentially. The main disadvantages are in skills, technology, and capital, especially such physical capital as roads, rails, ports, and communications.

To brighten the prospects for low-wage, labor-intensive manufacturing, countries will have to reduce today’s disadvantages. Sharply focused training programs can be aligned with industry needs and targeted to high school and university graduates to lift skills, even above those now typical in Asia. Well run special economic zones and industrial parks can reduce costs with better infrastructure and less onerous regulation. And broadly improving the business environment can make it cheaper and easier to do business.

The best prospects in manufacturing are in processing agricultural and extractive resources. The catch is that such processing is intensive in skills and capital, so it demands more of the factors countries are scarce in and less of what they have in abundance. Some of the constraints could be overcome with deliberate programs to develop capabilities in more labor-intensive activities upstream and downstream, such as processing cocoa and soya. Countries can also concertedly develop skills for increasingly sophisticated products—much in the way Finland and Sweden leveraged their timber by producing machinery for wood products and developing engineering services.

Supporting firms

The World Trading Organization, formed in 1995, greatly narrowed the use of active export promotion instruments that spurred the exports from East Asia in the 1970s. But there are still areas for government action. Among them:

Formulating, with private firms, an export plan that has explicit targets and the undivided attention of the highest levels of government. South Korea’s president in the 1960s held monthly meetings with exporters to review their progress in meeting agreed targets. A backdrop to the meetings was a scroll that said simply, “Export or die.” The reference was to the country, not the exporters, but the point was clear.

Setting up one-stop shops to make it easy for foreign investors. Singapore, lacking capital, natural resources, and modern enterprises, set out in the 1960s to attract foreign investors who would bring in their skills, capital, and technologies. Not just any foreign investors, but those that would keep upgrading the complexity of products—and transferring processes and capabilities—to move Singapore rapidly up the technological ladder. The Economic Development Board smoothed the way for foreign companies to survey the terrain, work through all the paperwork to register a business, connect with the right agencies to start operations, and take advantage of the island’s strategic location.

Figure 8  Sub-Saharan Africa goods exports to main markets ($ billions)

Source: International Monetary Fund Direction of Trade Statistics database.
reduce costs and raise productivity. Policymakers should track their exchange rate against the currencies of the main trading partners and take action when needed to ensure their exporters are competitive in those markets. They can also help in reducing costs by providing well functioning infrastructure, especially in export processing zones during the early stages of development.

Helping firms get the technology they need. Governments can facilitate the licensing of foreign technology by easing regulations, providing information on what is available and appropriate, and subsidizing the cost. They can also set up R&D facilities to address technological constraints in specific subsectors, again collaborating with firms. And they can push developed countries to ease the access to their technologies for developing countries under the TRIPs agreement in the WTO.

Also to be considered:

Subsidizing targeted firms contingent on producing specified products at no higher than prescribed unit costs, benchmarked against successful exporters elsewhere. That would effectively require firms to become internationally competitive, while also benefiting domestic consumers (as happened in Korea). Such subsidies contingent on cost reductions could be at the heart of a concrete program of public-private collaboration for economic transformation.

African countries also need to get developed countries to lower the barriers to their products in overseas markets (see the box). Trade preferences can help, but too often they exclude precisely the products in which an African country would have a comparative advantage. Updating the rules of origin, which define how much processing must take place in the exporting country, could also help.

Harmonizing US-EU trade preferences for lower income Africa

The collapse of the Doha round of global trade negotiations accelerated the flurry of bilateral and regional trade agreements, which discriminate against countries not party to the agreement, so poor and small countries usually lose out. This could also be the case with the intended US-EU Transatlantic Trade and Investment Partnership, unless it deals upfront with the current hodgepodge of trade preferences, which both the European Union and the United States give for (some) products to (some) countries in Sub-Saharan Africa.

The US African Growth and Opportunity Act provides preferential access to the US market for 40 of 48 Sub-Saharan countries, but the higher income ones are better positioned to use it, so the countries that really need that access barely benefit. The act also excludes key agricultural products that African countries can produce competitively.

The European Union’s Everything But Arms allows duty-free and quota-free access for all imports from the Least Developed Countries, 27 of them in Africa. But it excludes other lower income African countries, many well placed to develop competitive activities if they had such preferences, and complicates the integration of the region’s markets.

The European Union is trying to replace preferential access to former colonies in Africa, the Pacific, and the Caribbean with economic partnership agreements, but African countries have been hesitant to sign.

The present so-called system of preferences is a nightmare: different schemes cover different countries with different product coverage and different rules of origin. Rationalizing and expanding trade preferences would help the region’s economic transformation as well as its integration into the world economy. How to proceed?

• Focus on all low-income and lower middle-income countries in Africa, not just Least Developed Countries (and not on upper middle-income countries).
• Cover all products, with no exclusions (which often target products that African countries can make competitively).
• Harmonize rules of origin, and keep them simple, flexible, and relevant; keep requirements for local content low enough to allow Sub-Saharan Africa to participate in global value chains.
• Make the preferences long lasting, if not permanent, to ensure the stability and protections needed to encourage investment in the relevant export sector.

The new US-EU Transatlantic Trade and Investment Partnership leaves African economies out. If it included them, it could begin to rationalize the hodgepodge.

Developing people’s skills

Africa has a long road to travel to increase the supply and demand for skills—and to complement the regular system for skills development by moving outside that system and partnering with private firms to deliver the skills they need.

By mid-century Africa will have the world’s largest and youngest labor force, which could be a great asset to drive its economic transformation—or a drag on growth and a threat to social and political stability.

What’s needed to make the labor force an asset is well known. Boost secondary and higher enrollments. Improve the quality of teaching. Increase the scientific and technological orientation. Align with the requirements of the workplace. Develop vocational, technical, and polytechnic education. And support on-the-job training and continuing education. Typically, most of the effort is government-led in traditional education and training systems. Also to be considered is moving outside that system to quickly produce workers with the skills that businesses need.

Moving outside traditional systems

The number of young people who have graduated from secondary and higher institutions but are unemployed is large and growing. Yet the entrenched academic cultures in traditional universities make it difficult for them to engage with business.

Given these problems, countries should consider a skills development program outside traditional institutions. Right from the start, such a program could be organized with the private sector. It could focus on specific job-oriented short-term training for high school and university graduates who either are unemployed or working in jobs that do not use their education.

Three possible areas: manufacturing, agribusiness, and construction.

Skills for export-oriented manufacturing

With prospects dim for high school leavers, Ireland kept them off the street by offering free or very low cost technical and university training—as part of a strategy to attract foreign direct investment. It also provided fiscal and trade incentives and the conveniences of special economic zones and special industrial parks. But offering job-oriented skills was a key part of its value proposition.

Starting in 1969, Ireland began setting up regional technical colleges, later renamed institutes of technology, outside the traditional system of higher education. Eventually there were 13 in major cities and towns providing mid-level technical education in science, engineering, business, and art and design to staff the export-oriented growth poles.

Staffing the institutes were young and creative people with foreign experience. Importantly, they were not steeped in the culture prevailing in existing institutions of higher learning—and they had considerable freedom to innovate.

Also organized along these lines, the national institutes of higher learning in Dublin and Limerick worked with business to introduce incubators on campus. Later, the established universities followed suit and began to undertake applied research.

To market Ireland’s skills base as a competitive advantage, the presidents of these institutions, along with faculty, joined tours organized by the Ireland Development Authority to attract foreign direct investors.

Skills for agribusiness

Few African countries have institutes dedicated to training young graduates so that they can go into agroprocessing or agribusiness—or into work solving the technical problems of these sectors. Exceptions include floriculture and horticulture in Ethiopia and Kenya and wine in South Africa.

Governments should consider spinning off an institute to develop skills, amass knowledge, and solve problems for a small number of products in which they have a comparative advantage. The institute should partner with private producers, working with them to solve their problems and prepare graduates for careers in the product, either as staff or as entrepreneurs.

Such institutes, taken outside the regular academic system, should have a mission-oriented governance structure supported and run jointly by the state and private companies.

Chile has done this for fish and fruits, Finland for forest products.

Skills for construction

In the 1970s, when South Korea’s transformation strategy called for it, the country created specialized training institutes to quickly develop a cadre of skilled construction workers. When it began building the Seoul-Busan expressway (the World Bank doubted the feasibility), it finished the project ahead of schedule using its own trained expertise. Later, when the economy went into recession, it deployed its skilled construction workers to the Middle East, earning valuable foreign exchange.
Now consider roads in Africa. Many governments have looked to foreign donors and financing entities to support road construction, thinking only of the product—a road—and not of who is building it and how. But foreign contractors typically bring their own technical staff and skilled workers. Through the rest of this decade billions of dollars will be poured into Africa’s transport network under the Program for Infrastructure Development in Africa, requiring many millions of workers. Billions more will go into national highways and feeder roads.

Rather than just thinking of getting foreigners to finance and build roads (and major buildings) for them, governments should think about developing construction capabilities and skilled construction workers, which foreign finance would help put to work. For that to happen, governments would need to enter serious discussions with donors and development banks about local hiring preferences in construction tenders.

Malaysia’s three-part harmony: official, private, academic

To ignite Malaysia’s economic transformation, the government, firms, and academia set up the Penang Skills Development Center to provide job-oriented training outside the regular education system. The state’s chief minister brought in the CEOs of Hewlett-Packard, Intel, and Motorola to form a steering committee that asked their training and human resource managers to develop a concept paper for the center, which opened in 1989, with 24 companies as founding members.

Based in Penang, home to many foreign-owned operations, the center now has more than 170 business partners—constituting a global who’s who of major multinationals—that supply ideas, content, equipment, trainees, and leadership. About 75 companies offer attachment programs in precision machining technology, diplomas in engineering, and industrial skills training for recent graduates.

The first industry-led skills center, it set the mold for Malaysia’s other states, all of which now have similar programs. Its certificate and diploma courses train shop-floor workers as engineers and technicians. It also prepares trainees for entry to undergraduate and graduate programs at four Malaysian and eight foreign-affiliated universities.

The center produces an industrial talent requirement study that assesses the capacity and proficiency of Penang’s workforce and estimates future manpower requirements of the state’s manufacturing companies, identifying gaps in proficiency and mismatches in skills.

Samsung’s electrical engineering academies

In Kenya, Nigeria, and South Africa Samsung is providing hands-on skills training for students in grades 10–12 in line with government drives to create well paying jobs. With plans to expand to more African countries, the goal is to develop 10,000 electronics engineers by 2015.

The academy in Lagos is at the Agidingbi technical college. During the opening in August 2012, Lagos State Governor Babatunde Raji Fashola said, “There is no doubt that a sound knowledge of modern technology is the most important resource for entrepreneurship and wealth creation for technicians.”

Students who complete the year-long program in basic, intermediate, and advanced electrical engineering are eligible for internships with Samsung or its channel partners. Outstanding performers have a shot at 100 slots for annual learnerships in Seoul, part of Samsung’s program for young leaders.

Samsung is also working with universities in Cape Town and Nairobi to enable students to develop applications as part of their informatics and computer science courses—applications directly relevant to Africa.

Upstream, Samsung is investing in solar-powered internet schools to provide rich learning environments for K–12 students, with electronic white boards, printers, and note PCs for internet access and videoconferencing. The goal: 2.5 million learners by 2015.
Kickstarting agroprocessing

Substituting soy imports is a $1.2 billion a year opportunity for producers and processors that can match the price and quality of vertically integrated global traders.

A chapter in the forthcoming African Transformation Report explores the potential for leveraging nine agricultural products to achieve quick results in traditional commodity exports (cocoa, coffee, and cotton), nontraditional exports (fruits, vegetables, and soybeans), and domestic food products (sugar, rice, and palm oil).

Zambeef Products, one of Zambia’s biggest agribusinesses, covers the full value chain in producing, processing, distributing, and retailing beef, pork, fish, chickens, eggs, milk, flour, bread, and edible oils. It has about 5,000 hectares of irrigated row crops, mainly wheat, maize, and soybeans, and another 1,500 hectares for rained and dryland crops. And it has the capacity to produce 50,000 tons of soy-based animal and poultry feed a year. Having begun operations as a small butcher shop in Lusaka nearly 20 years ago, it now has more than 100 retail outlets, slaughterhouses, and processing plants. Annual sales: more than $160 million.

Start with high-quality produce

Agriculture makes up the bulk of most African economies, and most of the extreme poor rely on subsistence farming for their livelihoods. That is why Africa’s economic transformation has to start on farms, by modernizing agriculture to increase productivity of smallholders (see box on Ghana). Using agriculture as the basis for manufacturing and services, particularly by increasing agroprocessing and other agribusiness, will help address youth unemployment. It will also increase the demand (and prices) for what smallholders produce.

What will this take? The main requirement is for governments to ensure that farmers have the roads, power, financing, technical packages, and (where possible) irrigated land they need to regularly deliver high-quality produce, livestock, and poultry to agroprocessors. Governments also need to know the processing constraints: two of the big ones are refrigeration and packaging.

Soy oil and soy cake, for example

Soybean is the world’s most important and most traded oilseed. Small wonder, for it is truly a wonder crop, the world’s most nutritious, containing 40% protein and 20% oil, essential in the diets of humans. It is also valued in its processed form as a source of high-quality, high-protein animal and poultry feed.

China is the largest player in soybean processing by volume, followed by the key soybean producing countries: Argentina, Brazil, and the United States. Key markets for soybean include China as a consumer of raw soybeans and the European Union as a consumer of soybean cake. Sub-Saharan Africa is a small producer, with less than 0.7% of total production, but it imports substantial volumes of processed soy oil and soy cake for animal feed, especially on long-haul and cross-border routes. So, bring on more mobile phones.

• Property rights. Tenure security is necessary for farmers to invest in long-term land improvements, but in most parts of Africa, cadastral surveys are lacking, and formal programs of land registration and titling have not advanced far. Customary systems of property rights provide adequate security for traditional agriculture, but it is not clear that they can provide the tenure security required for agricultural transformation. And western-style land titles and markets cannot be introduced without doing violence to existing economic, social, and cultural arrangements. An enigma.

Agricultural technology improvements have come slowly in Africa, and not much is known about the diffusion of better technologies. In many ways, Africa is late in developing research capacity, and many crops and commodities had very little research effort until the past 10 or 20 years. There is a lot to do here, and arguably not much to show for it yet. Other driving forces in agriculture will come from appropriate investments in other public goods.

• Roads. Many rural areas are cut off from markets because it is very costly to move goods—including agricultural inputs and outputs, but also nonagricultural goods.

• Power. Electricity is essential for agricultural processing and post-harvest uses of crops and livestock. And for dairy products it allows cooling and makes more efficient collection schedules possible.

• Irrigation. Infrastructure for rained to irrigated farming will be a public good only in some places and purely private in others. But irrigation has the potential to transform agriculture in many locations, both by increasing productivity and by reducing weather risk.

• Competition. Rural isolation opens the door for noncompetitive behavior. With rural markets spread thinly and handling low volumes, traders can often set prices for both farmers and consumers. Transport also lacks competition, especially on long-haul and cross-border routes. So, bring on more mobile phones.
with imports recently valued at $1.2 billion.

In many African countries the low cost of soybean, compared with that of major producers, makes it possible for local processors to compete. Two possible strategies:

Target growth markets for soybean cake. Human consumption of soybean is marginal in most African countries, with Malawi and Nigeria as notable exceptions. A large untapped market of low-income consumers with latent demand for low-cost dietary protein could be met by prospective soybean processors.

Integrate vertically into feed. Soybean processing can be a challenge, with difficult economics due to seasonal variability of input costs and prices for oil and cake. Thus, processors may have to be vertically integrated into animal feed or even into livestock production, as with Zambeef.

Soybean processing requires sales of both oil and cake to be economically viable, and African demand is heavily skewed toward oil. So markets for cake need to be found or developed to fully capture opportunities.

Next steps for policymakers

Developing soybean processing should be understood primarily as a means to reduce expensive imports and to increase dietary protein of citizens (consumed either directly or in poultry).

To develop a robust processing sector, policymakers need detailed understanding of local production and consumption potential for the full range of key soybean and soybean-related products. They also may need to foster an infant industry that, despite the emerging price competitiveness of African production, face price competition in its development phase before reaching a minimum efficient scale.

Given the benefits to the livestock and poultry sector and overall nutrition, a case can be made for supporting the industry. But this must be balanced with a clear roadmap to eliminating support—to avoid any open-ended commitments to special interests.

Another decision is whether to work with major multinational oilseed traders and processors or to develop local processing capability. While in many sectors the development of local capabilities has significant broader benefits in employment, skills development, and income generation, the relatively low value added from soybean processing, combined with the significant benefits, requires detailed analysis of country-specific impacts to determine an appropriate policy balance.

Ghana: Blue Skies, Green Grass

That Ghanaians would spend up to $2 for fruit juice after a treasured meal of fufu and soup may surprise some people, for a country where half the population lives on less than $2 per day. But after $2 million in annual revenue, we can look back and wonder how Blue Skies tapped into the domestic market to shore up flagging international sales and thereby discovered the thirsty Ghanaian with money to spend.

The company’s international sales growth alone is a lesson for African fruit processors looking to expand. With its 100% natural juice with no preservatives, the product is riding the wave of health consciousness in Western markets, and has carved a place for itself on supermarket shelves in the United Kingdom and other European countries. Each day, the company flies about 20 tons of bottled juice and packs of fresh cut fruit from Ghana. This in the face of most of the major challenges of agroprocessing in Africa: consistency of inputs, quality control, infrastructure, logistics, rising energy prices, declining farming, and many more. With a shelf life of five days, the margin for error is razor thin. And government can do more to remove these constraints. As a company spokesperson put it, “an enterprising spirit can make a real difference when given support and encouragement.” At the height of an aviation fuel shortage in Ghana in February 2013, the company reported losing some $750,000 in exports in one week. Fortunately for the company, Ghanaians were there to drink up the juice.

In the upcoming African Transformation Report, our analyses of agro-processing opportunities in Africa invariably identify small domestic markets as barriers to expanding several products. Blue Skies shows how the barrier can be overcome. Consumers can be cultivated.

Yes, at roughly $2 million in annual sales, the domestic market is nowhere near $40 million in exports. Yes, at $2 per bottle, domestic sales underscore wide income disparities. But more than 150 Ghanaian farmers and more than 1,500 Ghanaian factory workers picking fruit and packing juice can live with that. Tellingly, employees led the way in discovering the local market through their informal market tests. So Blue Skies may be serving the upper class, but it’s growing the middle.

Even as the company flies juice around the world, it has found green grass under its feet.
Getting the most for everyone—from oil, gas, and minerals

A country’s natural resources belong to its people—today and in the future. How, then, can countries ensure that extracting those resources benefits more than a few? By managing everything that’s involved—well, fairly, and openly.

Botswana, once a poor, landlocked, agricultural economy, is now one of Africa’s richest, with a per capita income of $7,500. Discovering diamonds and managing the sector well made the difference. Consider the country’s 50–50 joint venture with De Beers—Debswana, the world’s largest diamond producer. Investments in infrastructure that benefited far more than the diamond sector. Prudent investments in human skills. A sovereign fund, now with $6.9 billion, to sustain the benefits for future generations. And a recent move of diamond-sorting and trading from London to Gaborone, the capital, directly and indirectly providing thousands of jobs.

The goal must be to avoid the resource curse of concentrating wealth in the hands of a few, spending for current consumption rather than investing in the future, running up the exchange rate rather than encouraging exports, and leaving environmental nightmares. It must also be to avoid the employment curse of having the public sector as the default employer for nationals and relying on foreign workers to keep the domestic economy going. And it must be to avoid the concentration curse of relying on highly volatile export prices and public revenues.

A first key to turning such curses into blessings is to get better at prospecting to know what you have and at negotiating with foreign companies to get fair deals.

Knowing what you have

As Oxford economist Paul Collier likes to ask, who has the most known oil, gas, and mineral reserves per square kilometer? Africa or the OECD. His surprise answer: the OECD, by far. The word known is the reason. Most of Africa’s reserves, suspected to be vast, even in the tens of trillions of dollars, are not known.

Mining companies bidding for exploration rights always know more about the real prospects than the governments issuing the rights. They also have a world to explore and decades of experience in acquiring and exercising rights. And they have patience, often preferring to let others improve their prospects and proceeding with exploration only when other discoveries near their parcels are confirmed.

To learn more about what they have, governments should invest more in geological surveys, starting with aerial photograph and satellite images to get a sense of promising terrain, moving to geodetic surveys of the surface to map topographic

Kenya’s billions of barrels

Thanks to an airborne gradiometry survey and geochemical modeling, Taipan Resources, based in Vancouver and Nairobi, thinks it will find a few billion barrels of oil in Kenya’s Anza block, where it has exploration rights. Adding to the outlook, recent discoveries by Tullow in western Kenya and Uganda are in similar geological settings. Across its northern border, Kenya has fields very similar geologically to those in South Sudan and in southern Somalia and Ethiopia.

Taipan’s CEO, Maxwell Birley, said, “The unrisked prospective resources for Taipan’s acreage in Kenya is 530 million barrels. We also believe that this estimate will likely increase to approximately one billion. These estimates are for only two blocks in Kenya. If this is reasonably extrapolated to other blocks across the country, one can easily forecast very significant hydrocarbon resources indeed.”

Kenya now auctions the licensing of blocks, having previously issued them to first comers. It also sets deadlines for surveys and offers additional exploration periods. And in line with the good management practice of staggering the issue of licenses, rather than all at once, Kenya is rolling out eight new blocks after the new government is in place, following the recent elections.

Energy Ministry official Patrick Nyoike said, “Some of the new blocks had been relinquished by explorers and will be repackaged for the auctions. Many companies have shown interest, Chevron and Eni among them.”
features, and then exploring below the surface to produce three-dimensional patterns. But just having high-resolution aerial surveys can put governments on a better footing before auctioning exploration rights and attracting investors. To avoid giving away too much, governments should auction such rights in stages, not in one go (see box on Kenya). They should also limit the terms of agreements to a few years so that rights holders don’t wait for the discoveries of others before moving ahead.

Getting value for everyone

Three instruments dominate in exacting revenues from the extractors: royalties per unit of production, taxes on profits, and equity stakes in a joint-venture subsidiary. An equity stake in a joint venture can come up dry, producing no dividends. Taxes on profits depend on keeping a close eye on revenues, costs, and transfer prices. And royalties depend on tracking the units of production. (Nigeria in the early days simply accepted royalty checks without auditing production.) Each instrument has pluses and minuses, and each demands considerable accounting capabilities.

Because resources, once extracted, are gone forever, they should be seen as part of a portfolio of national assets that also includes human capital, physical capital, financial capital, and institutional capital. Countries can enjoy fast growth and fat revenues from extraction for a time, but they can end up worse off than before a boom if they don’t use their share of the revenues to build those other assets—for this and future generations.

That is why it’s important to spend today to build human, physical, and financial assets along with the institutional assets not just for regulating extraction but also for selecting and monitoring projects—and for delivering services and managing the entire economy. It’s also important to separate resource revenues from other revenues, for investing in the long term.

And it’s important to do more than simply extract—to refine oil, to liquify natural gas, to process diamonds and other minerals (see the box on Botswana). Also required is monitoring what companies do, supplying the transport infrastructure that also supports agriculture and other parts of the economy, reducing the social and environmental costs (think oil spills), and saving and investing for future generations.

Botswana to become the world’s leading diamond trader?

Since the start of diamond mining in Botswana in the early 1970, Debswana, the 50-50 joint venture between De Beers and the government, sold most of its production to De Beers in London. That is changing, with De Beers moving its sorting and trading operations to Gaborone after 80 years in London.

This latest move transforms Botswana from a producer of rough stones into a major international center of diamond mining, sorting, trading, marketing, and jewelry making. Sorting, far more than simple triage, uses highly specialized talent and technology to assign each stone to one of 13,000 categories based on size, color, clarity, and eventual cut. An estimated $6 billion worth of diamonds will be processed through the country each year, bringing with it ancillary industries—and jobs—in marketing, security, logistics, and information technology.

As part of the 10-year agreement, the government will initially sell 10% of the rough stones produced in the country, rising to 20% over the period. De Beers will make $1.2 billion in diamonds available to local manufacturers, up from $800 million previously. That is certain to raise Botswana’s global profile and help it attract foreign investors in copper, nickel, and iron ore.

As Ponatshego Kedikilwe, the minister of minerals, energy, and water resources, put it, “Our agreement is only the first step—much work needs to be done during the next several years to make this transformation a success. As a major player in the diamond trading industry, we look forward to welcoming the global diamond industry to Botswana.”

Challenges remain, of course, including how to attract world-class talent and how to upgrade the skills of locals to match the demands of global markets. But given the long-standing relationship between De Beers and the government, the two partners have incentives to meet those challenges and create joint value.
Boosting leisure tourism and business travel

International arrivals are set to jump to 55 million by decade’s end, contributing $172 billion in 2020 and supporting 16 million jobs.

Sub-Saharan Africa had 33 million international visitors in 2011, up from 31 million the year before, with receipts of $33 billion. Half were leisure tourists, a quarter were visiting family and friends, and about a sixth were business and professional visitors (see box on business travel). On current trends the arrivals are set to rise to 55 million over the 2010s, contributing $66 billion to the region’s GDP by 2020, and 6.5 million jobs. Adding indirect and induced spending, tourism’s total contribution would almost triple to $172 billion and almost 16 million jobs. Those projections are on current trends. Given the continent’s dynamism evident almost everywhere, they are likely to be low, even very low, especially for business travel. And for those visiting family and friends, the increased contributions to spending and investment are likely to be considerable.

Nearly half of the international tourists go to Southern Africa, which has the top four destinations. South Africa is the continent’s leader, and all leading destinations in the continent are geographically close to it (Johannesburg and Cape Town are hubs for all of Southern Africa and the southern Indian Ocean). Zimbabwe, despite recent difficulties, is second. Botswana, with its well managed economy and remarkable geography and wildlife in the Okavango delta, is third. Mozambique, having done much to promote both tourism and investment, is fourth. Mauritius is a fast-growing destination for leisure tourism.

On the way to a million leisure tourists in Senegal

Senegal show what often needs to be done to move to the next level. Pushing large beach resorts, it started to nurture international tourism in the 1970s, with the government building the first tourist hotels. With 900,000 tourists in 2010, it is on its way to a million. Receipts that year ran to $453 million, and employment in tourism to 130,000.

By 2020 Senegal hopes to become “an important cultural and leisure site and a tourism destination of international renown.” Its climate and resort assets are competitive with other “reverse” climate destinations. For French-speaking tourists Senegal is the nearest warm resort destination during Europe’s winter (just as The Gambia is for English-speaking tourists). Senegal can build on the success of Sali, which has grown more than the authorities envisioned into a viable resort and is going up-market. And a new airport is under construction for Dakar. Senegal can move its tourism to the next level by taking action in four areas.

Business travel is booming

Little noticed in African tourism is the surge in business travel and hotels. Africa’s hotel capacity will increase 30% over the next five years, according to Lagos-based research firm W Hospitality Group, with a total of 208 hotels and 38,000 rooms in planning or under construction. About half those rooms are projected to open within the next two years. Leading the continent’s action is Nigeria, where 43 hotels with 6,808 rooms are under development.

In the last five years Rezidor has expanded its portfolio in Africa from 8 hotels in 5 countries to 49 in 21 countries. As Andrew McLachlan, Rezidor vice president for business development in Africa, asserts, “We have the largest pipeline of hotels in Sub-Saharan Africa. We plan aggressive growth for both Radisson Blu and Park Inn by Radisson through individual projects and portfolio deals.” A major incentive is the lack of branded hotels in large cities.

Buoyed by the growth of business travel, Accor, with its Sofitel and Ibis brands, has plans for 12 new hotels with more than 2,000 rooms in Cameroon, Ethiopia, Gabon, Ghana, and Nigeria. For most of them, Accor is the management company for private owners and developers.

Marriott is looking at Ethiopia, Kenya, Nigeria, and South Africa—and Hilton at Angola, Ethiopia, South Africa, and Tanzania. Onomo, Sheraton, and Starwood are also joining the hotel boom.

Not all is smooth, however. Hotels often have to be self-sufficient in power and water filtration systems. And getting fixtures and furniture can be slowed by red tape and poor logistics. Sounds as if a welcoming government could do much to speed things, as part of a plan to encourage foreign investment.
1. **Diversify the product.** Niche market attractions could be combined with resort tourism to make new products. Although demand for niche markets is relatively small, they have high rates of growth, and tourists are usually professional people with higher incomes. They can also be packaged in a variety of combinations to suit the taste of tourists not so interested in the beach.

2. **Invest in sites that already have master plans.** Sali, the site of most tourism, continues to grow. But there are real opportunities for development in the north (St. Louis), south, and parts of the interior. Senegal has two master plans that await implementation: for St. Louis and Siné Saloum, which probably have the most potential after Sali.

3. **Step up the promotion of Senegal as a tourist destination and diversify the source markets.** Promotion and marketing of tourism at the country level are weak and underfunded, though individuals vigorously market their hotels and tour services internationally. Senegal should aim to diversify its source market beyond France to other francophone countries (Belgium, Canada [Quebec], Switzerland, and North Africa), and beyond.

4. **Improve the dialogue between the government and the industry.** Talks between the public sector and private operators are intermittent, and need to be improved. SAPCO, the public developer attached to the Presidency, has gained valuable experience managing Sali and other operations. But it might be time to let the private sector take over this activity in stages and for SAPCO to focus on preparing sites for tendering to the private sector.

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**How operators view Africa’s potential for leisure tourism**

Most tour operators see significant potential for Africa as a tour destination—with some destinations having more potential than others: high performers, emerging destinations, destinations in repositioning, and destinations not viable.

- **High-performing destinations:** Botswana, Cape Verde, Mauritius, Namibia, Seychelles, South Africa, and Tanzania.
- **Emerging destinations:** Benin, Ethiopia, Ghana, Madagascar, Malawi, Mozambique, Rwanda, Uganda, and Zambia.
- **Destinations repositioning due to political difficulties and the challenges of charter tourism operation:** The Gambia, Kenya, Senegal, and Zimbabwe.
- **Destinations with potential:** Cameroon, Gabon, Guinea-Bissau, Lesotho, Malawi, São Tomé and Príncipe, Swaziland.
- **Destinations not currently viable:** Burkina Faso, Burundi, Central Africa Republic, Chad, Comoros, Democratic Republic of Congo, Congo, Côte d’Ivoire, Equatorial Guinea, Eritrea, Guinea, Liberia, Mali, Mauritania, Niger, Nigeria, Togo, Sierra Leone, Somalia, and Sudan.

But those ratings are for tourism, and countries now rated unviable are all candidates for stepped up business travel, given the region’s enormous economic potential.

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**Map 1 Relative potential of tour destinations**

- High-performing tour destinations
- Emerging tour destinations
- Re-positioning tour destinations
- Destinations with potential
- Destinations not currently viable

*Source: Twining-Ward 2010*
Integrating with infrastructure and ICTs

What will all this take? Leadership and commitment to integrate the region’s economies.

One African Economy. That has been a goal of the African Union since the inception of the Organization for African Unity in 1963, and it will be at the core of the African Union’s African Vision 2063—for the continent to join the ranks of emerging economies by adding value to natural resources and increasing trade among African countries.

The region’s economic communities promote cooperation and trade, with less than stellar results. The share of intraregional trade in import of goods is about 5% in the Common Market for Eastern and Southern Africa and 10% in the Economic Community of West African States. Compare that with 55% for the North American Free Trade Agreement and 60% for the European Union. (Much intra-African trade today goes unrecorded.)

**Regional infrastructure**

The AU’s Program for Infrastructure Development in Africa should give regional integration a boost. It brings together many disparate initiatives into a single coherent program covering transport, energy, water (transboundary), and information and communications technologies. Its capital cost through 2020 is estimated at almost $68 billion, with around 95% for energy and transport.

That will help reduce the costs of trading, which in Africa are the world’s highest. Exporting a container costs $1,960 ($890 in East Asia and $1,228 in Latin America), and importing one $2,492 ($935 in East Asia and $1,488 in Latin America).

How can regional transport infrastructure be financed? Loans from the African Development Bank will help but be only a small part of the long-term debt financing that African countries, the main sources of finance, will have to marshal.

- **Infrastructure bonds.** South Africa is financing turnpikes with infrastructure bonds. Kenya is doing the same for road projects, such as the 12-lane superhighway between Thika and Nairobi.
- **Loan guarantees.** To finance a turnpike between Johannesburg and Maputo, South Africa, working with its Development Bank, found investors willing to put in finance, but only with guarantees. So the government issued subordinated debt to reduce the risk to private investors. The result: the country’s first public-private partnership.
- **Regional financing.** Regional economic communities can also contribute, as with the ECOWAS excise tax of 0.25%, which generates an annual revenue stream for a general fund, some of which could go for regional infrastructure.

But before projects can move forward, they have to be planned and prepared, and that requires funding averaging roughly 7% of project costs, or $400–$500 million a year on average to 2020. Without such funding, big projects will be delayed. A range of

**Slashing transport costs, boosting intra-African trade**

Transport volumes will increase 6–8 times, with a particularly strong increase of up to 14 times for some landlocked countries. Port throughput will rise from 265 million tons in 2009, to more than 2 billion tons in 2040. Transport efficiency gains will be at least $172 billion in the Africa Regional Transport Integration Network, with the potential for much larger savings as trade corridors open.
project preparation facilities could be bundled into a single “tunnel of funds” to speed the pipeline of bankable projects.

**Regional ICT systems**

Also needed is reducing the time and trouble of trading, notoriously high in Africa. It takes more than 32 days to export a consignment in Africa (23 in East Asia), and more than 48 to import (24 in East Asia). And all these numbers are averages, with some countries far above them.

Here is where ICTs can help. As the figure shows, cross-border trade is complicated with many players. Suppliers and buyers have to deal with four agencies—the traditional ones for customs, immigration, quarantine, and security and perhaps with the authorities and ports and airports. Then there are the freight forwarders, banks, insurance companies, and other businesses for legal and accounting services.

To make things easier for traders, many countries are moving to single windows and automating customs to speed clearance and transit. Kenya, Mauritius, Senegal, and South Africa have tailored systems to do this, and more than 30 others use the United Nations Conference on Trade and Development’s off-the-shelf system.

Having information online for the movement of trucks, goods, people, and money cuts back on times at checkpoints (and even on the need for checkpoints) and on the opportunities for bribes. Digitally recorded transactions reduce the need for paper forms, data checks, and transactions with officials. Mobile phones can be used to pay some fees.

With trade so complex, developing single windows naturally takes time, progressing through many small steps. Kenya, having integrated some of its customs processing, formed Ketrade to begin assembling its single window. It is looking through that window for similar windows across its borders and through its ports.

Integrated cross-border management systems can coordinate the work of agencies on both sides of the border. But that requires sharing data under bilateral agreements (or perhaps multilateral in regional economic communities). And that will take time, as such complex information tracking systems are put in place step by step.

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**Figure 8** Why cross-border trade is so complicated

Who’s here, who’s not, why not?

Many global companies are already in Africa, and more are set to come.

It seems that every month brings a new report about the surge in investor interest in Africa. But is this translating into real investment on the ground? Focusing on manufacturing as part of analytical work for the *African Transformation Report*, ACET is assessing 200 global manufacturing firms to find out whether and where they have operations in Africa and what their plans are for future operations.

As part of that work, we looked at the top 180 global manufacturing firms that have manufacturing plants in countries other than their home country (that is, global manufacturing FDI companies); companies in manufacturing subsectors that we think could play an important role in Africa’s transformation. We then asked: how many manufacturing plants do these companies have in ACET and comparator countries and in which subsector?

Admittedly, one expects a greater number of plants in larger economies, but even accounting for that, the differences between Africa and other regions—and among African countries—are striking.

**Stars of FDI in manufacturing**

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**Beer, not Deere**

Manufacturing has proven to be a critical contributor to successful economic transformation in countries such as Malaysia, Singapore, Thailand, and Vietnam. Is this a viable option for Sub-Saharan Africa? It depends on who you ask.

In 1963 the first Guinness brewery outside of Ireland was built in Lagos, Nigeria. Today, Diageo brands are sold in 40 African countries, growing from that 1 brewery in Nigeria to 15 across Africa in addition to brewing beer with third-party operators in 16 other African countries. It owns 15 bottling plants, a glass manufacturing facility, and one malting facility—directly employing 5,300 people.

And while it may be more costly to produce Guinness in Nigeria than in Ireland, the return on investment is still higher than anywhere else.

Contrast that with John Deere, the international manufacturer of agricultural, construction, and forestry equipment, with more than 100 manufacturing facilities across the globe—but none in Sub-Saharan Africa. One of the major reasons: lack of an educated workforce, resulting in low productivity and uncompetitively high labor costs. Unlike the relatively simple process of brewing beer, assembling Deere equipment is demanding and highly sophisticated. It still costs less to import Deere products into Africa from its facilities in Mexico, the United States, and elsewhere.

As its sales continue to increase in the region, Deere hopes to one day open a manufacturing facility closer to the market, and it continues to encourage African leaders to focus on supporting and investing in education, following the example of India. Until then, it is expanding its sales and marketing capabilities on the continent. Working with the more than 4,000 employees in its African dealer network, it is providing training and resources to increase their technical capabilities in order to better support products, dealers, and customers.
ACET research

Country studies
- Botswana
- Burkina Faso
- Cameroon
- Ghana
- Ethiopia
- Kenya
- Mauritius
- Mozambique
- Nigeria
- Rwanda
- Senegal
- South Africa
- Tanzania
- Uganda
- Zambia

Sector studies

Agroprocessing opportunities
- Palm oil
- Cocoa
- Cotton
- Soybean
- Fruit
- Dairy
- Sugar cane
- Coffee
- Rice

Extractive industries
- Debswana’s HR development policy: a De Beers and Botswana partnership
- Trinidad & Tobago’s value-addition using gas resources
- Ghana’s mineral sector
- Ghana’s petroleum sector
- Uganda’s petroleum sector
- The exceptionality of Botswana: economics, politics, and challenges
- The global economic crises, funding public services in Africa, and concessions in the mining sector in Zambia
- Policy, legal, and institutional challenges of local content in Nigeria and South Africa
- Comparison of the Malaysian and South African domestic markets

Other sectors
- Building a competitive textiles industry: what African economies can learn from Mauritius
- Opportunities in the textile industry for transforming African economies
- Agricultural supply chains: market structure, farm constraints, and grassroots institutions
- Promoting sustainable development and transformation in rural Africa
- Value for money in financing agriculture
- Market competition in export cash crops and farm income in Africa
- Tourism in Africa
- Preferential trade agreements, employment, and productivity: evaluating the impacts of AGOA and its apparel provisions on African firms

Studies of transformation drivers
- Promoting exports: what worked and its relevance to African transformation
- FDI inflows in Africa: trends, sources, and sector distribution
- Innovative financing for infrastructure in low income countries: how the G20 might help
- Lessons from the East Asian and European experience for skills development in African countries
- Skills development for economic transformation in Africa
ACET’s analysis, advice, and advocacy

Analysis

In research, ACET seeks to investigate the drivers of economic transformation; examine the progress, platform, and prospects for transformation for African countries; and identify each country’s most promising pathways to transformation. Occasionally, we conduct special studies on current topics with impending impact on Africa’s transformation prospects, such as China’s activities on the continent. We draw our insights from existing knowledge and, where gaps exist, from our own investigations. Our African Transformation Index is meant to provide a common quantitative tool to measure the progress of countries. In our effort to foster intra-African learning, most of our research aims to map the African landscape on key policy issues, to identify best practice in Africa and around the world.

Advice

When governments share their goals and realities with us, we work together with them to chart a course and set priorities to drive transformation. Through our research we are building expertise in that unique approach to analyzing countries. But without the right structures, no strategy can be implemented, so a fundamental aspect of our advisory work is to assist governments in developing institutional arrangements for coordinating policy, managing public finances and delivering on goals. In a little over four years we have supported the governments of Ghana, Liberia, Mozambique, Rwanda, and Sierra Leone in various areas, including merging two ministries, reviewing a national development planning body, and helping formulate petroleum policy.

Advocacy

We push on several fronts for our analytical insights to be used by policymakers, businesses, and other key actors to make transformation happen. Through our Transformation Dialogues we share our findings with stakeholders at the global, regional, and country levels for debate, feedback, refinement, and implementation. And our research studies form the basis for industry-level engagements with key private sector players and policymakers to turn those opportunities into reality. As an honest broker, we will continue to facilitate dialogues to make government policy informed by business realities and industry, in turn, play a conscious role as an agent of transformation.
The African Center for Economic Transformation is an Accra-based economic policy institute supporting Africa’s long-term growth through transformation.

The 2013 African Transformation Report, set for release in October, draws on our comprehensive research program of country, sector, and thematic studies to look systematically at transformation as a broad framework for economic growth and development.

To help African policymakers see how they’re transforming and where they stand in relation to their neighbors, the report introduces the African Transformation Index, which measures five attributes of transformation: diversification, export competitiveness, productivity, technology, and human well-being.

Transformation can thus be seen as growth with depth.

The highlights in this preview give a sense of the structure and contents of the full report.