

AFRICA 2050

Competitiveness, Productivity and Growth



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AFRICA 2050

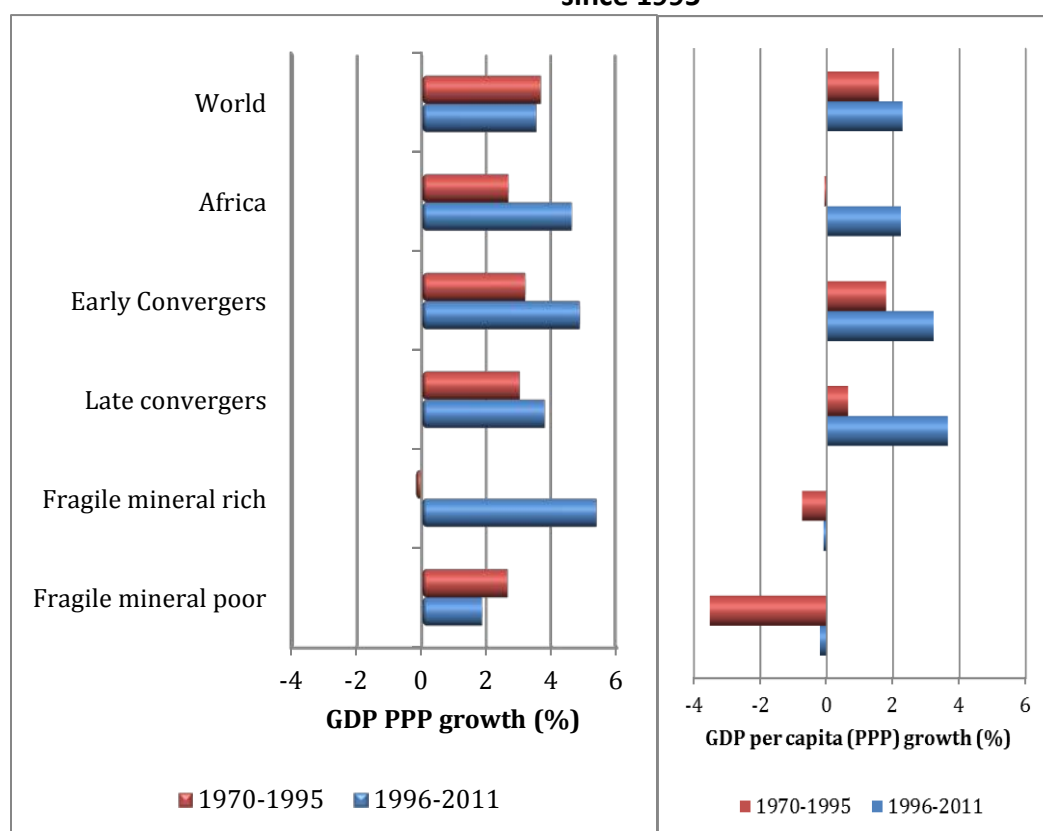
Competitiveness, Productivity and Growth

Anil Sood and Anupam Basu¹

Context

African economies have enjoyed higher growth rates since 1995 and also been relatively resilient to the 2008 crisis. Growth rates pre- and post-1995 illustrate the acceleration (Figure 1). The acceleration in growth results from high global demand for the continent's natural resources, from efforts on the macroeconomic front and from fundamental reforms; foreign aid inflows and concessional debt relief (including debt forgiveness) played an important role in supporting the reform efforts. African economies' resilience to the latest global crisis, while positive, also reflects limited integration with the global economy, particularly in the financial sector. Though the performance with respect to GDP per capita has been less positive due to the relatively high rates of population growth, GDP per capita grew at over 2%, double the rate of the previous 15 years (Figure 1).

Figure 1: Africa is growing faster and GDP per capita growth has kept pace with the world since 1995



Source: Centennial Group International

¹ Additional contributions made by Jose Fajgenbaum, Herve Ferhani and Kendra White are gratefully acknowledged by the authors.

Growth remains vulnerable. A proportion of the recent growth is explained by the high global demand for Africa's natural resources and related commodity price increases. By some estimates, one-quarter of the growth in GDP in Africa is attributable to changes in commodity prices/terms of trade. In light of the concentration of Africa's exports in commodities, such growth remains vulnerable to downtrends in demand and prices; a decline in terms of trade of 10 percent would entail a decline in GDP of 2 percent.

Africa faces a daunting challenge on the jobs front. If African countries are to turn their population growth into a demographic dividend and maintain social cohesion, they must prepare to create a very large number of jobs. Between 2010 and 2050 Africa's working age population (20 – 64 years) is expected to increase from 465.5 million to 1.097 billion (under the low variant scenario of the UN's population projections); the corresponding 2050 forecasts of the working age group for the medium and high variant population projections are 1.117 billion and 1.249 billion, respectively. These projections suggest that between 2010 and 2050 the number of new job seekers per year will vary from almost 16 million under the low variant to almost 20 million under the high variant of the UN population projections (compared to 14 million today). As in other parts of the world, 9 out of every 10 jobs in Africa are in the private sector. Accordingly, such job creation requires, inter alia, a vibrant private sector growing at sustained high rates.

The jobs challenge combined with vulnerability makes it vital for African countries to pursue job-intensive diversification of their economies based on improved global competitiveness. This makes it vital to continue efforts to transform and diversify African economies well beyond commodities into high productivity, job-intensive activities such as agro-processing, manufacturing and a wide range of services. High growth would need to be sustained by increased exports based on improvements in global competitiveness and productivity.

Current Status: Economic Structure, Employment, Competitiveness and Productivity

Past reforms in African countries have focused on removing barriers to market competition and private sector development; however, much more needs to be done to engage the private sector as the primary engine of growth. Although the private sector accounts for a dominant share of GDP, aggregate domestic demand and employment, it remains underdeveloped in many respects. Micro, small and medium-size enterprises (MSMEs) account for most of the private sector enterprises and employment, with most workers in low productivity non-wage jobs and informal employment. The transition from agriculture to other sectors, especially job-intensive manufacturing and in general, from low-productivity to higher productivity firms and value-added activities is far from complete. Africa ranks very low on most global competitiveness indicators, and despite recent improvements, total factor productivity is low relative to other regions. As a result, Africa's export structure is concentrated in a few primary products, and its share of global exports has remained low (more so if fuel exports are excluded).

Economic structure

Past reforms have helped many African countries remove barriers to market competition and to private sector development. Reforms have included: restructuring and privatizing public enterprises; removal of price controls; elimination of exchange controls; reduction of import tariffs and non-tariff barriers; and removal of selective controls on bank credit and interest rates. In addition, many countries have undertaken reforms to improve the business environment and the investment climate, all with the basic objective to enhance the role of private sector participation in the economy.

The private sector in Africa today is relatively large (IZA 2011). The private sector accounts for about two-thirds of total investment and four-fifths of total consumption. Its share of aggregate domestic demand is substantial in both North Africa (58 percent) and Sub-Saharan Africa (69 percent). However, in both regions the ratios of private sector demand to GDP have been declining as government expenditures have been increasing. The private sector also accounts for three-quarters of total domestic bank credit and 90 percent of total employment.

Micro, small and medium size enterprises (MSMEs) account for a predominant share of private sector firms, up to 90 percent of all businesses in Sub-Saharan Africa.² The vast majority of the MSMEs (90 percent) are micro enterprises (MEs, employing 1-9 employees), operating mainly in the informal sector (Fjose, Grunfeld and Green 2010). Hence, small and medium enterprises (SMEs employing 10-250 employees) account for a relatively small share of all MSMEs in number, although this share is relatively large in Ghana and Tunisia (Fjose, Grunfeld and Green 2010). Unlike the micro-enterprises, the SMEs operate in the formal sector.

In most countries in Africa the transition from agriculture to other sectors, typical of most other regions, is far from complete. The share of agricultural value-added, after dropping in the 1970s and 1980s, has held steady since 1995 at around 16% of GDP (using constant 2005 prices). Since 1995, mining and utilities' share of GDP has increased sharply, reflecting to a large extent increases in world fuel prices. The share of value-added by the manufacturing sector (potentially labor-intensive) has dropped to 10 percent and is well below the share in Latin America and, particularly, developing Asia (Table 1); manufacturing has contributed little to job creation. The share of the services sector has increased noticeably compared to 1980 and is approaching that in developing Asia. The sector has been the main source of both new employment and gains in labor productivity.

² IFC web site: "SME Initiatives – Creating Opportunity where its needed."

Table 1: Sectoral value-added contributions to nominal GDP (%)

Sectoral value-added contributions to nominal GDP (%)	Africa					Latin America	Developing Asia
	1970	1980	1995	2000	2010	2010	2010
Agriculture, hunting, forestry, fishing	25.1	19.1	16.5	15.2	16.0	5.7	10.1
Industry	30.7	42.2	32.7	35.5	38.4	32.6	41.3
Mining, manufacturing, utilities	25.8	36.5	28.3	31.3	33.3	26.2	35.2
Manufacturing	13.8	12.5	14.7	12.8	10.0	16.1	24.6
Mining & Utilities	12.0	24.0	13.7	18.6	23.2	10.1	10.6
Construction	4.9	5.7	4.3	4.2	5.1	6.4	6.1
Services	44.2	38.7	50.8	49.2	45.6	61.7	48.6

Source: UNCTADstat

Employment

Labor force participation rates have remained stagnant in both North Africa and SSA, with a small increase in the female participation rate and a modest decline in the male participation rate. Table 2 shows trends in labor participation rates and unemployment statistics within North Africa and Sub-Saharan Africa, comparing their status in 2010 with East Asia and Latin America. Overall the male participation rate (75.6%) is substantially higher than the female participation rate (55%), and this reflects the striking gap in North Africa (74.1% vs. 24%).

Table 2: Participation rates are low and unemployment high for females in North Africa

	North Africa		Sub-Saharan Africa		East Asia	Latin America & Caribbean
	1995	2010	1995	2010	2010	2010
Labor Force Participation (%)						
Overall	48.5	48.8	69.6	70.2	72.5	66.2
Male	75.3	74.1	78.2	76.1	79.2	79.8
Female	21.9	24.0	61.2	64.4	65.6	53.2
Unemployment						
Total	13.8	9.6	7.9	7.6	4.2	7.2
Male	11.4	7.4	7.3	7.1	4.8	5.9
Female	22.0	16.4	8.7	8.0	3.5	9.1
Youth	29.4	23.1	12.4	11.4	8.9	14.5
Male	25.6	18.5	11.4	10.8	10.5	11.9
Female	39.2	34.4	13.5	12.2	7.2	18.5

Source: World Development Report 2013

The unemployment rate has declined noticeably in North Africa (from 13.8% in 1995 to 9.6% in 2010). The unemployment rate remains much higher among women than men in North Africa (16.4% vs. 7.4% in 2010).

Youth unemployment rates in North Africa (23%) and SSA (11.4%) are higher than the overall unemployment rates in the two regions. These unemployment rates are higher for women than for men in both regions. These disparities are more substantial in North Africa—34.4% for women vs. 18.5% for men —and may reflect in part the higher per capita incomes and safety nets than in SSA.

The combined share of wage and salaried workers and employers in total employment has been rising. Stable, wage-paying jobs account for a predominant share of employment in North Africa (62%). In contrast, in SSA the share of vulnerable employment (comprising own-account workers and family workers) remains very high (77%) (Table 3). A large part of the vulnerable employment is informal employment, which exists in both the informal and formal sectors.

Table 3: Three-quarters of employment in SSA is vulnerable employment

	North Africa		Sub-Saharan Africa		East Asia	Latin America & Caribbean
Status in Employment	1995	2010	1995	2010	2010	2010
Wage & salaried workers (employees) (%)	47.2	52.1	17.5	21.7	35.4	63.5
Employers (%)	10.3	10.1	1.1	1.4	2.3	4.6
Share of vulnerable employment in total employment (%)	42.6	37.7	81.4	77.0	62.2	31.9

Source: World Development Report 2013

Small and medium enterprises (SMEs) account for a substantial share of total employment in African countries, although the share varies widely across countries. The average share of SMEs in total employment is above 50 percent, with much higher shares in some countries, e.g., Egypt, Ghana and Kenya. The average share among the “early convergers” is about 34 percent compared 19 percent for the countries classified as “late convergers and fragile”;³ South Africa is an outlier at 82%. Workers in SMEs also represent a significant share of the total formal labor force in manufacturing.

In Sub-Saharan Africa (SSA), informal non-farm enterprises (NFEs), which include household enterprises (HEs) and micro enterprises (MEs), account for a significant share of the total labor force (28 percent) (Foxx and Sohnesen 2012). The share of informal employment in total non-agricultural employment is quite large (58 percent on average). It varies widely, between

³ The convergence scenario modeled in the Africa 2050 study classifies 19 African countries as “early convergers” based on their GDP and TFP growth, 15 as “late convergers”, and 20 as “fragile.”

33 percent in South Africa and almost 82 percent in Mali within the sample of eleven countries for which data are available.⁴

Overall the share of the primary sector in total employment has been declining gradually, while the employment shares of the secondary and tertiary sectors have been rising. Agriculture accounts for the largest share of employment in SSA at 62% while in North Africa this share is about 28%. The secondary sector accounts for the lowest employment share in both North Africa (22%) and SSA (8.5%). The tertiary sector's employment share rose in both regions, but more markedly in SSA. In North Africa where this share has remained virtually stagnant, it still accounts for about half the total employment (Table 4).

Table 4: The share of industry and services in employment remains very low in SSA

	North Africa		Sub-Saharan Africa		East Asia	Latin America & Caribbean
	1995	2010	1995	2010	2010	2010
Sectoral shares in Total Employment						
Agriculture	33.1	28.4	67.2	61.9	35.0	16.2
Industry	19.2	21.7	8.0	8.5	28.7	22.2
Services	47.7	49.9	24.7	29.6	36.4	61.6

Source: World Development Report 2013

Overall labor productivity has increased over the past decade in both SSA and North Africa, with the agriculture and services sectors contributing to the increase.⁵ In both regions the improvement in agricultural productivity has been sustained for a longer period compared to other sectors. Labor productivity in industry has fallen over the past fifteen years in both regions.

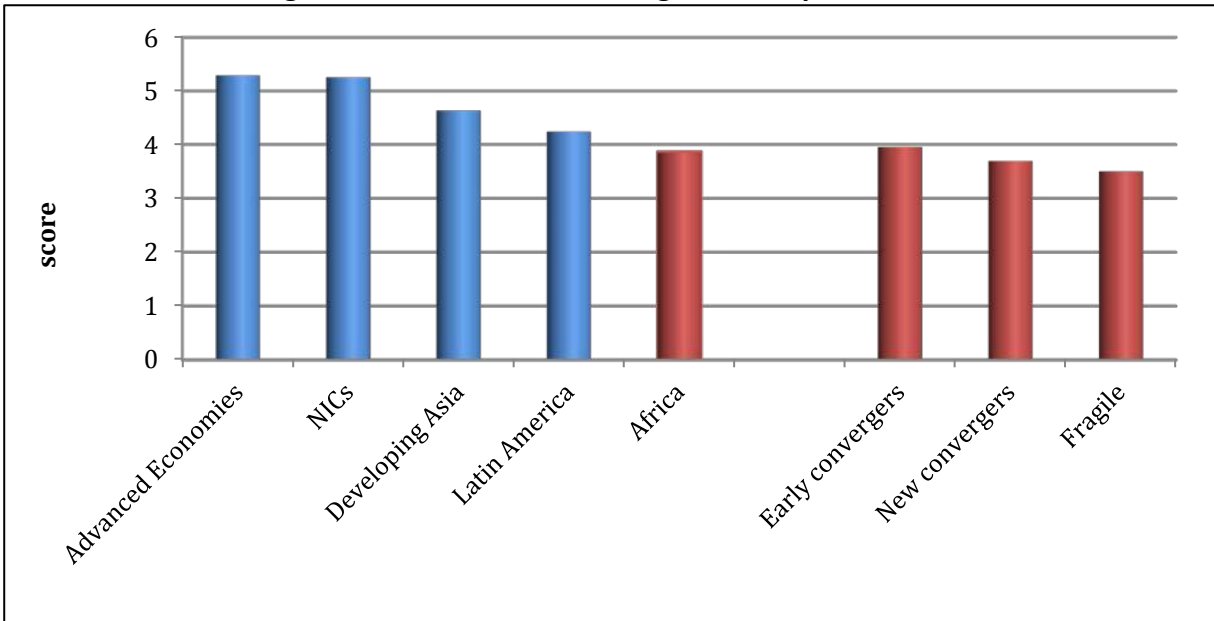
Global competitiveness

With the exception of very few countries, the continent ranks very low on global competitiveness compared to all other regions. In the often-cited Global Competitiveness Index (2012), no African country ranks in the top 50; South Africa (52), Mauritius (54), Rwanda (63), and Morocco (70), rank in the top 50th percentile. The vast majority of African countries rank at the very bottom of the many indices related to competitiveness (Figure 2).

⁴ ILO database estimates.

⁶ Reform and regional integration of professional services in East Africa: Time for Action Report 57672-AFR, World Bank.

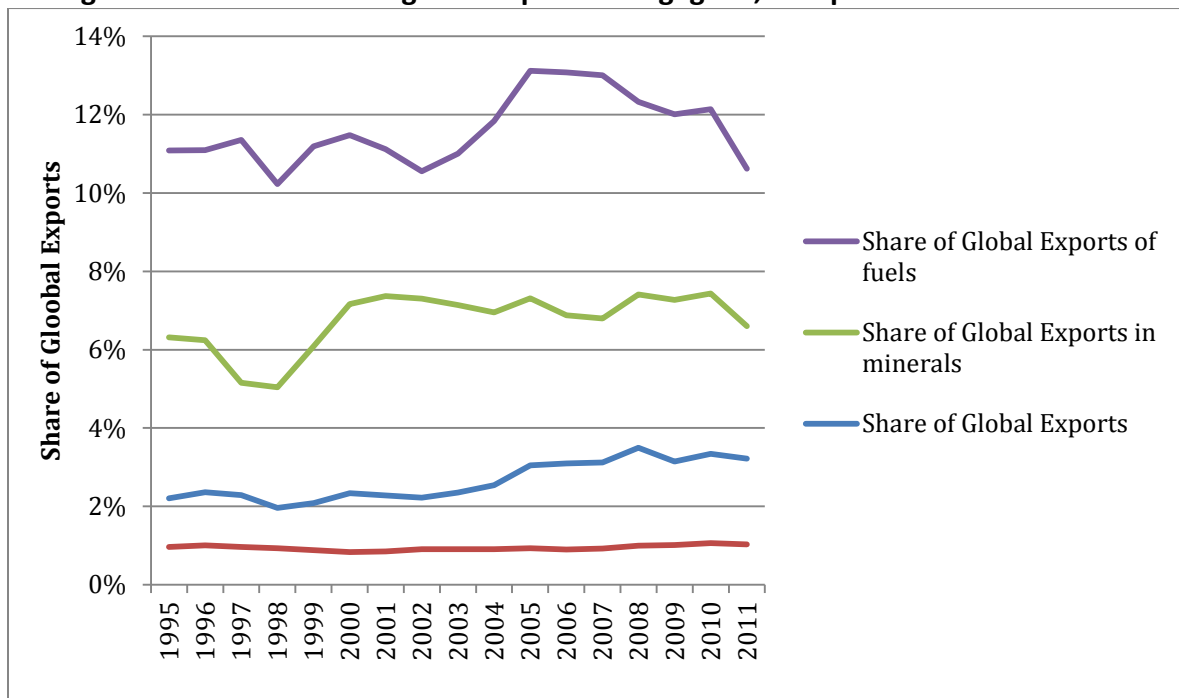
Figure 2: Africa scores low on global competitiveness



Source: Africa Competitiveness Report

The lagging competitiveness of African economies is also reflected in Africa's trade performance. Africa's exports are concentrated in oil, minerals and, to a lesser extent, agricultural commodities. Its overall share of global exports has risen somewhat in the last decade, but it remains very low at around 1% if fuel, minerals and other primary commodities are excluded (Figure 3).

Figure 3: Africa's share of global exports is negligible, except in fuels and minerals

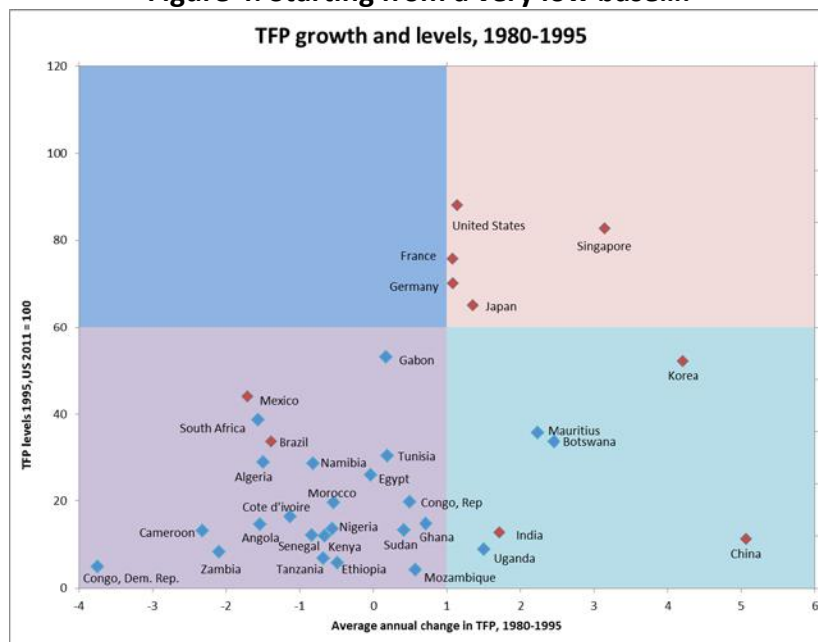


Source: UNCTAD

Total Factor Productivity

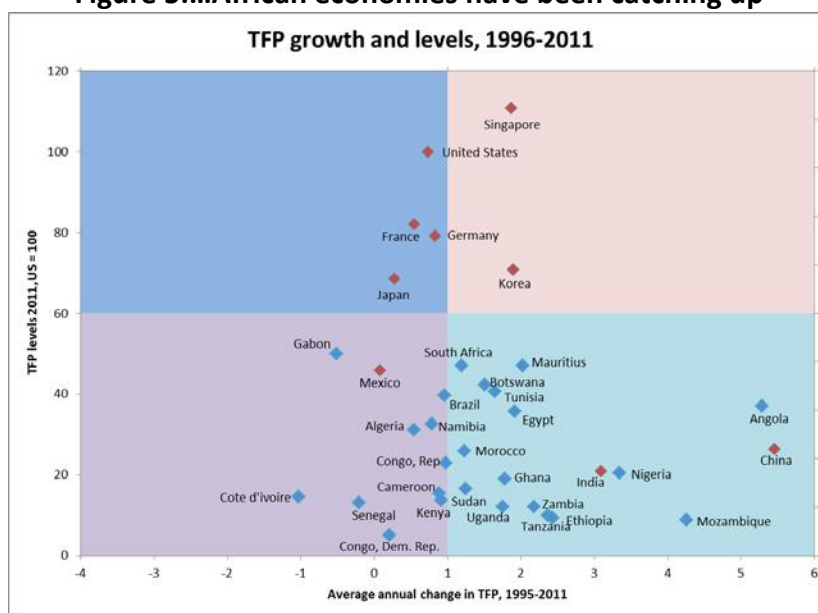
Africa's performance with respect to total factor productivity (TFP) – a key determinant of competitiveness – has improved in recent years, but there is a long way to go. TFP level/growth rate performance of African economies also shows marked progress since 1995 as reflected in the movement of most African countries between Figures 4 and 5. Though improving, the level of TFP in African economies is very low – again with the exception of a handful of countries.

Figure 4: Starting from a very low base....



Source: Centennial Group International

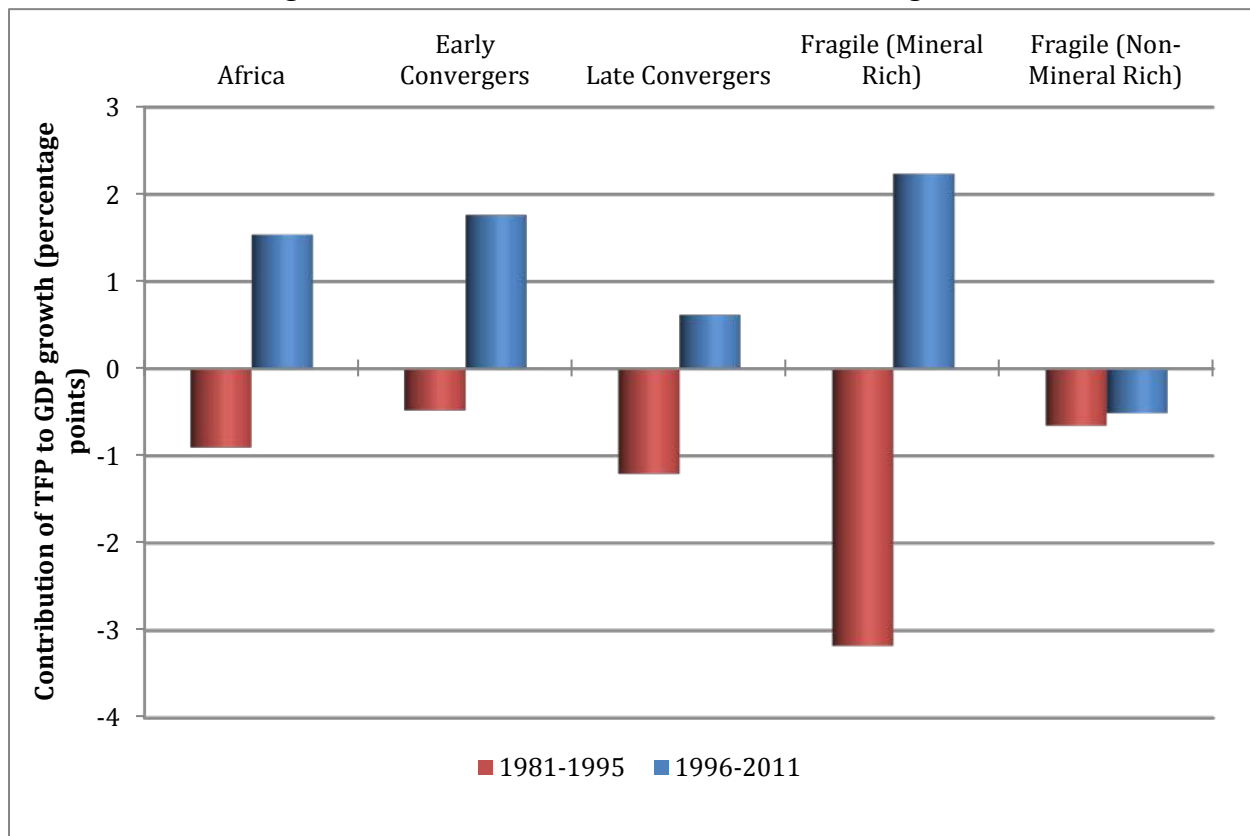
Figure 5:...African economies have been catching up



Source: Centennial Group International

TFP growth now contributes significantly to GDP growth in Africa. While TFP performance detracted from growth in the 1980-1995 period, it has accounted for more than one-third of the growth since. TFP contribution differs by country category (Figure 6). At the positive end, TFP contributed close to 40% of the growth performance of early convergers post-1995. At the other end TFP contribution remains negative in the fragile states without mineral resources.

Figure 6: TFP contributes over a third of Africa's growth



Source: Centennial Group International

Factors Underlying Africa's Competitiveness, Productivity and Growth

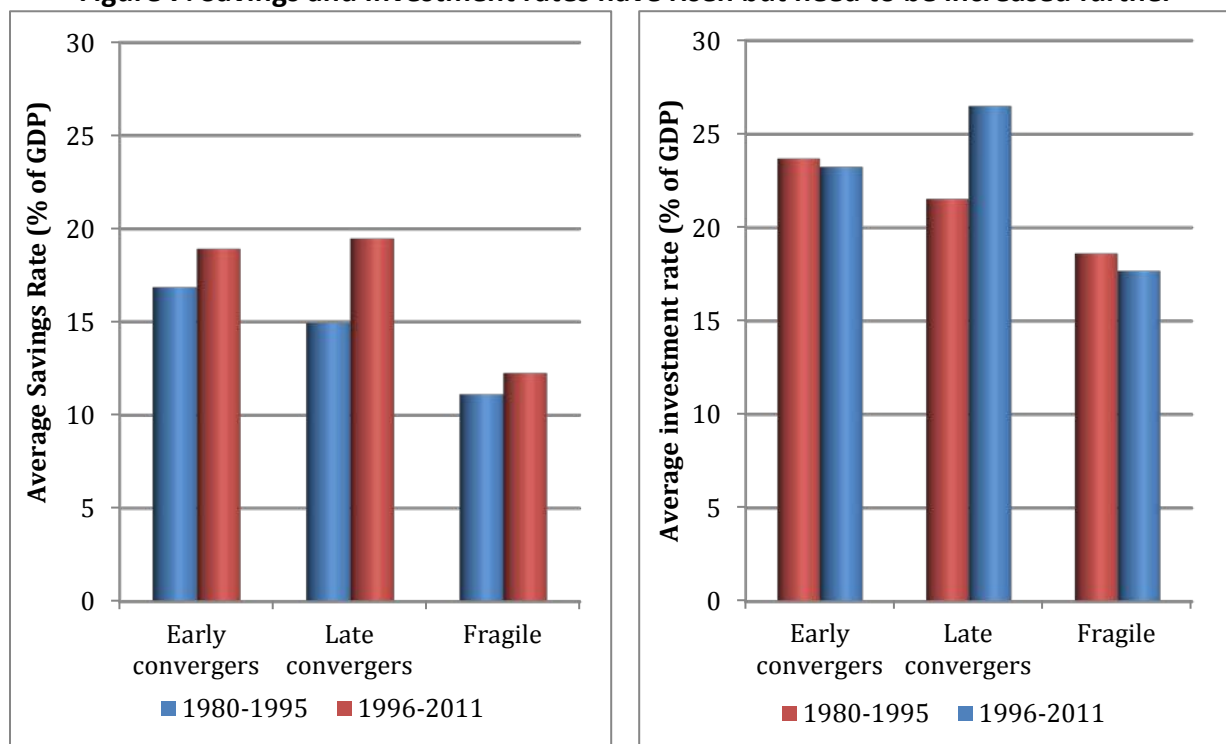
The major factors that underpin competitiveness, productivity and resulting growth fall under two broad categories—the climate for investment and the needed skills/human capital. The determinants of the investment climate include the macroeconomic environment, prevalence of competition, needed infrastructure, access to finance, business environment and, importantly, governance including rule of law. Skills and human capital matched to the requirements of the economy are of course fundamental, including for growth in productive jobs.

These topics are briefly discussed below with some (e.g., infrastructure, human capital and governance) treated in greater depth in papers dedicated to them.

Macroeconomic environment

Improved policies and reforms have led to macro stability in a number of countries but high investment requirements pose a challenge. More sustainable fiscal policies, controlled inflation and better-managed debt have contributed to macro stability in many African economies. Savings and investment rates have improved over the past ten years, though even higher savings rates are required for long term growth. The investment rate fluctuated around 20 percent of GDP during 1980-2011, and it has risen to about 23 percent since 2007 (Figure 7). While these ratios are similar to those seen in Latin America, they are significantly lower than the average in emerging markets, and far lower than the average in fast-growing developing Asia. Savings rates have generally fallen short of investment, fluctuating around 20 percent in recent years. Again, these rates are below the emerging markets' average and should be increased to help ensure sustained long-term growth. The investment-savings gaps, particularly the underlying fiscal deficits, were financed by substantial foreign aid inflows and debt relief (including debt reduction under the HIPC initiative and debt forgiveness under the MDRI).

Figure 7: Savings and Investment rates have risen but need to be increased further



Source: IMF World Economic Outlook

Competition and trade

African enterprises face little competition. Lack of competition is evident in the gap between Africa and the advanced economies across a number of indicators of market competition—intensity of local competition, extent of market dominance and effectiveness of anti-monopoly policies. Africa's scores on all three indicators are and remain noticeably lower (Table 5). Facing

very little competition African enterprises lack the impetus for raising productivity and competitiveness.

Table 5: Selected indicators of market competition

	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013
Intensity of local competition							
Advanced economies	5.5	5.6	5.6	5.5	5.5	5.5	5.5
Africa	4.1	4.3	4.5	4.5	4.5	4.4	4.3
Extent of market dominance							
Advanced economies	5.0	5.1	5.1	4.9	4.7	4.7	4.7
Africa	3.3	3.3	3.4	3.5	3.5	3.5	3.5
Effectiveness of anti-monopoly policies							
Advanced economies	5.3	5.3	5.2	5.1	5.0	4.9	4.8
Africa	4.0	4.0	4.0	4.1	4.1	4.1	4.1

Source: World Economic Forum 2013

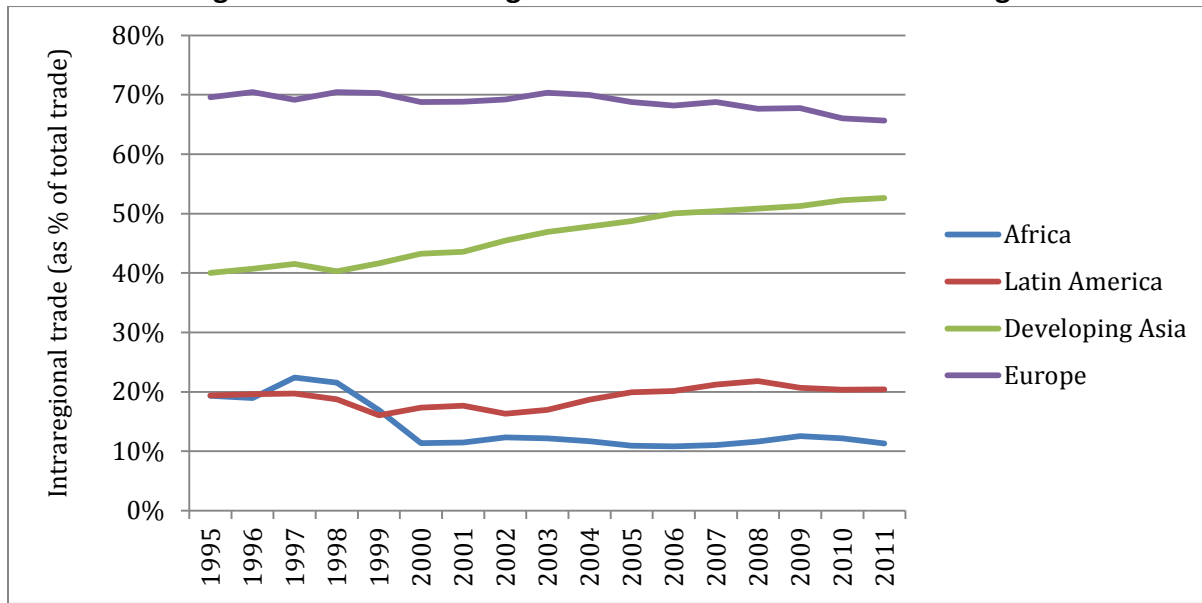
With the exception of a handful of countries, Africa's economies, and thus national markets, are small. The cost of trading across borders in Sub-Saharan Africa (SSA) is higher than in any other region across most of the indicators shown below (Table 6). The high costs reflect both gaps in infrastructure and the inadequate state of trade facilitation services. "Thick borders" and high costs of trading between countries result in very limited intra-Africa trade, which has fallen from a peak of over 20% and now stands at 11.3%. This is a little over half of the level in Latin America (20.4%) and less than a quarter of that in developing Asia (52.6%)(Figure 8).

Table 6: Africa has "thick borders": Cost of trading across borders is high

	Documents to export (number)	Time to export (days)	Cost to export (US\$ per container)	Documents to import (number)	Time to import (days)	Cost to import (US\$ per container)
East Asia & Pacific	6	21	923	7	22	958
Eastern Europe & Central Asia	7	26	2134	8	29	2349
Latin America & Caribbean	6	17	1268	7	19	1612
Middle East & North Africa	6	19	1083	8	22	1275
OECD high income	4	10	1028	5	10	1080
South Asia	8	32	1603	9	33	1736
Sub-Saharan Africa	8	31	1990	9	37	2567
North Africa	7	13	809	8	18	973

Source: Doing Business 2013

Figure 8: African intraregional trade is below that of other regions



Source: UNCTAD

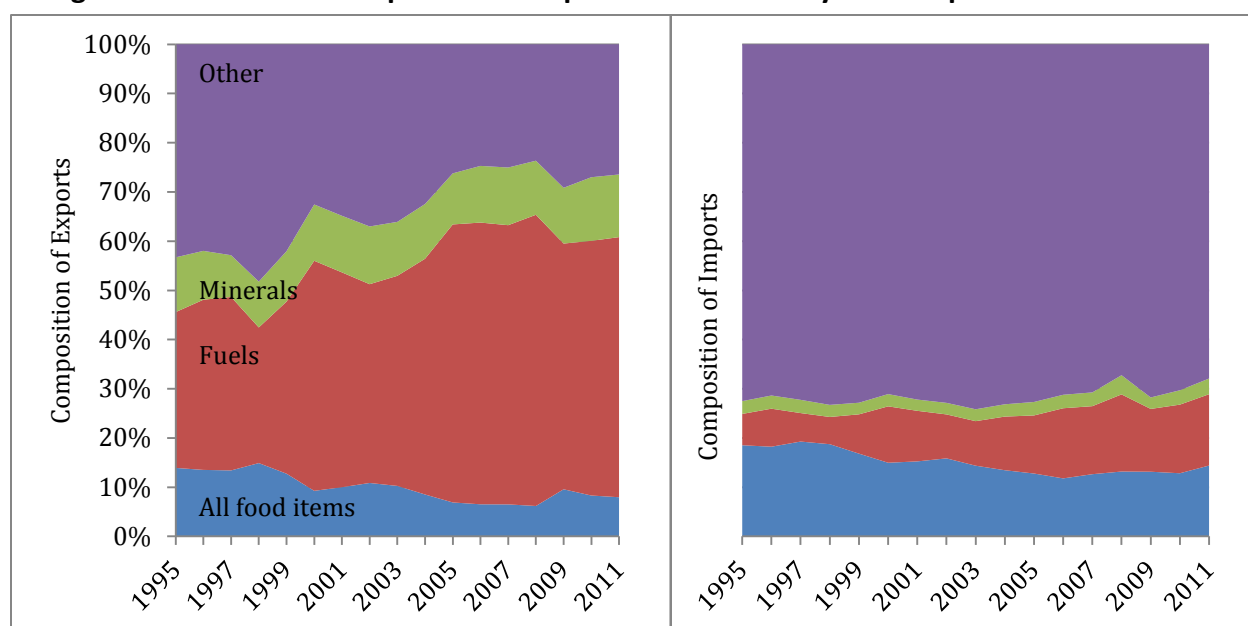
Competition is undermined also by domestic entry and other regulations. The professional services sector in East Africa⁶ offers an example of a number of regulations, restrictions and constraints imposed by the countries in the region. Professional services are associated with higher labor productivity, lower transaction costs and improved production processes. But there is a large gap between the potential contribution these services could make and the small contribution they make today in Africa. National markets for professionals and professional services in East Africa remain underdeveloped, whereas regional markets are fragmented by restrictive policies and regulatory heterogeneity. Kenya, Tanzania and Uganda all impose severe entry restrictions on engineering and legal services. Licensing and qualification requirements inhibit competition. Operational regulations (fees, advertising, etc.) also undermine the growth of a strong professional services sector.

The pattern of trade also means that African enterprises face competition in export markets mostly with respect to commodities. Africa's exports have been concentrated in commodities, while its imports show the reverse pattern with a concentration in manufactures (Figure 9). The share of exports of fuels and minerals in total exports has risen sharply since 1995. The pattern of exports is also reflected in Africa's export concentration index, which is higher than any other region, particularly for oil-rich economies (Table 7).⁷ As discussed earlier, an export structure concentrated in a few commodities means that African economies are highly vulnerable to external shocks originating from global commodity markets.

⁶ Reform and regional integration of professional services in East Africa: Time for Action Report 57672-AFR, World Bank.

⁷ The Herfindahl-Hirschmann index has been used to measure export concentration; its value varies between 0 and 1 (maximum concentration).

Figure 9: Africa faces competition in export markets mostly with respect to commodities



Source: UNCTAD

Table 7: Africa's exports are concentrated in a small number of products and a small number of trading partners

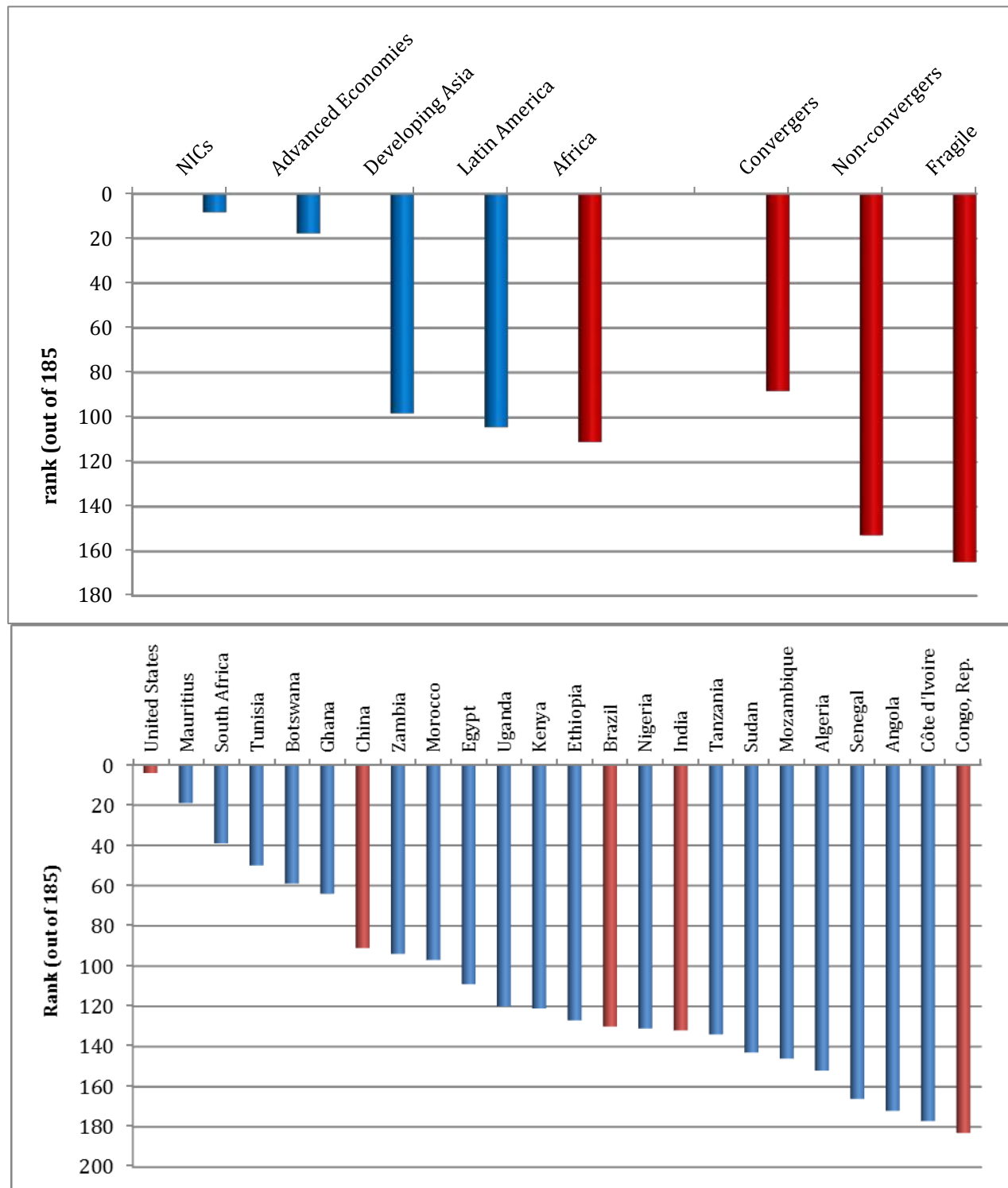
Export Concentration Index	1995	2000	2005	2010	2011
World	0.05	0.07	0.08	0.08	0.08
Developed economies	0.06	0.07	0.07	0.06	0.06
Transition economies	0.18	0.22	0.29	0.32	0.34
Developing economies	0.09	0.13	0.14	0.13	0.13
Africa	0.24	0.33	0.44	0.39	0.41
Latin America	0.09	0.11	0.12	0.13	0.14
Developing Asia	0.09	0.13	0.13	0.12	0.12

Source: UNCTAD

Business environment

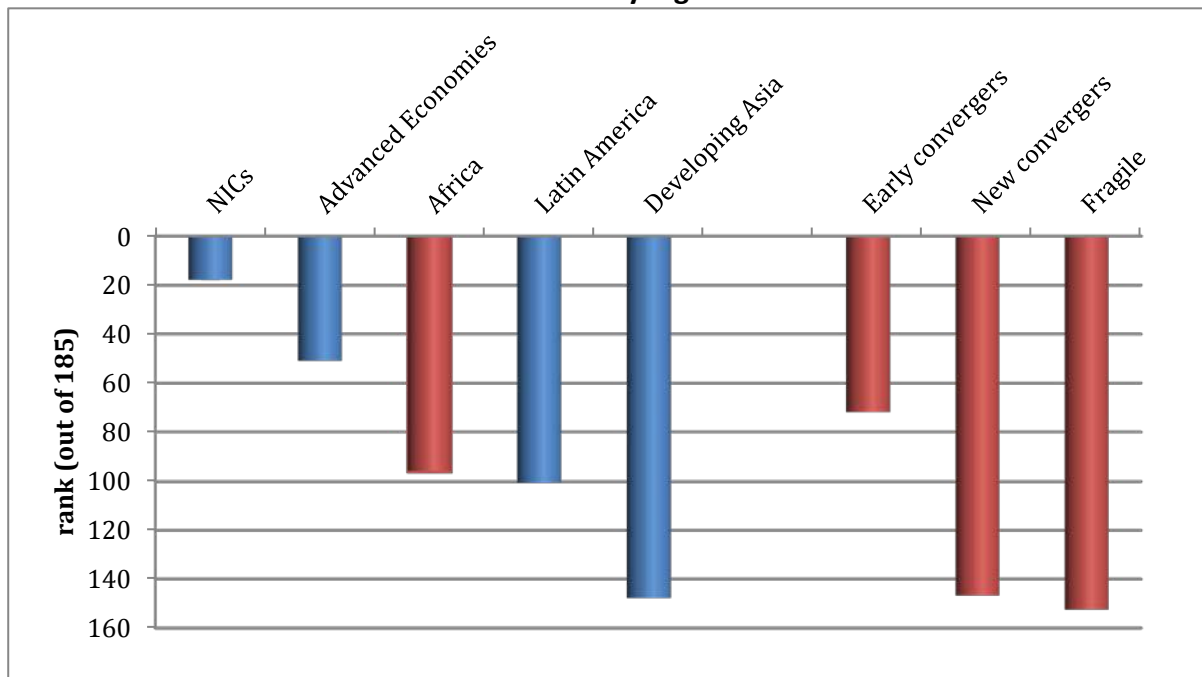
Indicators of the business environment show that Africa lags other regions. “Doing Business” and other similar indicators show that Africa ranks behind developing Asia and Latin America, with very few countries in the top 50. There is of course a significant difference between early convergers and other economies (Figure 10). There are also some notable examples of countries, e.g., Rwanda, that have registered marked improvement in recent years. Africa ranks above Latin America and developing Asia with respect to indicators that measure the ease of starting a business, with convergers ranking particularly high (Figure 11).

Figure 10: Africa ranks poorly in terms of “Doing Business,” but there are significant differences between countries



Source: Doing Business Index

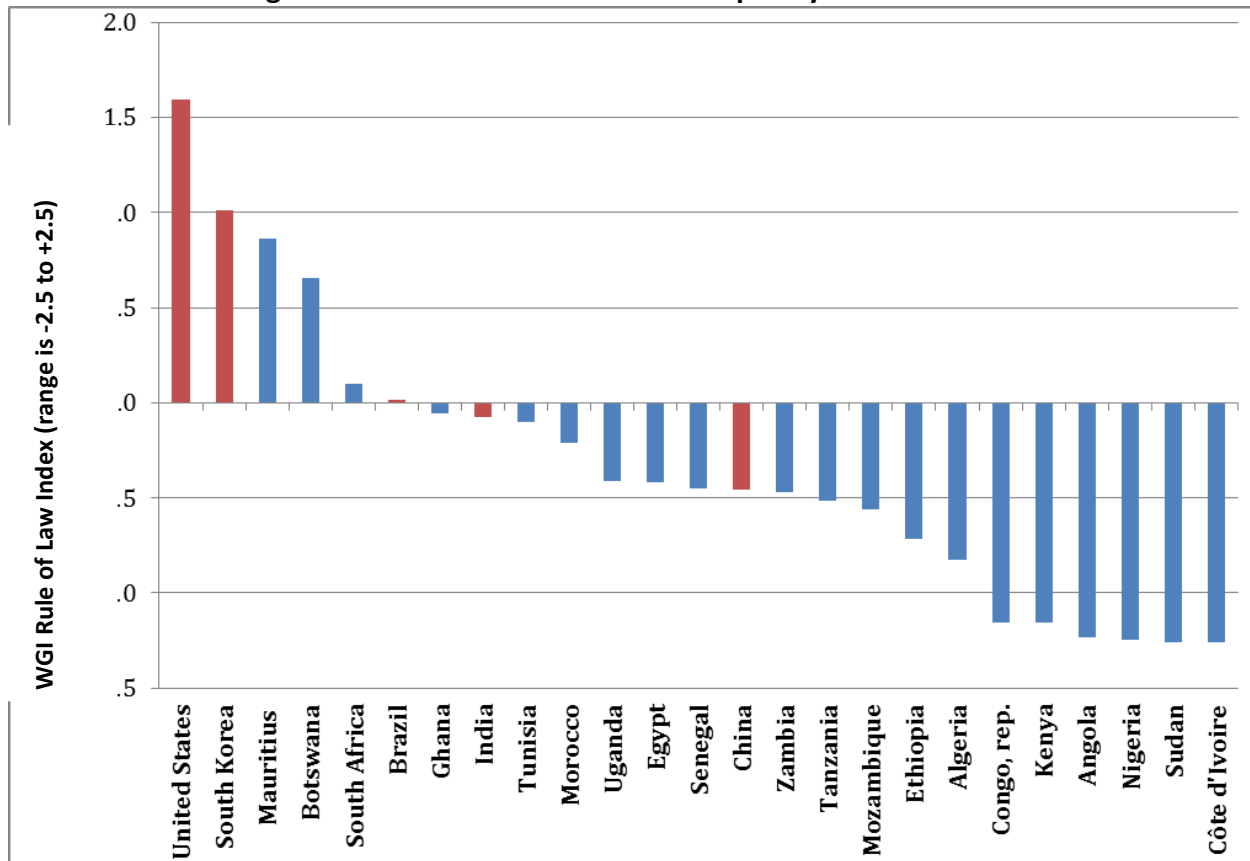
Figure 11: Africa is average in terms of starting a business, with early convergers ranking relatively high



Source: World Bank, Doing Business

African countries fare poorly with respect to control of corruption, regulation quality and rule of law. The design and implementation of regulatory and investment climate policies is subject to state capture by firms or individuals and manipulation to serve vested interests. Moreover, a combination of complex political and institutional factors can often impede the process of reducing industrial concentration and promoting competition in major economic sectors (as in South Africa). Recent data on the Control of Corruption index in the World Bank Governance Indicators (WGI) show that in 2011 only one country (Botswana) in Africa was ranked in the top quartile with most countries in the third and fourth quartiles. With respect to regulatory quality, again only one country, Mauritius, is ranked in the first quartile. No African country makes the first quartile with respect to the government effectiveness indicator. Finally, with respect to the rule of law, again only Mauritius makes it into the first quartile. Most African countries fare poorly (Figure 12), mostly on account of weak implementation. Contract enforcement is a challenge in many countries, and in some individuals' physical security is at risk.

Figure 12: Most Africa countries rate poorly on rule of law

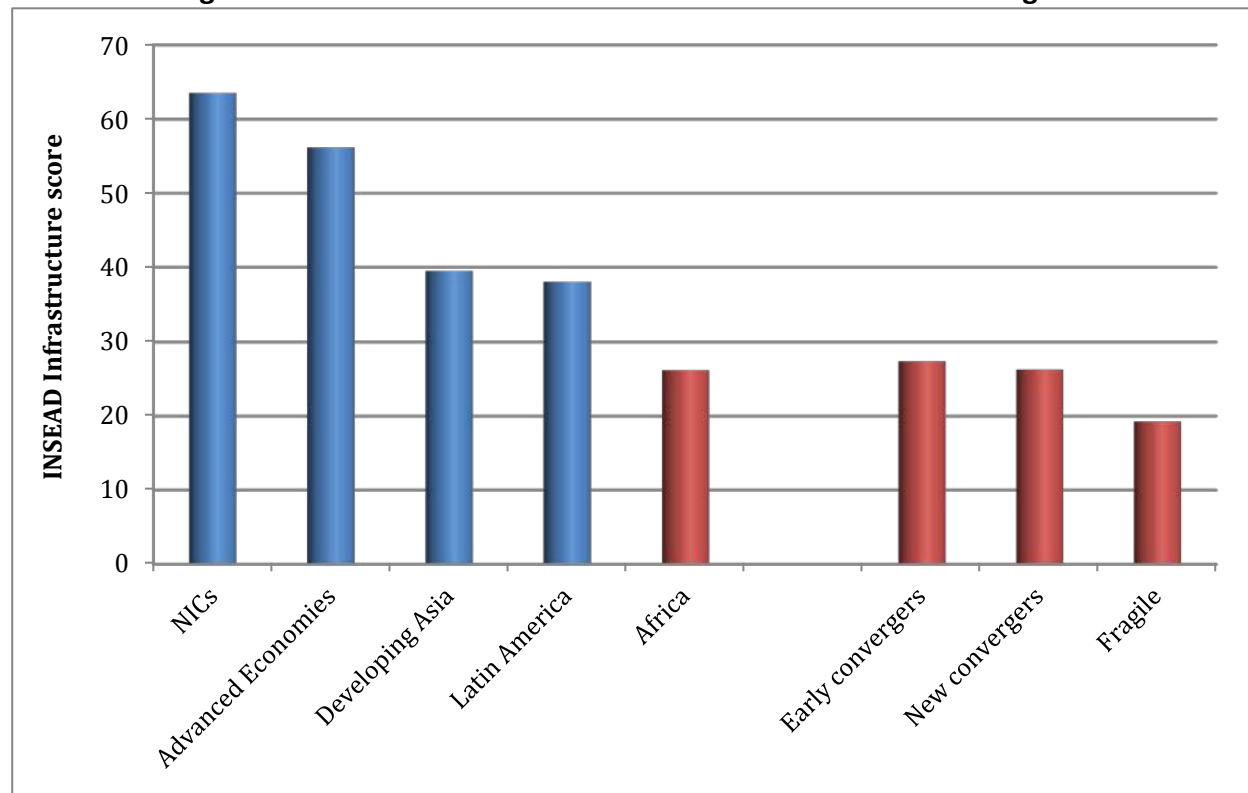


Source: World Bank WGI

Labor markets in Africa are more rigid than in other regions of the world. Strict laws regulate employer-employee relations, including those related to hiring, maximum hours of work and overtime, minimum wage, protection against dismissal without cause and severance pay (Foxy and Gaal 2008). High mandatory benefits, social insurance and labor taxes also contribute to raising labor costs. Despite the rigid labor laws, investment climate surveys suggest that firms consider labor regulations in most countries to be less of an obstacle to investment and expansion than constraints in infrastructure, access to credit and worker skills. South Africa lies at the extreme. Of the 144 countries rated by WEF, it ranks 144th on cooperation in labor-employer relations, 140th on flexibility of wage determination, 143rd on hiring and firing practices and 134th on pay and productivity.

The dominant, binding constraints to competitiveness lie in the area of infrastructure (power, transportation, logistics and ICT) – both within and between countries. These lead to high costs and losses in productivity and significantly undermine competitiveness. The poor quality and high costs are due in part to inadequate infrastructure investment, but even more so due to poor policies and management of infrastructure assets. Africa's infrastructure is rated very poorly (Figure 13). Most significant, 24/7 access to power is rare, and power outages constrain productivity. Roads and rail transport are a major constraint and raise costs. With the exception of telephony, prices of infrastructure services are very high, partly due to cost factors but also due to high profits enabled by lack of competition (Table 8).

Figure 13: Africa scores lower on infrastructure than all other regions



Source: INSEAD

Table 8: Africa's infrastructure costs are also higher

Infrastructure	Sub-Saharan Africa	Other developing regions
Power Tariffs (\$ per kilowatt-hour)	0.02-0.46	0.05-0.10
Water Tariffs (\$ per cubic meter)	0.86-6.56	0.03-0.60
Road Freight Tariffs (\$ per ton-kilometer)	0.04-0.14	0.01-0.04
Mobile Telephony (\$ per basket per month)	2.60-21.00	9.90
International Telephony (\$ per 3-minute call to the U.S.)	0.44-12.50	2.00
Internet Dial-Up Service (\$ per month)	6.70-148	11.00

Sources: Authors' estimates based on Africon 2008; Banerjee, Skilling, and others 2008; Eberhard et al. 2008; Minges et al. 2008; Teravaninthorn and Raballand 2008; Wodon 2008a and 2008b

Note: Ranges reflect prices in different countries and various consumption levels. Prices for telephony and internet service represent all developing regions, including Africa.

There has been tremendous progress in ICT, particularly in mobile telephony. The progress is as also reflected in the lower costs shown above. ICTs directly contribute 7 per cent of Africa's GDP. ICT is beginning to address some of the challenges facing: agriculture and food security (information systems/platforms for stakeholders), climate change (satellite and GPS), education (access to information and resources), financial services (mobile banking), health (communication and data collection), modernizing government (social media to reinforce democratic processes and foster innovation), and regional trade and integration (improving efficiency and coordination of trade and transport, port, customs and border management and data sharing). Good practice examples of innovative ICT initiatives can be seen in the areas of crop insurance, village mapping, money transfers and telemedicine, in Kenya, Malawi, Senegal and Mali, respectively.⁸

Availability of and access to finance is limited and is also cited as a major obstacle to growth. Several factors make African finance both small and shallow. Africa is a large and sparsely populated continent, making outreach to scattered users costly. Prevalent informality hampers access to information on borrowers and curtails household enterprises' and MSMEs' access to finance. Enforcement of creditors' rights is weak due to unreliable courts as governance issues plague the judiciary, as well as a number of other institutions. As a result of this, a large part of the population is un-banked. Sub-Saharan Africa has 2.7 bank branches per 100,000 compared to 7.4 in developing East Asia. Mobile phone technology is bypassing this challenge in some countries as evidenced by the success of the M-Pesa network covering Kenya and neighboring countries, which gained 14 million users within 4 years of its launch in 2007. Finally, African banks typically invest mostly in government securities rather than lending to the private sector. This contributes to making long-term finance elusive and, in turn, especially affects funding for infrastructure, housing and enterprises. This is in sharp contrast to what is required to sustain high growth rates and the financial markets in the more successful emerging market economies.

The urbanization pattern, particularly in SSA, is undermining the growth potential typically afforded by urbanization. Urbanization has been driven less by an urban demand for labor linked to fast industrialization (such as in 19th century Europe or now in Asia), than by the relative lack of opportunity in most rural areas. Sprawling urban development of exceptionally large metropolises has created huge unmanageable zones without the needed infrastructure and basic services in terms of urban roads, transport, drainage, safe drinking water and electricity etc. Beyond their modern administrative and commercial centers, a common feature of many large African cities is the widespread prevalence of slums or what are usually called "unstructured districts"⁹ lacking the most basic facilities. Some of these "unstructured districts/slums" have already become huge lawless areas controlled by rival gangs involved in various illicit activities.

⁸ eTransform Africa—The transformational use of information and communication technologies, World Bank and African Development bank with the support of the African Union.

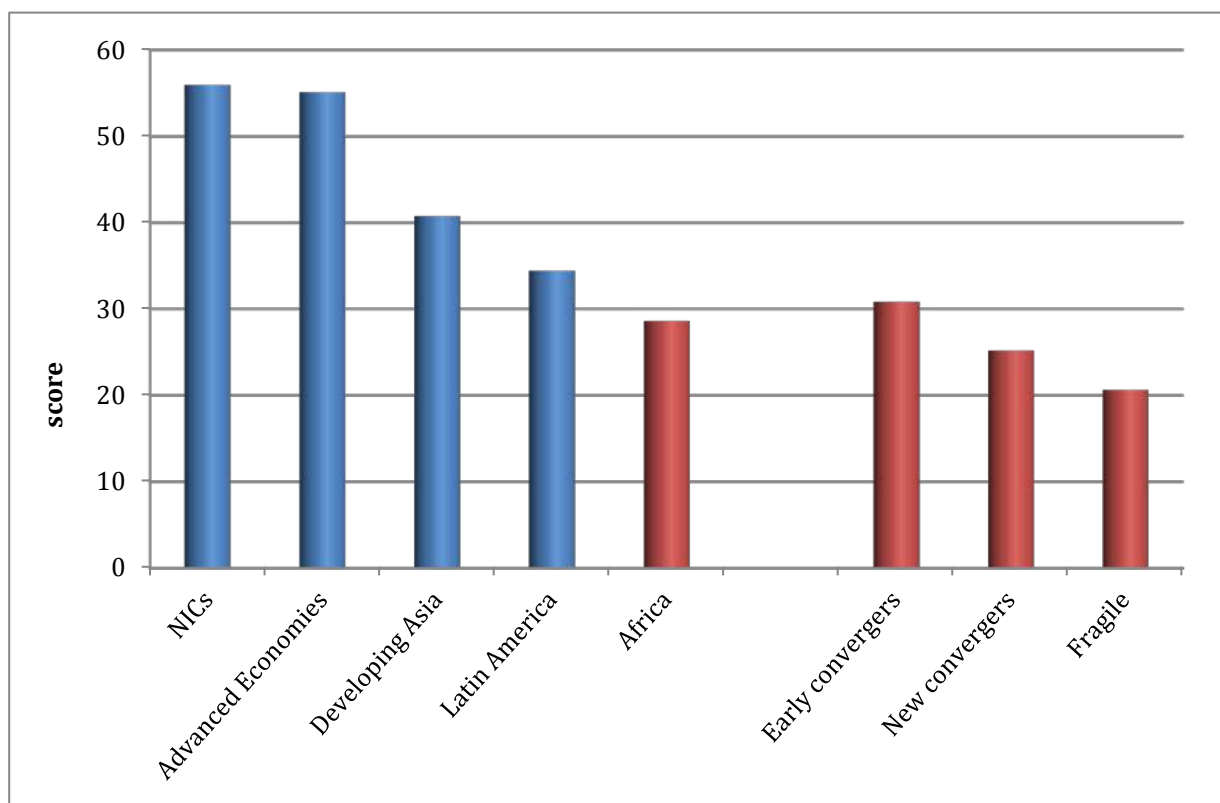
⁹ « Quartiers sous intégrés ».

Skills, innovation and entrepreneurship

Education level/skills endowment of the labor force lags behind other regions, and the mismatch with the required skills may be growing. The percentage of labor force with primary and secondary education—40% have completed lower secondary—though improving remains low. The percentage with tertiary education shows a similar trend. Within tertiary education, there is very limited emphasis on engineering and other professional education (management, accounting, law). The quality of education/teachers is a major issue.

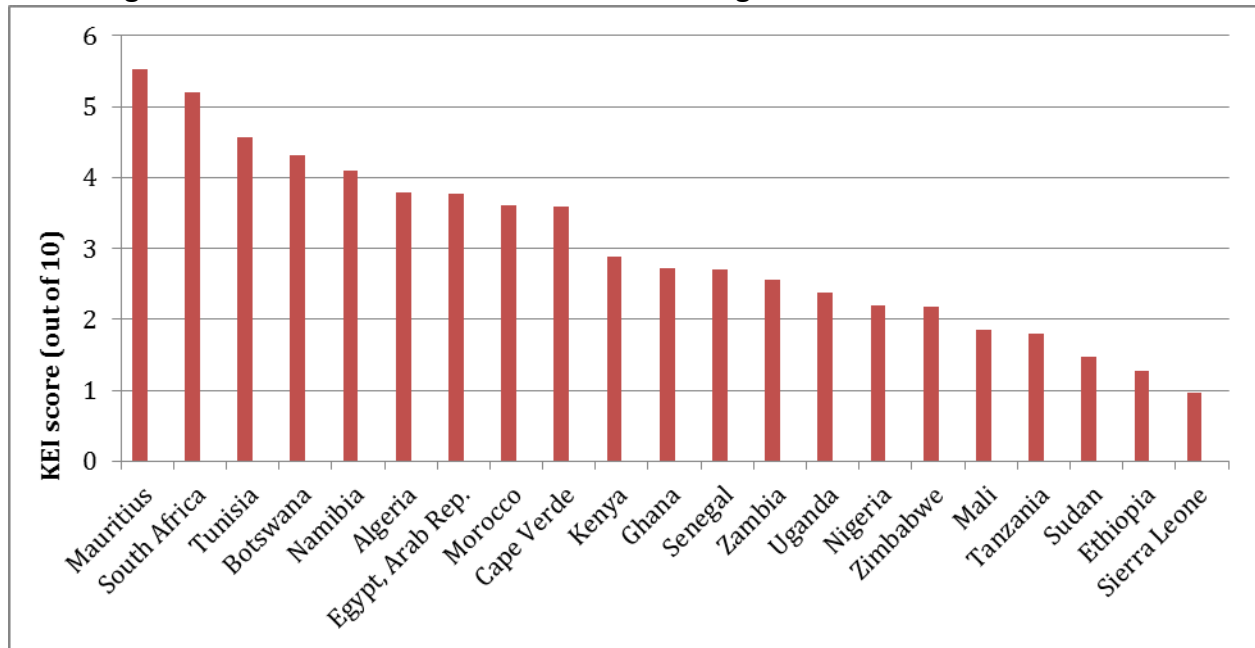
Africa's status with respect to innovation is the lowest among all regions, with North Africa faring better than SSA (Figures 14 and 15). African economies also rank poorly on indices of technological development, technology level of output and exports and progress toward becoming knowledge economies.

Figure 14: African economies rank poorly in innovation...



Source: INSEAD

Figure 15: ...but some African economies rate higher for innovation than others

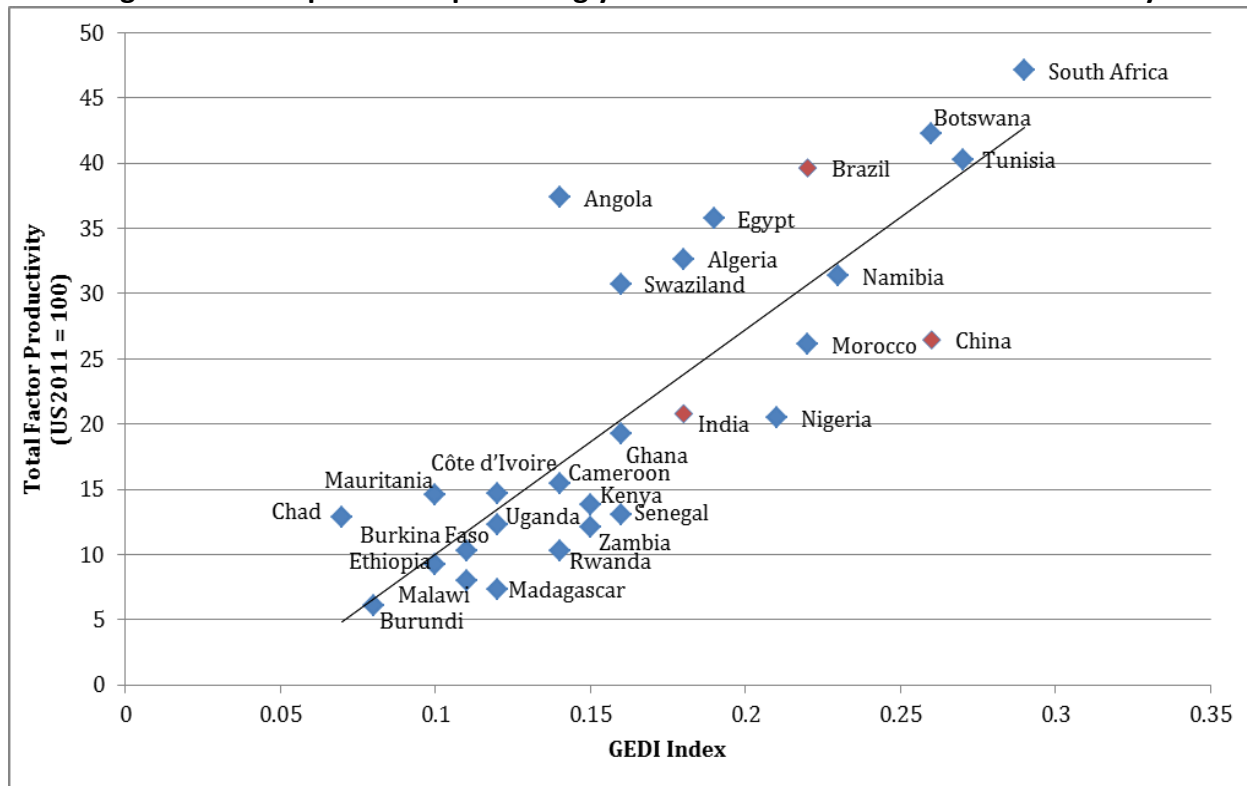


Source: KEI Index, World Bank KAM

Africa lacks world-class universities, which are widely recognized as catalysts for development through their role in producing knowledge, skills and innovations required for economic growth. Only one African University (University of Cape Town, South Africa) makes the Top 200 as compared to 4-6 from the Republic of Korea alone. Both the level of tertiary education and the share of students in technical fields are low. Africa's share of engineers is the lowest of all regions (Asia has the highest); only 4% of SSA graduates study engineering compared to 20% in Asia. Only 2% of Sub-Saharan students study agriculture; that is comparable to other regions but low relative to the importance of the sector in the region and the challenge of transforming the sector. Public and private expenditure on R&D is also the lowest of all regions at 0.4% of GDP. Furthermore, university-industry partnerships and linkages are weak, and there is very limited progress toward urban "clusters" that typically drive innovation and technology development as well as the creation and growth of enterprises.

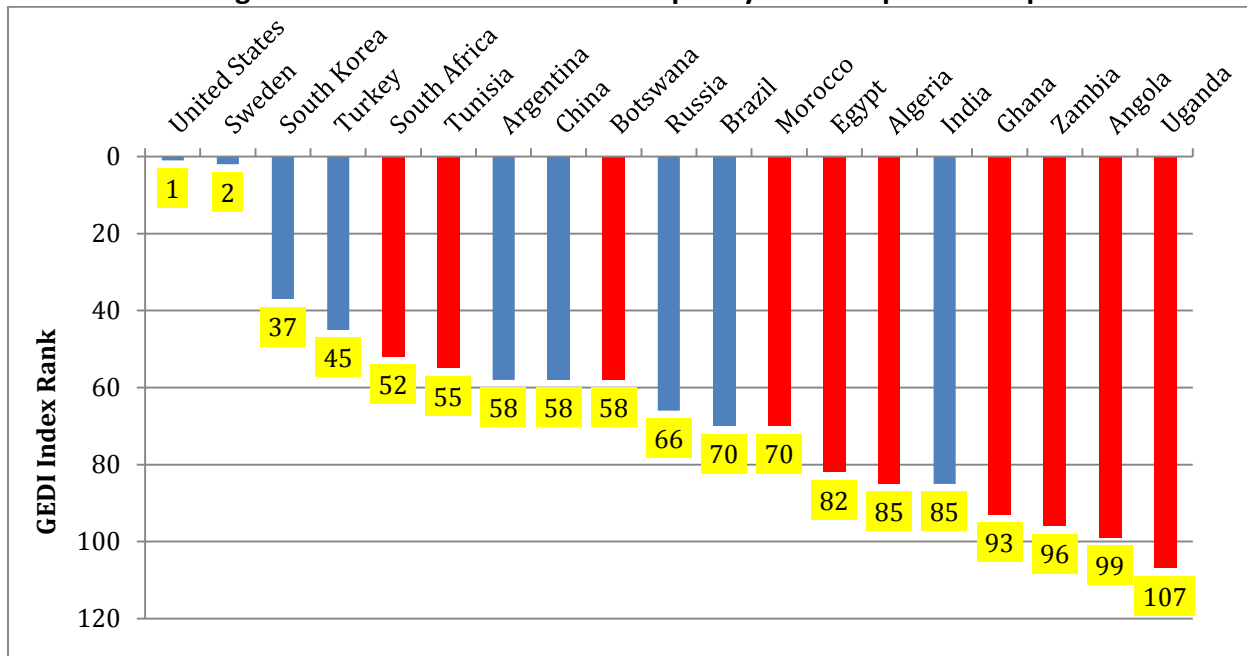
Entrepreneurship is vital for Africa's growth and for much-needed job creation. It also contributes to Schumpeter's "creative destruction," innovation and technological progress. There is a positive correlation between entrepreneurship and improvements in TFP (Figure 16). Few African economies rank in the top half of the 118 economies that are rated in the index of entrepreneurship (Figure 17). As discussed earlier, African enterprises are predominantly small and in the informal sector. Entrepreneurship is visible mostly in MSMEs, notably in women-owned household enterprises. At the other end of the spectrum, there are very few large, global companies in Africa that could be the pulling force and, for example, drive "factory Africa"; African companies are missing from the Fortune Global 500.

Figure 16: Entrepreneurship is strongly correlated with Total Factor Productivity



Source: George Mason University Center for Entrepreneurship and Public Policy; Centennial Group International

Figure 17: African economies rank poorly for entrepreneurship



Note: Mauritius is not included in the GEDI data set.

Source: George Mason University Center for Entrepreneurship and Public Policy

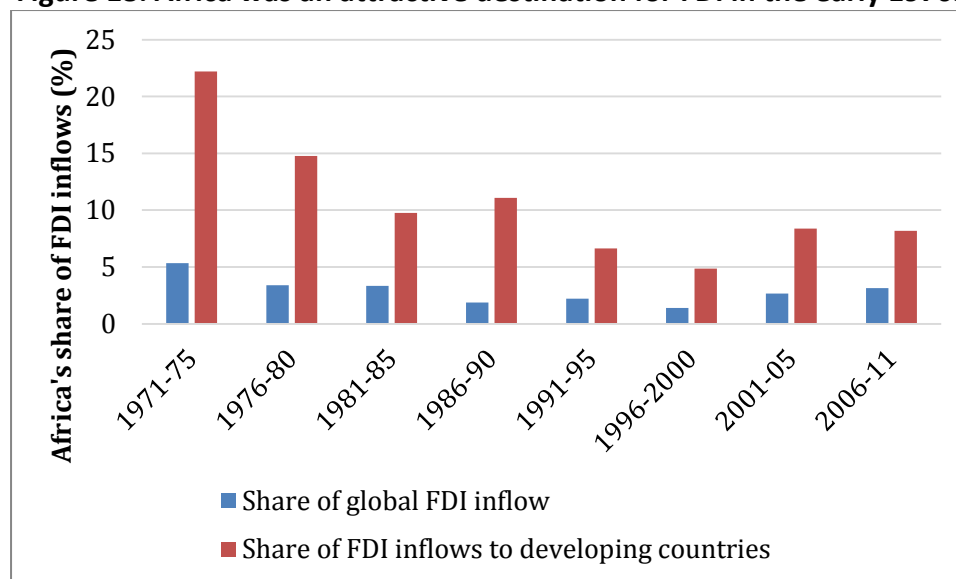
Innovation and entrepreneurship in Africa are largely of the “catch-up” variety, based on replicating existing products. There are very few examples of frontier or pioneering innovation and entrepreneurship, which is about breakthroughs in science and technology. South Africa, Botswana, Tunisia and Mauritius consistently outperform the rest of the region when it comes to issues such as total factor productivity, entrepreneurship and innovation. Furthermore, these countries also outperform major emerging market economies such as Brazil, India and China. Africa lacks a skilled labor force, especially in important sectors such as research and technology, in which innovation and entrepreneurship are cultivated. For example, Africa only has about 55% of the researchers per 1000 workers that China has, and only 1% of the technicians per 1000 workers that Brazil has (Figure 22).

Foreign Direct Investment

FDI is important for Africa for a number of reasons. FDI is widely acknowledged for its positive effect on growth and productivity. It is potentially a source of technology, a wide range of skills and know-how, and spillovers into domestic enterprises through integration into supply chains. It has played an important role in improving competitiveness in African firms.

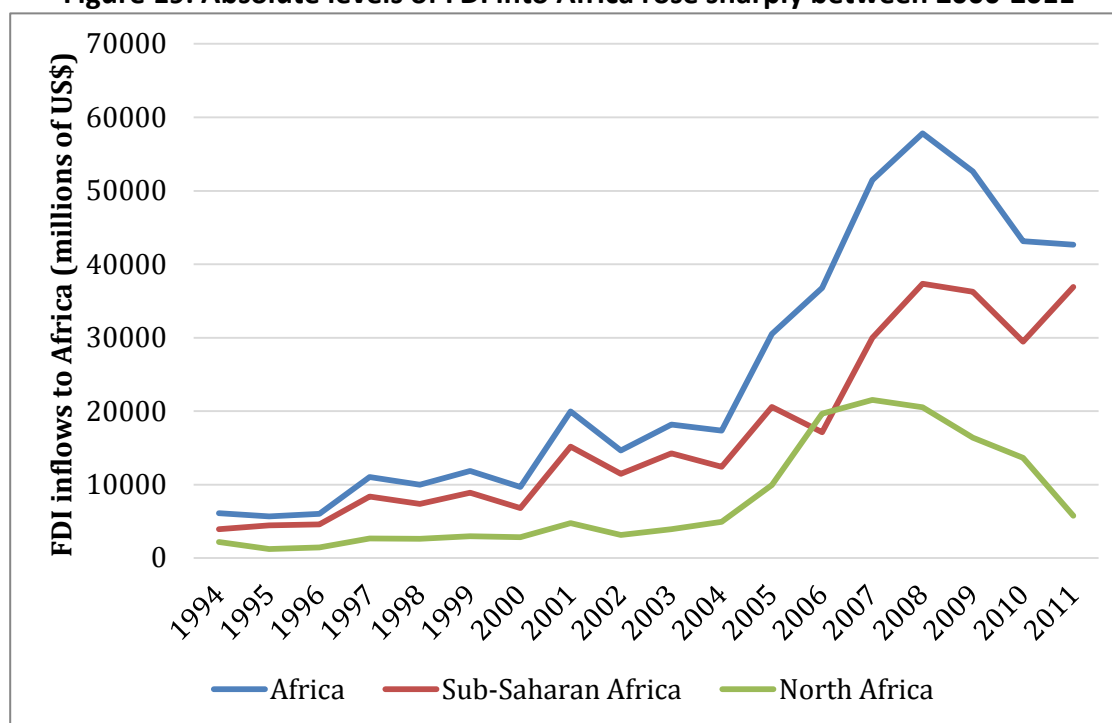
FDI to Africa has grown significantly in recent years (Figure 18). Africa was an attractive destination for FDI in the early 1970s when it accounted for some 5% of global FDI inflows and close to 30% of the inflows into developing economies. Thereafter, Africa’s share trended downwards; by the 1990s FDI flows to Asia expanded dramatically, bringing Africa’s share of global inflows to less than 1% in 2000 and of inflows to developing countries to under 5%. This trend was reversed over the past decade, and absolute levels of FDI into Africa rose sharply, from US\$ 9.7 billion in 2000 and to US\$ 43 billion in 2011 (Figure 19). North Africa and West Africa have been the two sub-regions attracting most of these inflows, followed by East Africa. Egypt, Morocco, Nigeria and Tunisia have been the major destinations. Inflows have declined in the last three years due to political uncertainty but remain important at 2.6% of GDP. Sources of FDI now include new entrants, dominated by China. There has also been some increase in intra-Africa investment.

Figure 18: Africa was an attractive destination for FDI in the early 1970s



Source: UNCTADstat

Figure 19: Absolute levels of FDI into Africa rose sharply between 2000-2011



Source: UNCTADstat

Foreign investors' perceptions point to some barriers that are specific to increasing FDI into Africa. Foreign investors in emerging markets are now more positive about Africa than those in developed economies. They rank an unstable political environment, corruption and weak security as the leading barriers to investment, with infrastructure in fourth place. This is in

contrast to domestic enterprises that rank infrastructure and access to finance at the top of their list.

Summary: With a handful of exceptions, African economies fare poorly on the determinants of global competitiveness. Higher savings and investment rates will be needed to sustain higher growth rates over the long-term. A number of elements of the investment climate merit urgent attention. A lack of competition contributes to a lack of impetus among African firms to improve productivity and competitiveness. The high costs of trading across borders, resulting from inadequate infrastructure and trade facilitation services, have impeded the expansion of both regional and global trade and hence, the exposure to foreign competition.

Africa lags behind other regions across many Doing Business indicators; most African countries are in the bottom two quartiles for the World Bank's indicators of Control of Corruption, Regulatory Quality, Government Effectiveness and Rule of Law. Binding constraints in power, transport systems, trade logistics and ICT contribute to high costs and productivity losses for African firms, undermining their competitiveness. The lack of much-needed infrastructure and basic services (such as roads, transport systems, drainage, drinking water and power) in urban areas has contributed to the growth of sprawling slums instead of urban clusters of productive, job-creating enterprises.

Education level/skills endowment of the labor force lags behind other regions, and the mismatch with the required skills may be growing. Africa's status with respect to innovation and entrepreneurship is the lowest among all regions. FDI to Africa, which can contribute to enhanced productivity and competitiveness, has grown significantly in recent years.

Vision Africa 2050

The preceding two sections have discussed the current status of African economies with a special emphasis on the determinants of competitiveness. With that backdrop, this section makes the leap to what Africa could be in 2050. The section focuses on the marked improvements in competitiveness, productivity and a wide range of underlying factors that could underpin Africa 2050. The section that follows then lays out the bold action agenda for Africa to realize this Vision.

African economies, with very few exceptions, would be characterized by macro-stability and high rates of savings and investment. These would enable the much-needed increase in investment, particularly but not only, in human capital and infrastructure.

The economies would be more diversified and with much less concentration in commodities. The share of oil and minerals would have fallen significantly in favor of light manufacturing, trade, and social and other services, including tourism. Agricultural output would have changed to higher value-added products, and productivity would have increased considerably, with labor moving out of agriculture. Exports would be similarly diversified in their composition with Africa "taking over" some areas now dominated by developing Asia.

Firms across Africa would serve larger, more “integrated” regional and global markets. At the same time, they would be open to competition—domestically and through trade. The continent would be seen as an attractive destination of FDI diversified across sectors and from both (today’s) developed economies and emerging markets, with its share in global FDI exceeding 10%.

Most economies would boast a thriving enterprise sector. The sector would comprise a mix of companies of different sizes including some 20-30 African companies that count among the top 500 global companies (e.g., in extractive industries and ancillary services, agro-industry, trading and renewable energy) investing across Africa and the globe. Most enterprises would be in the formal sector, specialized and taking advantage of the economies of scale afforded by larger markets. The majority of those that remain in the informal, household enterprise sector would be closely linked to the formal sector, including as part of production/service “networks”/supply chains.

TFP levels would have continued to catch up with best practice. Many economies would reach the level of Chile today. Productivity gains would be supported by upgraded education and skills of the workforce, including management skills of entrepreneurs and professional (accounting, legal, consulting) services. Businesses of all sizes, including entrepreneurs and traders in the informal household enterprise sector, would have access to needed finance from a deeper financial sector including non-bank financial institutions. Financial services to household enterprises would be supported by mobile banking.

Upgraded national and regional infrastructure and resulting high quality of services at low costs would support enhanced competitiveness. With very few exceptions, the continent would enjoy 24/7 power, clean water, access to roads—the vast majority of the population within 2km—an air network with “hubs” in major capitals, efficient ports and pervasive ICT with full internet access). Hydropower would enable a plentiful supply of electricity to high density centers. Smaller hydro (e.g., pico hydro, <5kw) and solar stations would ensure clean electrification of remote areas, facilitating access by all to ICT and the internet.

A well-functioning, regionally and globally networked science-technology-innovation (STI) system built around world class universities (with some 10-15 in the top 200) would serve the continent. Universities and businesses would be concentrated in efficient urban “clusters” that would support continuous innovation adapted to Africa’s needs. Urban centers would account for close to 90% of GDP.

The bottom-line result would be reflected in much higher scores for most countries on the Global Competitiveness Index and, vitally, in much-needed growth in employment and good jobs!

Action Agenda

The continent faces a challenging multi-pronged agenda for action in order to bridge the very large gap between the Vision for 2050 outlined above and the current status (discussed earlier). Labor-intensive diversification based on enhancement of competitiveness and productivity will be needed to sustain growth and create much-needed jobs. Successful implementation of such

an agenda would enable African economies to take advantage of growth and diversification opportunities in (see also other related sections):

- Agriculture and agro-processing to meet the changing food consumption pattern of a more affluent Africa and for export
- Construction of much-needed infrastructure –national and regional
- Value added and ancillary industries/services related to the extractive natural resource sector
- Social services—health and education
- Tourism
- Retail and trade, including global trading in minerals and agricultural commodities
- Light manufacturing

The agenda with respect to the required macroeconomic environment, improvements in governance and the rule of law, infrastructure, urbanization and the development of requisite skills/human capital is elaborated in the related sections.

The focus here is on four areas – competition; markets and trade; technology development, innovation and entrepreneurship; and the business environment –all in the support of the objective of creating jobs.

Foster competition

Fostering competition, including through entry and growth of enterprises (also see below) is a key challenge for most African economies. This entails actions to put in place pro-competition policies and, on the other hand, to curb anti-competitive behavior demonstrated by state or private monopolies, strong vested interests and instances of state capture. The regulatory barriers to the entry and exit of firms which limit competition in input and output markets should be removed to bring them in line with international best practice.

Regulatory policies should aim to level the playing field between small and large firms. Compared with large firms, the costs of unreliable power supply are more burdensome, and the burden of fixed costs (license and permit fees) are greater for smaller firms. Informal firms account for by far the largest share of economic activity, and yet they face the most difficulties in getting access to public services and bank credit – more so in rural areas than in urban areas. The provision of services (especially transport and finance) to the rural sector is essential for connecting rural and urban markets and forging production linkages between agriculture and industry. Finally, the burden of regulatory requirements (the number of procedures, the time required to comply with them and the costs of compliance) needs to be progressively reduced to allow domestic firms to become competitive in a global setting.

The proposed action agenda has significant potential for promoting synergy between the various parts of the private sector, by reinforcing supply and demand side linkages between the informal and formal sectors, large and small firms, and the farming and manufacturing sectors. For example, improvements in basic infrastructure (transport, communications and electricity) and financial services would facilitate the participation of domestic firms in the value

chain of production and raise firm productivity. The provision of services (especially transport and finance) to the rural sector is essential for connecting rural and urban markets and forging production linkages between agriculture and industry. Urban firms could buy from or outsource some activities to smaller firms and/or rural firms. Similarly, these services (especially banking facilities) would also facilitate linkages between firms in the formal and informal sectors. Improvements in infrastructure and financial services are also essential for domestic firms to connect with both regional and global markets. Reductions in regional transport costs would be immensely beneficial for landlocked countries. A recent study finds a strong positive relationship between firm productivity and services performance (Arnold, Mattoo and Narciso).¹⁰

“Integrate,” expand markets and facilitate trade

Africa has long recognized the imperative of moving toward more integrated markets with respect to goods, services and the movement of people, and must continue to pursue this agenda aggressively. Lessons can be learned from the more successful RECs (e.g., EAC in some areas, ECOWAS in others) and from other regions of the world. Actions need to go beyond lowering tariff barriers to genuinely opening up, reducing non-tariff and behind the border barriers, improving connectivity, facilitating cross-border intra-Africa trade in food, other goods and services, and harmonization of trade and investment regimes. Greater openness to global markets is essential for domestic African firms to benefit from economies of scale and for learning-by-exporting.

To reap the benefits of competition, African firms need to expand their markets beyond their national boundaries to participate in regional and global markets. The existing private sector dominated by numerous small firms and a large informal sector catering mainly to domestic markets has to be transformed into a dynamic modern private sector with firms growing in both numbers and size and conducting their business in the formal sector. This transformation of the private sector needs to be achieved through an action agenda that promotes export-oriented and labor-intensive light manufacturing industries as well as other labor-intensive sectors such as tourism. Such an action agenda would contribute effectively to both rapid economic growth and substantial job creation. It would improve living standards by raising productivity and providing stable, wage-paying jobs. This transformation will have to be achieved to accommodate the projected substantial growth in the work force and to productively employ the large numbers of laborers expected to move out from agriculture as farm productivity improves.

Trade logistics in each country need to be substantially improved. This would entail appropriate trade facilitation measures to sharply reduce the cost, complexity and time spent in completing customs clearance, obtaining bank credit and paying customs duties. This is essential to encourage firms to access (both regional and non-regional) foreign markets for exports and to procure inputs at competitive world prices. National and regional infrastructure for power, transport (roads and railways), port facilities, and broadband and telecom services

¹⁰ Jens Matthias Arnold, Aaditya Mattoo, and Gaia Narciso – “Services Inputs and Firm Productivity in Sub-Saharan Africa.”

should be expanded and upgraded to lower costs. Finally, regional infrastructure should be integrated to improve connectivity both regionally and globally.

Pro-competition policies combined with larger markets would provide the impetus for investment –domestic and FDI – to take advantage of expanded opportunities. At the same time, Africa could diversify its export markets beyond its traditional partners to include the more rapidly growing emerging market economies and, most importantly, to link itself into global supply chains.

Promote technology development, innovation and entrepreneurship

African economies can realize large gains from tapping into expanding global knowledge. Today, this is increasingly possible including through trade, FDI, access to diaspora and information in print and on the internet. It requires African countries to build a foundation to diffuse and encourage the adoption of new technologies. To this end, Africa needs a massive increase in the capacity and quality of education and in investments in technology and innovation, particularly early stage technological development and grassroots innovation. Many sectors will require workers with specialized knowledge—a prerequisite for an STI system that can serve as a major source of growth. In addition to technical subjects, students need to learn soft skills—creativity, innovation, communication, managerial and entrepreneurial skills.

Most economies in Africa could pursue innovation and entrepreneurship of the catch-up variety. The underlying requirements are clearly getting the fundamentals (economic and business basics, access to finance, availability of needed infrastructure services etc.) right. A few economies that are technologically more advanced and have already achieved high levels of TFP (e.g., South Africa, Mauritius, Botswana and Tunisia) can start to lay the foundation for pioneering or frontier innovation and entrepreneurship, which requires a more demanding ecosystem—strong tertiary education particularly in science and engineering, appropriate intellectual property rights, availability of venture capital, a tax regime that promotes research and innovation, and science and technology parks/export processing zones.

More effort must be put into promoting research and development. This includes raising research and development expenditures, mostly in the private sector, from the very low current level of 0.4% of GDP to some 2-3%. Africa must also invest in building world-class universities with links between universities/research centers and industry, so that skills and degrees are relevant and useful in the job market. Such linkages can also underpin the development of urban “clusters” that can enable agglomeration economies, support the emergence and growth of businesses and help meet Africa’s jobs challenge.

Foreign direct investment can bring in much needed technology, know-how and managerial capability across sectors. Implementing fundamental reforms to address political instability, corruption, concerns about safety and bureaucratic obstacles will help make the business environment more predictable and appealing. Enhancing competition to promote the development of professional services (e.g., accounting, auditing and legal services) can help to build and support entrepreneurial capacity.

In addition to technological development, realizing the bold vision for 2050 will require Africa to promote inclusion. It will be important to mitigate the risks of increased inequality through rapid urbanization and widening productivity gap between agriculture and other sectors. STI systems must therefore focus also on the needs of the informal sector—specifically its access to knowledge and technology. The vision for the transformation of the agricultural sector and rural prosperity calls for increased R&D in agriculture. It is important to ensure that ICT services and innovations are available to and benefit all Africans, including the poor and vulnerable and those living in remote areas. China, India and South Africa offer good examples of inclusive innovation—to lower the costs of goods and services to make them more affordable and readily accessible to poor people and enhance income-earning opportunities.

Regional collaboration in STI can bring substantial gains. Collaboration to leverage STI systems in countries where they are relatively developed will help achieve faster results in other African countries at lower cost. Regional collaboration should help to develop centers of excellence in selected areas of particular relevance to the continent such as extractive industries and ancillary services, agriculture, small solar power and hydropower units, and ICT including mobile telephony and related applications. These are best established and operated as PPPs, including with global organizations.

Improve the business environment with a focus on private sector development

The key challenge in this area is to foster an environment that enables and promotes entry (and allows exit) of enterprises and their continued growth, unconstrained by regulatory and other barriers. Such an environment is vital to support the transformation and growth of informal household ventures to SMEs in the formal sector and from there to larger enterprises.

African governments need to formulate sound and streamlined regulations. It would be important to minimize ambiguity in the regulations and publish the related implementation rules as well as all decisions based on them. The regulations that govern government-firm relations need to be transparent in design and implementation to facilitate public scrutiny. Effective implementation of regulatory policies depends also on the quality of public services and the civil service, the degree of the administration's independence from political pressures and the credibility of the government's commitment to the policies.

To prevent corruption and “state capture,” decisive actions are needed to eliminate discretionary authority, inadequate accountability and monopoly power. In countries richly endowed with natural resources (such as oil and minerals), state owned monopolies have often been used as an instrument of rent-seeking by politicians. A well-known example is Zaire's public monopoly in the copper sector (Gecamines) in the 1970s (World Bank 2005). To prevent the undue influence of particular groups on government policymaking at the cost of broader social interests, governments need to include in their policy dialogue a broader range of interest groups than just influential firms, such as business associations that represent smaller firms, and civil society groups and consumer organizations that would be affected by the policies under consideration. Also, proper accountability for the exercise of public authority should be sought through vigilant and competitive legislatures and a free and independent media. These institutions could provide strong legislative oversight, enhance the transparency of government-firm transactions and make the public aware of the costs of corruption. These

efforts would lower transaction costs for firms; curtail corruption, state capture and clientelism, and encourage informal sector firms to enter the formal sector.

For the business community and the public to have confidence in the regulatory system, governments have not only to enforce but also abide by the rule of law. There should be clear conflict-of-interest laws and standards of public conduct. Cases of corruption or other improper financial transactions would have to be dealt through a proper judicial process. Some countries have relied on independent, autonomous bodies to investigate and prosecute suspects, prevent corruption and educate the public. Botswana's establishment of a Directorate of Corruption and Economic Crime for this purpose in 1994, and its active publicity campaign to inform and educate the public provides an example (World Bank 2005).

An advanced and efficient financial system is essential to help encourage higher financial savings, deepen financial intermediation and, eventually, develop dynamic domestic capital markets that finance investment activities.¹¹ In light of the low population density and small national markets, cross-border approaches will be needed. The rapid spread of pan-African banking systems, as well as the introduction of a framework that facilitates taking advantage of portfolio capital inflows (frontier markets) should also help in this regard. In addition to leveraging technology, like M-Pesa, alternative channels such as stores and post offices can minimize fixed costs.

While governments and the public sector have an important role to play with respect to the above agenda, the results will ultimately be driven by investment by the private sector -- foreign and, increasingly, domestic.

¹¹ In the case of the smaller economies, consideration could be given to the development of regional capital markets in order to take advantage of economies of scale.

Box 1: Agenda for jobs

The primary environment for promoting job creation is that the fundamentals for growth and private sector development are in place, and that the broad agenda of promoting labor-intensive diversification of African economies is successfully implemented. This requires a set of well-prioritized policies and reforms, which have been discussed above. The second element of the job agenda would be that of addressing the most visible problems of job creation that arise in a variety of country situations in the African context. These include the challenges related to rural-urban migration, informal employment, women's entry into market activities, and youth unemployment.

To facilitate rural-urban migration, early efforts are required to extend adequate health and education services in both rural and urban areas to better prepare rural migrants for entry into the urban job market. In the rural sector opportunities for absorbing labor in productive off-farm activities should be pursued. On the demand side of the urban labor market, public policies need to focus on the development of functional cities (with good infrastructure, such as efficient transport and communication services, and a network of competing firms and suppliers) that could provide the basis for developing a dynamic urban private sector, and for taking advantage of the productivity spillovers from jobs in industrial clusters, dynamic cities and global value chains.

A critical job challenge is to improve worker productivity and prospects of better paying jobs in both the formal and the informal sectors, because informal employment will remain a key feature of African economies for some time to come. More broad-based access to higher levels of education beyond the primary level would provide the informal sector with better human capital. Efforts to improve the informal sector's access to inputs, finance and markets would facilitate the employment of the better-educated new entrants to the sector. Improvements in the business environment that reduce the costs of complying with government regulations will help to reduce the incentives for firms to operate in the informal sector. In addition, opportunities for linking informal sector firms with formal sector firms should be seized.

Governments should make greater efforts to facilitate women's entry into high productivity market activities by removing obstacles to their access to productive assets such as education, capital and land to support entrepreneurship. Regulations that prevent women from having equal employment opportunities need to be eliminated.

The challenge of youth unemployment merits special attention. The education system – including vocational training--should provide the youth with the education and skills that respond better to the needs of the private sector. On-the-job training and apprenticeships can help the youth adapt better to the work environment of the private sector.

Finally, where the Government plays a key role in hiring new graduates and setting public sector wages, it would be important to ensure that public sector hiring and wage policies also take into account the realities of the macroeconomic situation and the need to avoid maintaining wages and non-wage benefits more generous than in the private sector.

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