CHAPTER 1.1

# Assessing Africa's Competitiveness: Opportunities and Challenges to Transforming Africa's Economies

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The 2015 *Africa Competitiveness Report* comes out as Africa is growing at a brisk pace, surpassed only by emerging and developing Asia. Indeed, compared with the economic turmoil that affected advanced economies in recent years, economic growth in the African region has provided something of a silver lining. Growth is now returning in some advanced economies—notably the United States—although it remains anemic in much of Europe, Japan, and other advanced economies. In contrast, many sub-Saharan economies continue to register growth rates of over 5 percent on average. Yet, despite maintaining such healthy growth rates for over a decade, Africa's levels of productivity are low and overall competitiveness has remained stagnant—a concern voiced since the first *Africa Competitiveness Report* came out in 1998.

Low levels of competitiveness are concerning for two reasons. In the short run, they render the region's economies vulnerable to important economic downside shocks; such shocks range from a slowdown in emerging markets to repercussions of the four-year low in oil prices and lower prices for other commodities for the region's resource-rich economies. In the medium run, they call into question whether the continent will be able to leverage its demographic dividend: Africa's population of over 1 billion people represents a large emerging consumer market and labor force that provides significant growth opportunities.[1] In this context, making Africa's economies more competitive will be critical. This year's *Report* therefore explores whether structural transformations critical for driving competitiveness are being implemented. It also asks the question: are policymakers putting the fundamentals into place to maintain the high growth trajectory needed to ensure increases in living standards?

Following a brief analysis of the current structure of the region's economies, this chapter will assess in detail the competitiveness landscape on the continent and in the individual countries covered by our analysis. By highlighting the strengths and weaknesses of the region and comparing individual African economies in a regional and global context, policymakers, business leaders, and other stakeholders are offered an important tool for formulating competitiveness-enhancing policies. This approach lays the groundwork for a more in-depth analysis of structural transformation in the chapters to follow.

## AFRICA'S COMPETITIVENESS CHALLENGE

Much talk has centered on whether or not recent economic growth rates in Africa are sustainable in the medium to long run. The analysis undertaken in this *Report* can help inform this debate because the levels

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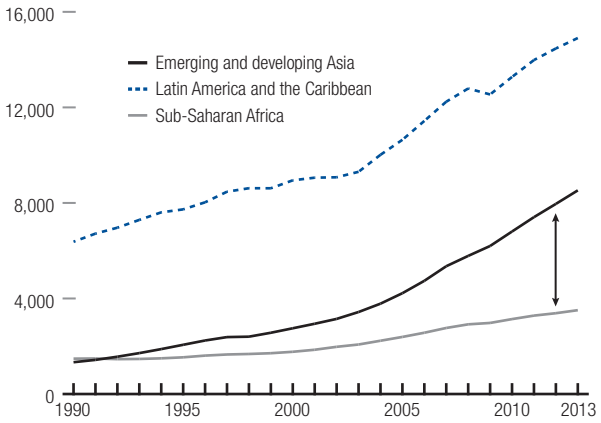
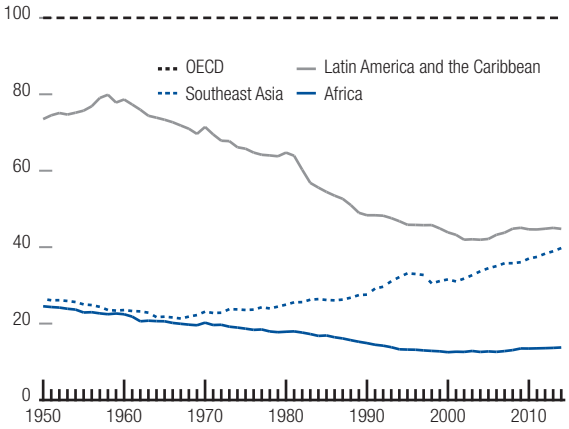
**Figure 1: Prosperity and economic growth, 1990–2013**
GDP based on purchasing power parity (PPP) per capita, current int'l dollars




Source: IMF, 2014c.

**Figure 2: Africa's falling productivity**
Labor productivity per person employed in 1990 US$ (converted at Geary Khamis PPPs)




Source: The Conference Board *Total Economy Database*™, forthcoming, June 2015, http://www.conference-board.org/data/economydatabase.

Note: **Southeast Asia** includes Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam; **Africa** includes Algeria, Angola, Burkina Faso, Cameroon, Côte d'Ivoire, the Democratic Republic of Congo, Egypt, Ethiopia, Ghana, Kenya, Madagascar, Malawi, Mali, Morocco, Mozambique, Niger, Nigeria, Senegal, South Africa, Sudan, Tanzania, Tunisia, Uganda, Zambia, and Zimbabwe; **Latin America and the Caribbean** includes Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Jamaica, Mexico, Peru, St. Lucia, Trinidad and Tobago, Uruguay, and Venezuela; **OECD countries** include Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Rep., Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

of competitiveness of African economies are important determinants of productivity. In other words, more competitive African economies will tend to produce higher levels of prosperity (see Figure 1).

## Structural transformation

As widely recognized, the past decade has heralded a new era of a reinvigorated Africa on the back of high average growth rates. The most critical question observers and analysts have since debated is whether the continent will be able to continue growing briskly and ensure rising living standards. The opportunities arising from Africa's rapid population growth—most notably a large consumer market and a young and dynamic workforce—stand in stark contrast to the present structures of economies that are characterized to a large extent by primary product dependency, insufficient education (both in quantitative and qualitative terms), and consistently low rankings in overall human development.[2] For some economies—as some observers suggest[3]—recent growth has been the result of high commodity prices, which would mean slower growth during the current downturn in commodity prices. Other observers reference sounder macroeconomic policies and a more efficient business environment as decisive underlying drivers of African growth performance, which would point to a more sustainable evolution.[4] In addition, Africa is far more stable and better governed now than at any other time since independence. Although there is not yet agreement on where the continent's economy is headed, the debate highlights the diversity of a region with elements that range from diversified middle-income economies such as South Africa and Mauritius to fragile ones such as Burundi and resource-dependent ones such as Chad and Angola.

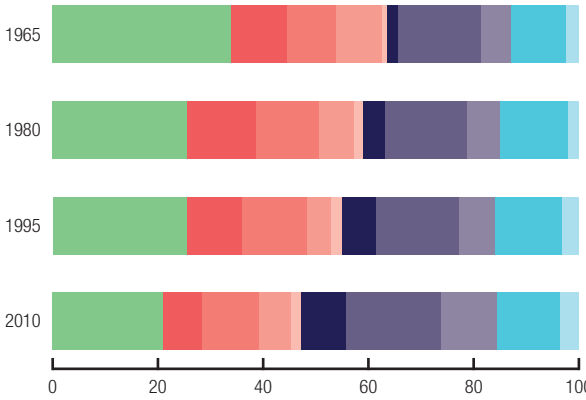
Figure 2 compares labor productivity—as a proxy for overall productivity—in Africa with that of other regions for the past 50 years. Although Africa and Southeast Asia started from similar, very low levels, labor in Southeast Asia has since become more productive, effectively converging toward the Organisation for Economic Co-operation and Development (OECD) average. In contrast, as Figure 2 shows, not only has Africa been trailing Southeast Asia, but in fact the productivity gap between the two regions deepened between 1960 and 2005. However, the slight recovery in productivity seen since the early 2000s provides a small bright spot, indicating that economic growth is increasingly driven by rising productivity in some African countries. Data from the Groningen Growth and Development Centre (GGDC) 10-sector database,[5] further explored below, suggest that these productivity gains occurred across many sectors, including agriculture, but were especially large in the utilities, transport, and telecommunication services.

In this context, *structural transformation*—here defined as the reallocation of economic activity away from the least productive sectors of the economy to more productive ones—stands as a fundamental driver of economic development.[6] Structural transformation contains two elements: the rise of new, more productive activities and the movement of resources from traditional activities to more sophisticated ones.[7] Is there evidence of reallocation of labor across sectors in Africa?

**Agriculture continues to play an important role in terms of value-added on the continent, yet its decline over the past four decades has largely been offset by the larger role of the service sector while manufacturing has been stalling.[8]** Figure 3 shows the composition of value-added for selected economies from sub-Saharan Africa, North Africa (Egypt and

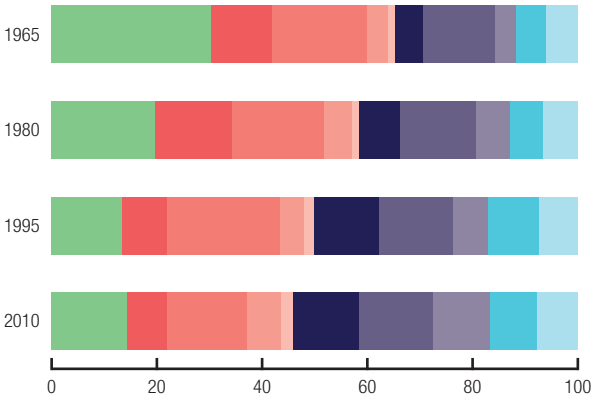
**Figure 3: Sectoral value-added by regions, 1965–2010 (% total value-added)**

3a: Sub-Saharan Africa



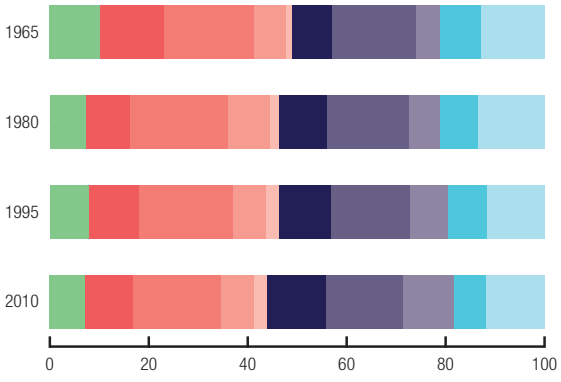

Note: The **sub-Saharan Africa** sample includes Botswana, Ethiopia, Ghana, Kenya, Malawi (1966 data have been used for 1965), Mauritius (1970 for 1965), Nigeria, Senegal (1970 for 1965), South Africa, Tanzania, and Zambia.

3b: North Africa



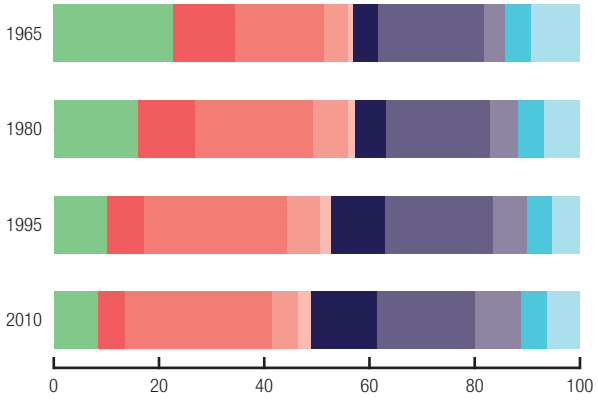

Note: The **North Africa** sample includes Egypt and Morocco.

3c: Latin America




Note: The **Latin America** sample includes Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Mexico, Peru, and Venezuela.

3d: ASEAN




Note: The **ASEAN** sample includes Indonesia, Malaysia (1970 data for 1965), the Philippines (1971 for 1965), Singapore, and Thailand.

**Agriculture**
- Agriculture

**Industry**
- Mining
- Manufacturing
- Construction
- Utilities

**Market services**
- Business services
- Trade services
- Transport and communication services

**Non-market services**
- Government services
- Personal services

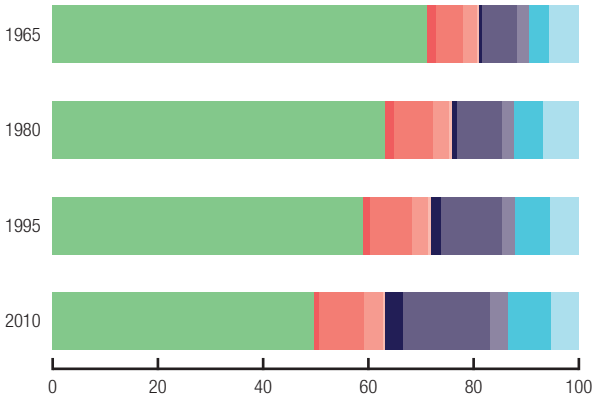
Source: Timmer et al., 2014.

Note: The 10 economic sectors are grouped following the ISIC Rev. 3.1 classification as follows: agriculture (ISIC Rev. 3.1: A,B); mining (C); manufacturing (D); construction (F); utilities (E); business services (J,K); trade services (G,H); transport and communication services (I); government services (L,M,N); personal services (O,P). For Bolivia, Chile, Colombia, Peru, Venezuela, and Singapore, data on personal services (O,P) also include data on government services (L,M,N).

Morocco), and two comparator regions—the Association of Southeast Asian Nations (ASEAN) and Latin America. The GGDC 10 sector database allows for a more granular analysis of value-added.[9] For sub-Saharan Africa, the data show that although the agricultural value-added share in GDP has significantly decreased in the past 40 years (from close to 34 percent in 1965 down to 21 percent in 2010), the share of the service sector has experienced an increase and in 2010 accounted for close to 60 percent of GDP of the 11 economies in the sample, most notably in the areas of trade (including hotels and restaurants, wholesale and retail), transport and communications, and business services. Today the share of services in the economy in sub-Saharan countries is similar to the services share in ASEAN countries, although market services—in particular business services—are playing a smaller role. For North Africa, the data show a similar picture: the share of value-added in agriculture decreased by half over the past 40 years, from 30 to 15 percent, while the share of the service sector rose to 55 percent in 2010 from 35 percent four decades ago. Similarly, we see a fall in manufacturing value-added, which has dropped from 18 percent in 1965 to 15 percent in 2010. What differs

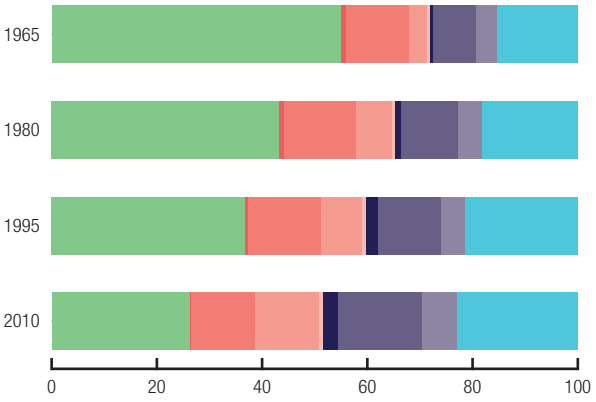
**Figure 4: Employment share, 1965–2010 (% total employment)**

4a: Sub-Saharan Africa




Note: The **sub-Saharan Africa** sample includes Botswana, Ethiopia, Ghana, Kenya (1969 data have been used for 1965), Malawi (1966 for 1965), Mauritius (1970 for 1965), Nigeria, Senegal (1970 for 1965), South Africa, Tanzania, and Zambia.

4b: North Africa




Note: The **North Africa** sample includes Egypt and Morocco.

Source: Timmer et al., 2014.

Note: The 10 economic sectors are grouped following the ISIC Rev. 3.1 classification as follows: agriculture (ISIC Rev. 3.1: A,B); mining (C); manufacturing (D); construction (F); utilities (E); business services (J,K); trade services (G,H); transport and communication services (I); government services (L,M,N); personal services (O,P). For Zambia, data on personal services (O,P) also include data on government services (L,M,N). For Egypt and Morocco, data on government services (L,M,N) also include personal services (O,P).

in North Africa from sub-Saharan Africa is that business services, in terms of value-added, are close to those in the ASEAN economies. Chapter 2.2 further discusses the role of service exports in Africa and their forward and backward linkages to the domestic economy.

The data also show the well-documented stalling of manufacturing in sub-Saharan Africa compared with developments in the ASEAN economies. Currently, manufacturing accounts for just 11 percent of overall value-added in the sub-Saharan Africa region—a share that has remained stable over the past decades—much lower than the close to 30 percent of the ASEAN economies. But where has employment shifted?

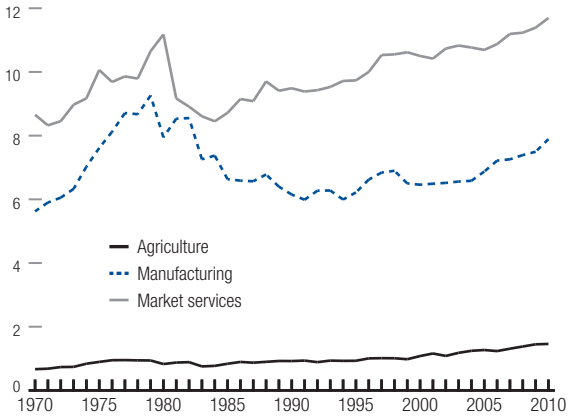
**About half of employment in sub-Saharan Africa continues to take place in the agriculture sector, although labor has primarily been moving out of agriculture into the service sector, "bypassing" the manufacturing sector.** Figure 4 shows the employment shares for 11 sub-Saharan economies and two North African economies across agriculture, industry, and services. The more disaggregated level allows for a more comprehensive analysis of structural transformation.

There are a few interesting observations: in 2010, agriculture still accounted for half of the employment, on average, despite a declining share both in employment and value-added (see Chapter 2.1 for an in-depth discussion of the agriculture sector). In terms of labor mobility, between 1965 and 1980 the share of value-added in manufacturing increased from 9.3 to 12.1 percent and the corresponding employment share from 4.8 to 7.2 percent. These data indicate that, after their independence, African economies developed and workers moved out of agriculture to be absorbed in manufacturing. For the following decade, however, industrialization stalled. The charts of Figures 3 and 4 illustrate what is commonly known as the de-industrializing phase between 1995 and 2010, which is characterized by a stable employment share but a falling share of manufacturing value-added. Indeed, the data suggest that during the same years workers have shifted away from both agriculture and manufacturing into the market service sector—most notably retail, distribution, and other trade services—where the employment share increased by 50 percent. Furthermore, the figure indicates the fact that the mining sector provides only a negligible fraction of employment. A similar pattern can be observed in the sample of North African economies, Morocco and Egypt.

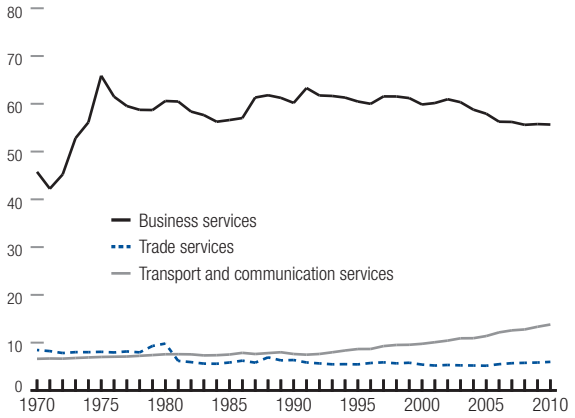
**However, labor productivity both in agriculture and trade service sectors—where most employment has shifted—remains low.** Figure 5a shows the comparatively low (though gradually increasing) labor productivity in the agriculture sector,[10] as further explored in Chapter 2.1. Figure 5b breaks down productivity into different market services. As seen above, trade services has absorbed most of labor in the

**Figure 5: Labor productivity per worker, sub-Saharan Africa (US$ thousands, PPP-adjusted, 2005 prices)**

5a: Selected sectors




5b: Within market services




Source: de Vries et al., 2013; Timmer et al., 2014.

Notes: The 10 economic sectors are grouped following the ISIC Rev. 3.1 classification as follows: agriculture (ISIC Rev. 3.1: A,B); mining (C); manufacturing (D); construction (F); utilities (E); business services (J,K); trade services (G,H); transport and communication services (I); government services (L,M,N); personal services (O,P).

Agriculture and manufacturing include ISIC Rev. 3.1 categories A and B, and D respectively. Market services correspond to the sum of business services (J,K), trade services (G,H), and transport and communication services (I). Numbers correspond to un-weighted average productivity per employee for the following countries: Botswana, Ethiopia, Ghana, Kenya, Malawi, Mauritius, Nigeria, Senegal, South Africa, Tanzania, and Zambia. For each country, productivity per employee has been calculated using value-added data in 2005 constant local currency sourced from the GGDC 10-sector Database and converted into 2005 constant PPP-adjusted US dollars using 2005 exchange rates and 2005 sector-specific PPPs sourced from the GGDC Africa Sector Database.[11]

past decades, yet it is this sector that also exhibits the lowest and declining labor productivity. This observation is confirmed by Figures 6a–6d, which show the relative productivity levels of different sectors in sub-Saharan Africa—that is, the ratio of specific sectors' labor productivity level to the total economy productivity at five-year intervals, beginning in 1965. Relative productivity appears higher in business services, but it has nonetheless also been declining in this sector. The transport and communication service sectors, together with the construction and utilities sectors, appear to be the main drivers of productivity growth since 2000. Today, together with mining and business services, these sectors boast the highest relative productivities. However, as discussed in Chapter 2.2, transport services on the continent—while presenting a significant percentage of total services exports across most African economies—have only weak links to other domestic sectors' exports.

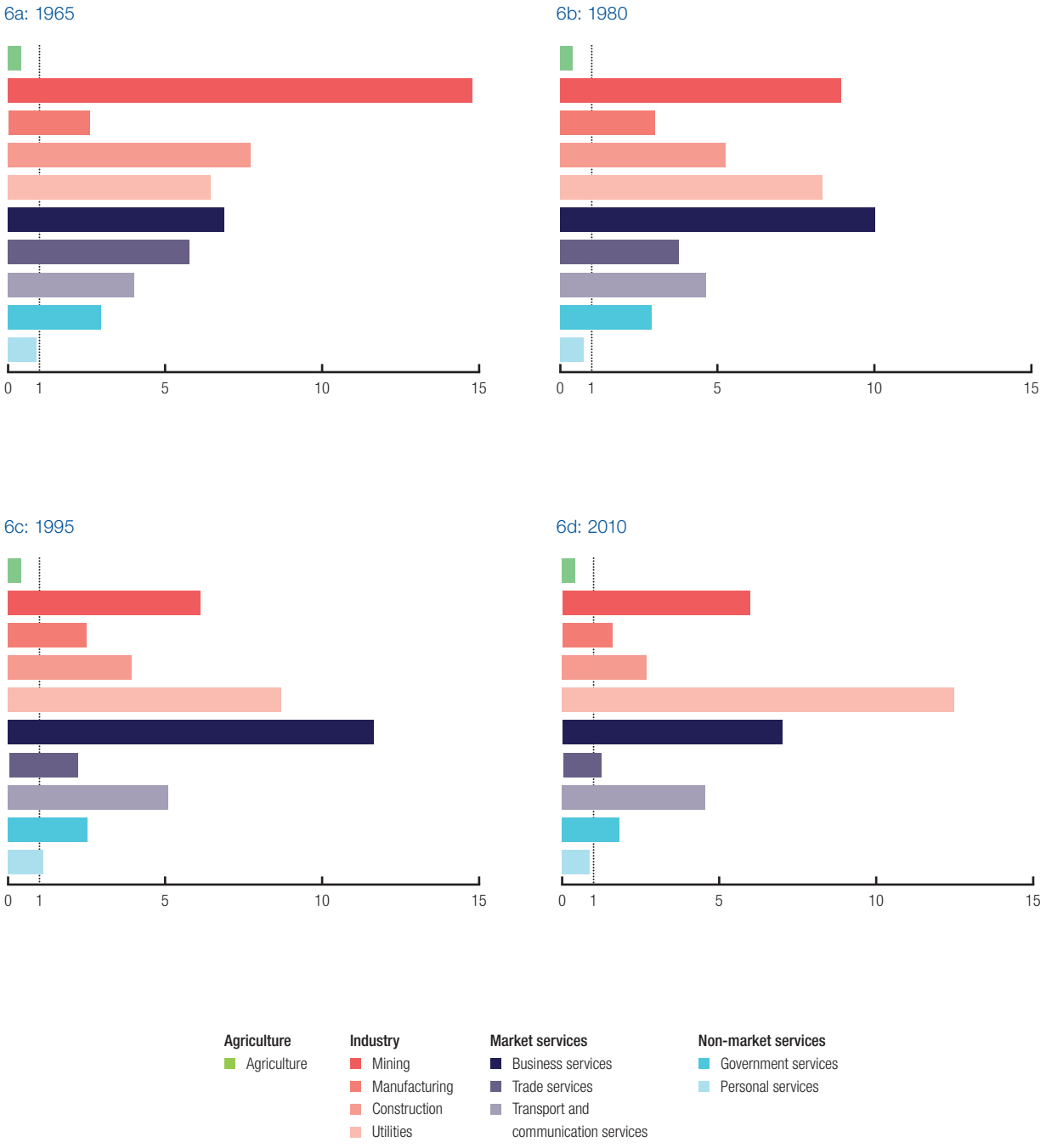
Overall, evidence suggests that although workers shifted from agriculture to services, most of them moved into the least productive jobs in retail and distribution services (including small shops, hotels, and restaurants). For the service sector to be a viable alternative to manufacturing on the path to economic structural change, focus must be on high-productivity jobs in business services.

What does this mean for Africa? The prevailing wisdom has emphasized industrialization as the driving force of economic development. This perception has been corroborated by the rapid industrial-led developments of East and Southeast Asia since the 1960s, among other observations. Some commentators, however, have argued that it may be possible to bypass manufacturing and shift into high-productivity services, citing the example of India.[12] Others doubt that a similar route is viable for Africa in view of the continent's large catch-up requirements and small share of employment in the business services (shown in Figure 4). They point to the fact that even in India manufacturing still represents almost 20 percent of overall value-added, compared with 11 percent in sub-Saharan Africa.[13] Moreover, highly productive business services constitute a significant share of value-added and employment in only a handful of advanced economies. For such services to prosper, countries need long-term investments in widespread and well-developed higher education and training systems. They also need to create an enabling environment for foreign direct investment and technology transfer; both these things together will support building regional value and tap into global value chains (see Chapter 2.3). Going forward, Africa will need broad-based productivity increases to create shared prosperity.

Identifying the drivers of productivity needed to ensure sustained economic growth is the goal of the Global Competitiveness Index (GCI), which defines *competitiveness* as *the set of institutions, policies, and factors that determine the level of productivity of a country.* The current and future levels of productivity, in turn, set the sustainable level of prosperity that can be earned by an economy in the medium to long term.

The measurement of competitiveness is a complex undertaking. To address this complexity, the idea that many different factors matter for competitiveness is reflected by the 12 distinct pillars of the Index:[14] institutions (public and private), infrastructure, the macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, market size,

**Figure 6: Relative sector productivity, sub-Saharan Africa (relative sector productivity, 1 = total economy productivity)**



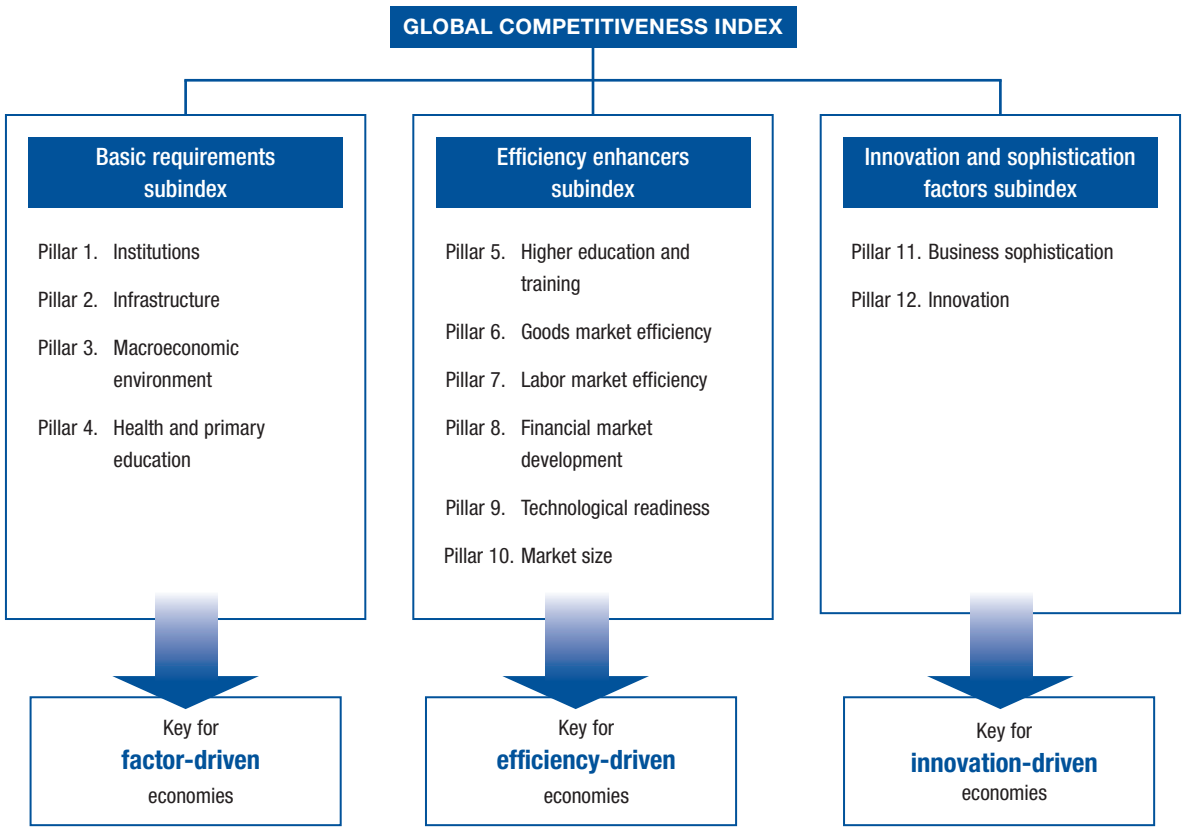

Source: Timmer et al., 2014.

Notes: The 10 economic sectors are grouped following the ISIC Rev. 3.1 classification as follows: agriculture (ISIC Rev. 3.1: A,B), mining (C), manufacturing (D), construction (F), utilities (E), business services (J,K), trade services (G,H), transport and communication services (I), government services (L,M,N), personal services (O,P). The **sub-Saharan Africa** sample includes Botswana, Ethiopia, Ghana, Kenya (1969 data have been used for 1965), Malawi (1966 for 1965), Mauritius (1970 for 1965), Senegal (1970 for 1965), South Africa, Tanzania, and Zambia. Nigeria has been excluded because the country represents a clear outlier as a result of the extremely high productivity in the mining sector.

business sophistication, and innovation (see Figure 7). Improving competitiveness across the 12 GCI pillars would be important for meeting Africa's sustainable growth challenge.

The GCI takes into account the fact that countries around the world are at different stages of economic development and offers guidance on the priority areas for reforms. Specifically, the GCI distinguishes three stages of development. In their first stage, economies are *factor-driven* and their competitiveness is based on their factor endowments—primarily unskilled labor and natural resources. Maintaining competitiveness in this stage depends relatively more on well-functioning public and private institutions (pillar 1), well-developed infrastructure (pillar 2), a stable macroeconomic environment (pillar 3), and a healthy and literate workforce (pillar 4). As wages rise with advancing development, countries move into the second, *efficiency-driven* stage of development, when they must begin to develop more efficient production processes and

**Figure 7: The Global Competitiveness Index framework**




Source: World Economic Forum, 2014a.

increase product quality. At this stage, competitiveness depends more on higher education and training (pillar 5), an efficient goods and services market (pillar 6), frictionless labor markets (pillar 7), developed financial markets (pillar 8), the ability to make use of latest technological developments (pillar 9), and the size of the domestic and foreign markets available to the country's companies (pillar 10). Finally, as countries move into the third, *innovation-driven* stage, they are able to sustain higher wages and the associated level of productivity only if their businesses are able to compete with new and unique products. At this stage, companies must compete by producing new and different goods or services using the most sophisticated management methods (pillar 11) and innovation (pillar 12).

The GCI classifies most African countries as factor-driven economies (see Table 1).[15] It suggests that a competitiveness agenda for most African countries should prioritize building out the basic fundamentals as their first critical step toward improving productivity and competitiveness. That is, these economies should prioritize providing sound institutions and macroeconomic policies, adequate infrastructure, and the means for ensuring a healthy and educated workforce. This is particularly important for the five countries (Algeria, Angola, Botswana, Gabon, and Libya) that are currently transitioning to the second—efficiency-driven—stage of development, which will require them to move into higher level of efficiencies to maintain growth.[16] Seven other African economies are currently in the efficiency-driven stage of the GCI, where higher education and market efficiencies (goods, labor, and financial) take a more prominent role. Along with Seychelles, Mauritius is currently transitioning to the innovation-driven stage. To increase their competitiveness, these small open economies need to do more to put into place a skilled workforce and a business environment that is supportive for innovation and adaptive to new technologies. It is important to bear in mind that the priorities proposed by the GCI serve as guidelines rather than carved-in-stone policies, and a holistic competitiveness agenda needs to consider the country-specific context and unique challenges.

The next section will assess and analyze the overall competitiveness of Africa. To get a sense of the region's performance in international comparison, it also compares the performance of relevant regions and countries (Southeast Asia, Latin America and the Caribbean, and the BRIC economies).[17]

## Country coverage

As in the previous *Africa Competitiveness Report,* this year's *Report* features 38 African economies that were covered by the GCR 2014–2015. The sample has changed slightly from the last report: two countries—Angola and Tunisia—were re-instated in the GCI, and

**Table 1: African countries by stage of development**

| Stage | African countries | Other countries in this stage | Important areas for competitiveness |
|---|---|---|---|
| **Stage 1 (factor-driven)** GDP per capita < US$2,000 | Benin,* Burkina Faso, Burundi, Cameroon, Chad, Côte d'Ivoire, Ethiopia, Gambia, Ghana, Guinea, Kenya, Lesotho, Liberia,* Madagascar, Malawi, Mali, Mauritania, Mozambique, Nigeria, Rwanda, Senegal, Sierra Leone, Tanzania, Uganda, Zambia, Zimbabwe | Bangladesh, Nicaragua, Pakistan, Vietnam, Yemen | Basic requirements (60%) and efficiency enhancers (35%) |
| **Transition from 1 to 2** GDP per capita US$2,000 to US$3,000 | Algeria, Angola, Botswana, Gabon, Libya | Azerbaijan, Bolivia, Brunei Darussalam, Iran, Islamic Rep., Venezuela | Basic requirements (between 40% and 60%) and efficiency enhancers (between 35% and 50%)* |
| **Stage 2 (efficiency-driven)** GDP per capita US$3,000 to US$9,000 | Cape Verde, Egypt, Morocco, Namibia, South Africa, Swaziland, Tunisia | Albania, Belize, China, Colombia, Indonesia, Jordan, Peru, South Africa | Basic requirements (40%) and efficiency enhancers (50%) |
| **Transition from 2 to 3** GDP per capita US$9,000 to US$17,000 | Mauritius, Seychelles | Argentina, Brazil, Chile, Croatia, Malaysia, Mexico, Russian Federation, Turkey | Basic requirements (between 20% and 40%) and efficiency enhancers (50%) Innovation factors (10% to 30%)* |
| **Stage 3 (innovation-driven)** GDP per capita > US$17,000 | | Germany, Korea, Rep, Norway, Spain, United Kingdom, United States | Basic requirements (20%) and efficiency enhancers (50%) Innovation factors (30%)* |

Sources: World Economic Forum 2014a, 2013b (Benin and Liberia).
Note: Countries with a share of mineral exports in their total exports higher than 70 percent are moved toward a lower stage of development. See endnote 15 for more details.
* Based on the GCI 2014–2015.

two previously covered countries—Benin and Liberia—were not included in 2014–2015 because sufficient Executive Opinion Survey data could not be collected. For the sake of completeness, their competitiveness profiles are presented using 2013–2014 data, marked by an asterisk in Part 3.[18]

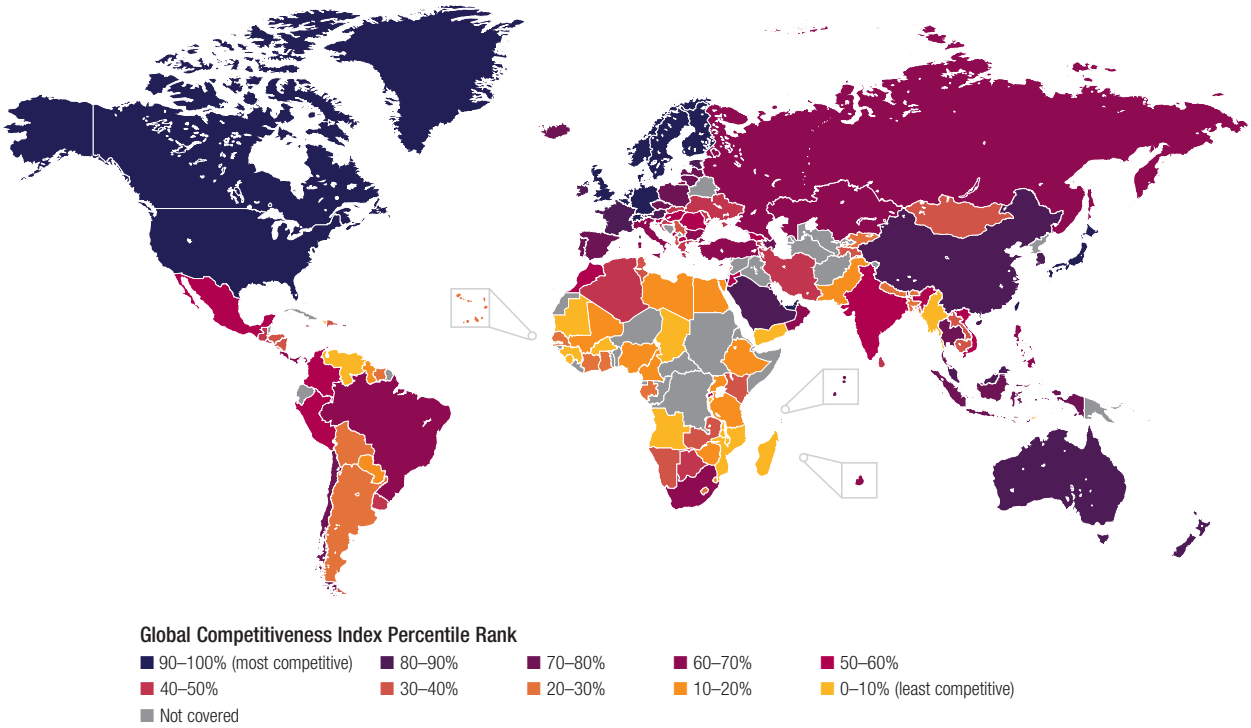
## Africa's performance in an international context

Despite recent rapid growth, African economies on average trail the rest of the world in competitiveness: 15 out of the 20 least competitive economies in the GCI sample that forms the basis of this *Report* are from Africa. Figure 8 identifies competitiveness "hotspots" and the regions or countries that exhibit weak performances in the GCI. The 10 best-performing countries are shaded in dark blue. The remaining countries are shaded in increasingly warmer tones, moving from a dark purple (the second-best-performing group) through shades of purple-red, dark orange, orange, and finally yellow; this last color identifies the least-competitive nations according to the GCI. As shown on the map, a vast majority of African countries covered in this *Report* fall into the group of least-competitive economies (orange to yellow). Outside of Africa, only four Latin American countries (Guyana, Haiti, Paraguay, and Venezuela), three Asian economies (Myanmar, Pakistan, and Timor-Leste), and one country from the Middle East (Yemen) perform similarly. However, within Africa, Mauritius, Rwanda, and South Africa (burgundy red), and Botswana and Morocco (lighter red) are relatively more competitive.

**Despite high and persistent growth rates experienced in the region for over a decade, Africa's overall competitiveness has remained stagnant—a message that the *Africa Competitiveness Report* series has been highlighting since it began in 1998.** Figure 9 compares 24 African economies that have been included in the GCI since 2006. Their performance is benchmarked against that of the OECD average, providing a sense of how these regions compare with a group of the world's more advanced economies; it is also measured against the performance of Southeast Asia and Latin America, which provide more comparable benchmarks in terms of stages of development. For instance, although both Africa and Southeast Asia had approximately the same levels of GDP per capita in the 1960s, Southeast Asia's GDP per capita has since risen considerably more rapidly than sub-Saharan Africa (see also Figure 1). This is reflected in their competitiveness performance, which shows a stagnation of Africa's competitiveness overall and a widening gap with Southeast Asia (Figure 9).

**Overall, Africa is lagging other regions in establishing the basic requirements for competitiveness, but does comparatively well in the GCI assessment of goods, labor, and financial market efficiency.** Comparing Africa's performance with other, more advanced regions helps to identify the region's overall strengths and weaknesses. To this end, Figure 10 compares the performance of this year's sample of 38 African economies with that of regional comparators out of a total sample of

**Figure 8: The Global Competitiveness Index 2014–2015**

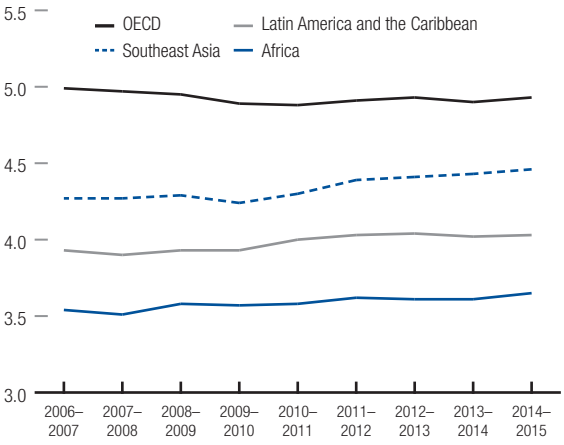



Source: World Economic Forum, 2014a.

144 economies in the 12 pillars of competitiveness. African economies consistently underperform the Southeast Asian average across all the pillars. The most critical gaps continue to be seen in the areas of basic requirements of competitiveness: institutions, infrastructure, and education and skills.[19] This is troubling because the majority of African economies are classified as factor-driven economies (see Table 1), so these areas are currently the most critical areas for the competitiveness of these countries. On a more positive note, Africa's financial, goods, and labor markets function comparatively well (on par, or nearly on par, with Latin America). However, ease of entry and exit from low-wage, low-productivity jobs will not lead to improved competitiveness. It will be important to build upon the region's comparatively efficient markets by investing in other competitiveness-enhancing reforms.

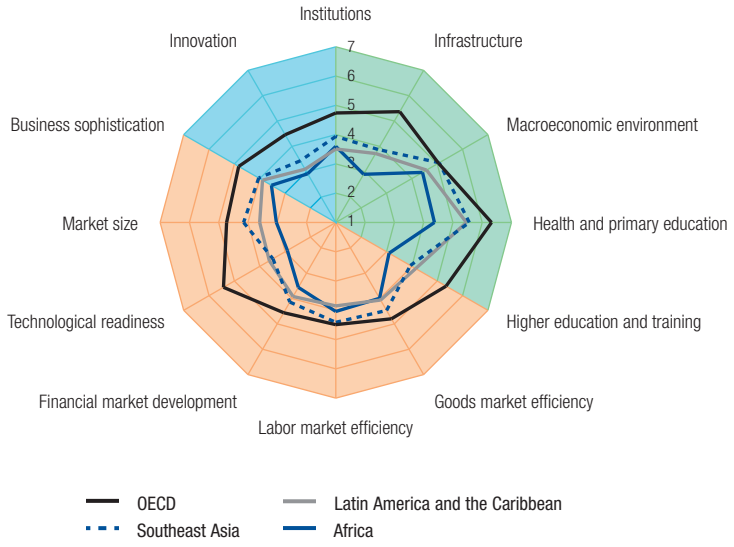
**A particular point of concern is the continent's weak institutions.** Although Africa's performance is similar to that of Southeast Asia and Latin America and the Caribbean in this pillar, the institutions in all three regions receive scores below 4 out of 7. This suggests that more effort should be made to increase the capacity of the institutional framework, as it provides a critical foundation for the other dimensions of competitiveness. Indeed, the quality of institutions has actually been deteriorating in both OECD and African economies according to the GCI. This might explain in part why Africa's competitiveness seems to have stagnated in comparison to OECD economies (see Figure 11a). In Africa, a decline in security and government efficiency—two components of the public institutions subpillar—would appear to be at the core of this decline. Sound public institutions and governance are an important prerequisite for economic development;

**Figure 9: Trends in the GCI, 2006–14**
GCI scores (1–7)




Source: World Economic Forum, 2014a.
Note: **Africa** (2006 constant sample) includes Algeria, Egypt, Morocco, Botswana, Burkina Faso, Burundi, Cameroon, Chad, Ethiopia, Gambia, Kenya, Lesotho, Madagascar, Mali, Mauritania, Mauritius, Mozambique, Namibia, Nigeria, South Africa, Tanzania, Uganda, Zambia, Zimbabwe; **Latin America and the Caribbean** (2006 constant sample) includes Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay, Venezuela; **Southeast Asia** (2006 constant sample) includes Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, Timor-Leste, Vietnam; **OECD countries** include Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Rep., Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

**Figure 10: Africa's performance in regional comparison, 2014–2015**
GCI scores (1–7)




| BASIC REQUIREMENTS PILLAR | |
|---|---|
| OECD | 5.37 |
| Southeast Asia | 4.62 |
| Latin America and the Caribbean | 4.32 |
| Africa | 3.82 |

| EFFICIENCY ENHANCERS PILLAR | |
|---|---|
| OECD | 4.89 |
| Southeast Asia | 4.10 |
| Latin America and the Caribbean | 3.87 |
| Africa | 3.44 |

| INNOVATION AND SOPHISTICATION FACTORS PILLAR | |
|---|---|
| OECD | 4.65 |
| Southeast Asia | 3.74 |
| Latin America and the Caribbean | 3.49 |
| Africa | 3.23 |

Source: World Economic Forum, 2014a.
Note: **Africa** includes Algeria, Angola, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Chad, Côte d'Ivoire, Egypt, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Lesotho, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, Swaziland, Tanzania, Tunisia, Uganda, Zambia, Zimbabwe; **Latin America and the Caribbean** includes Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay, Venezuela; **Southeast Asia** includes Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Vietnam; **OECD countries** include Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Rep., Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

against this backdrop, their weakening—as indicated by the data—raises questions about whether the fundamentals are in position that will put growth on a sustainable footing.

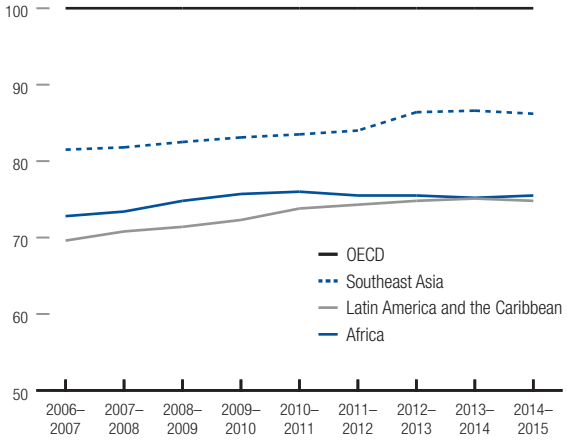
**Africa suffers from a persistent infrastructure deficit.** The GCI data confirm once more the region's pronounced infrastructure deficit—a critical bottleneck to reaping the benefits from increased regional integration, a topic explored in the 2013 *Africa Competitiveness Report.*[20] Connecting Africa's markets will be a critical driver for the region in boosting intra-African trade. Data suggest that, to date, only 11.3 percent of trade in Africa is intra-regional,[21] and that total exports remain heavily skewed toward exports of raw minerals. In addition, major bottlenecks—such as the unreliable electricity supply—are hampering the continent's transition to higher-value-added activities. Africa—based on a sample of 48 economies—generates roughly the same power as Spain, although Africa's population is nearing 1.1 billion while there are 49 million people in Spain.[22]

The years between 2006 and 2009 were promising and seemed to usher in a gradual convergence in the region's performance in terms of the quality of infrastructure compared with that of OECD economies, but the past six years show a divergence (Figure 11b). This is particularly worrisome given that, for the time being, Africa's performance in infrastructure stands at just little over half of that of the OECD.[23] Estimates suggest that the annual infrastructure and maintenance needs for sub-Saharan Africa stand at 10 percent of GDP.[24] The Priority Action Plan of the Programme for Infrastructure Development in Africa (PIDA PAP) alone encompasses an investment need of US$68 billion between 2012 and 2020, incorporating 51 programs of regional importance in the transport, water, energy, and information and communication technologies (ICT) sectors.[25] Africa's stagnation with respect to infrastructure stands in stark contrast to the regions of Southeast Asia and Latin America and the Caribbean, where infrastructure investments have managed to reduce the infrastructure gap with OECD economies. Southeast Asia, for instance, has narrowed the gap from 70 percent in 2006 to 80 percent in 2014 (see Figure 11b). One of the main challenges going forward will be to balance public finance and infrastructure investment needs. A recent IMF study, however, finds that the lack of financing is not always the primary cause of infrastructure underinvestment; in many countries, insufficient regulatory and implementation capacity seem to be the main constraints.[26]

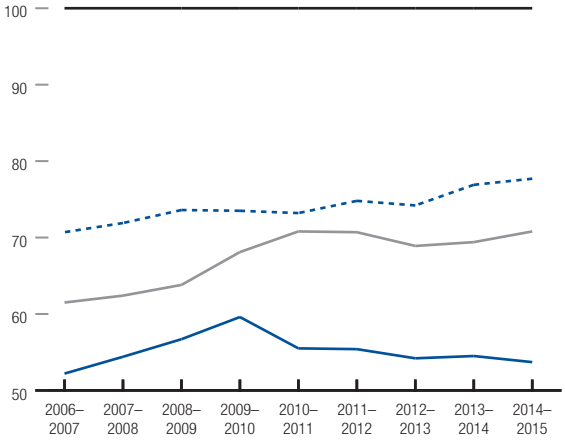
**Most worryingly, Africa is not benefitting from its human capital potential. The entire region is underperforming significantly in education and public health (see Figures 11c and 11d).** Communicable diseases are not under control in parts of the region; child mortality is over twice that of Latin

**Figure 11: Africa's performance in selected pillars against comparators (relative performance, 100 = OECD)**

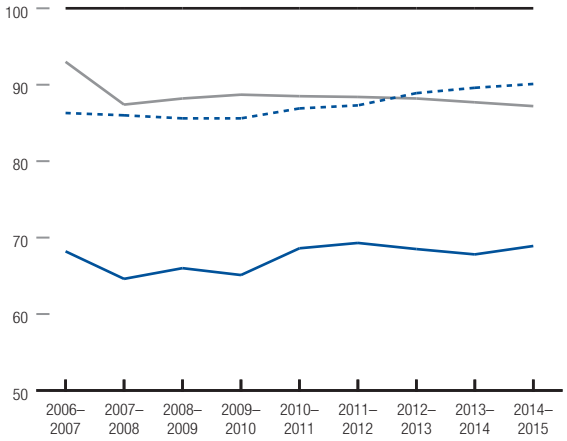
11a: Institutions pillar



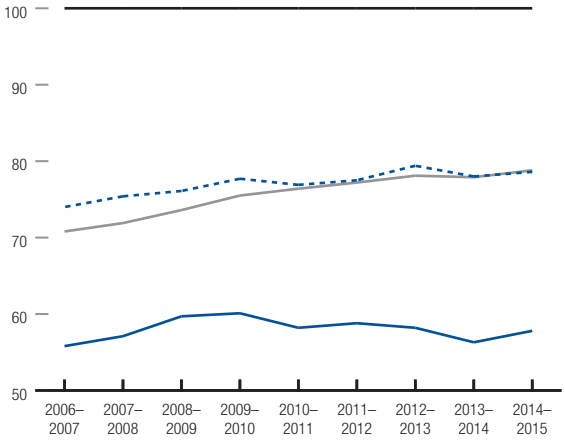

11b: Infrastructure pillar



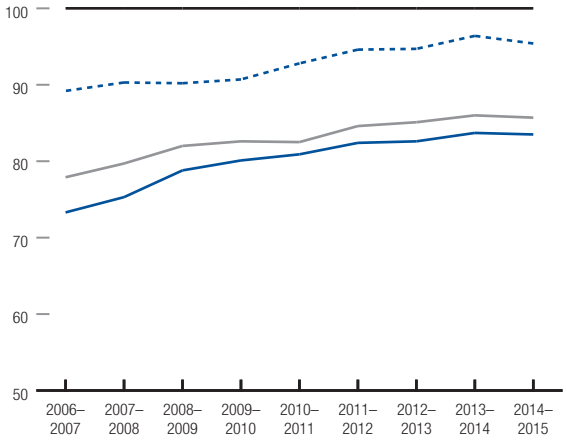

11c: Health and primary education pillar



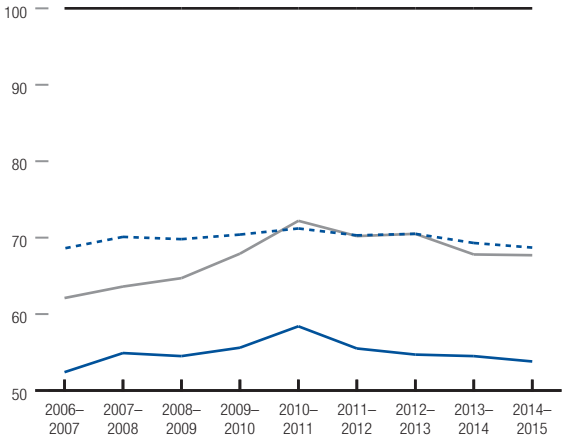

11d: Higher education and training pillar




11e: Goods market efficiency pillar




11f: Technological readiness pillar




Sources: World Economic Forum, *The Global Competitiveness Report*, (various editions).

Note: **Africa** (2006 constant sample) includes Algeria, Egypt, Morocco, Botswana, Burkina Faso, Burundi, Cameroon, Chad, Ethiopia, Gambia, Kenya, Lesotho, Madagascar, Mali, Mauritania, Mauritius, Mozambique, Namibia, Nigeria, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe; **Latin America and the Caribbean** (2006 constant sample) includes Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay, and Venezuela; **Southeast Asia** (2006 constant sample) includes Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, Timor-Leste, and Vietnam; **OECD countries** include Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Rep., Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

America and the Caribbean and Southeast Asia; and life expectancy amounts to just 50 years on average, compared with over 70 years in both comparator regions. Similarly, only every second child on the African continent receives a secondary education and just a tenth of the age cohort goes on to enroll in tertiary institutions, compared with over a third in the comparator regions.

Low education levels are a pressing concern in view of the region's youth unemployment challenge and its potentially detrimental consequences. Events such as the Arab Spring have highlighted the tensions that can arise from a growing population without accompanying economic and social progress that ensures decent living standards, employment, and fair opportunities to better people's lives.[27] Already Africa is home to the youngest population worldwide; by 2020 half its population is projected to be under 25 years of age. A World Bank report estimates that each year between 2015 and 2035 there will be half a million more 15-year-olds in Africa than in the previous year.[28] To absorb this growing labor force, it is estimated that 18 million jobs will need to be created per year until 2035.[29]

A well-educated workforce will be the single most important enabler for transforming Africa's economies and allowing them to benefit from a demographic dividend. In the short term, absorbing the large number of new labor-market entrants will require the development of job-intensive sectors (see Chapter 2.1). In the longer term, moving up the value chain into more advanced manufacturing and service sectors while increasing these sectors' productivity will require significant and immediate investment in education if the workforce is to move beyond simple production processes. Africa's underperformance in educating its workforce and upgrading skills is particularly worrying given the shift of workers into the service sector, with its large share of value-added and its low (labor) productivity, as explored earlier in this chapter. What is more, high unemployment rates among youth with secondary and tertiary education even in countries that do well on educational attainment, such as Mauritius and Tunisia, indicate a mismatch between the education system and the needs of employers. Surveys among employers confirm these trends: 54 percent of African employers state that job seekers' skills do not match their needs and 41 percent that the unemployed lack skills in general.[30] Education can play an even more prominent role by ensuring knowledge spillovers from the natural resource sector to the domestic economy. This will happen only through skills and training efforts (see Box 1), because the adoption of new technologies and strengthening innovation will become more important to ensure that the continent remains competitive going forward.

**Despite Africa's mobile revolution, the region as a whole is not keeping up with the rapid technological improvements elsewhere.** The GCI's technological readiness pillar measures the agility with which an economy adopts existing technologies to enhance the productivity of its industries, with a specific emphasis on its capacity to fully leverage ICTs. This is especially important in view of the changing role of ICTs. Indeed, they have become critical tools in today's economy, accounting for a significant share of value-added and employment in advanced economies, supporting efficiency gains, and enabling transformative innovation. For developing economies, for instance, a 10 percent increase in the penetration rates of mobile phones has been associated with a 0.8 percent increase in GDP per capita, while the same increase in broadband networks could add a further 1.4 percent to overall economic growth.[31]

Africa's rate of mobile subscriptions per 100 population has increased dramatically in our sample: just one-tenth of the population held a subscription in 2006, while over four-fifths held one in 2014, representing a more rapid increase than either of the comparator regions. However, ICTs generally remain a moving target. Figure 11f shows that Africa continues to perform at 50 percent of OECD economies in the pillar on technological readiness. A similar stagnation compared with advanced economies is observed in Latin America and the Caribbean and in Southeast Asia. The situation is even less positive when considering ICT use, one of the two subpillars of the technological readiness pillar (see Appendix A), where Africa's performance remains just 30 percent of that of OECD economies. Going forward, African economies need not only to make the types of investment necessary to build out their ICT infrastructure, but also to create an enabling environment to fully leverage ICT uptake to boost economic and social impacts.[32]

In particular, increasing competition in ICT markets will be vital for increasing affordability, improving the provision of services, and accelerating uptake. Almost one out three countries in sub-Saharan Africa have already fully liberalized their ICT markets. This group of reformers includes not only region leaders such as Kenya, Mauritius, and Nigeria, but also fragile and least-developed countries such as Burkina Faso, Madagascar, and Uganda. Competitive markets are low-hanging fruits that can increase ICT use and connectivity across the country. In this year's sample of 38 African economies, less than 20 percent of the population has access to the Internet, compared with close to 30 percent in Southeast Asia and 50 percent in Latin America. Although the region has shown its capacity for innovative ICT business models, such as the widely known M-PESA system, connecting more of its population to the Internet and closing the gap with other fast-moving economies will be critical for its future, particularly in view of the shift

### Box 1: The Africa Skills Initiative

Addressing Africa's unemployment challenge and its growing skills mismatch will require the concerted efforts of all stakeholders. Although it is governments that must create the enabling environment that promotes the creation of quality employment overall and secures access to quality education, it is critical that business, civil society, and the education and training sector are engaged in identifying and implementing solutions.

Under the umbrella of the World Economic Forum's Global Challenge on Employment, Skills & Human Capital,[1] the Africa Skills Initiative convenes the Forum's multi-stakeholder communities in an effort to understand the present and future needs of this challenge and identify potential solutions. The initiative uses a set of analytical tools that includes the Human Capital Index, which measures and benchmarks countries on their human capital endowment; the Future of Jobs analysis, which provides sector-level diagnostics on key trends and disruptions to the job market and their effects on employment and skills; and the Disrupting Unemployment portal, which consolidates information on business-led solutions for addressing skills gaps, fostering entrepreneurship, and facilitating the talent market. Leveraging this knowledge, the initiative aims to identify what can be done today to disrupt the employment crisis now while at the same time preparing for the future. Led by the Africa Business Council, the initiative calls on businesses to make public commitments to creating jobs and improving skills over a period of two years.

Some vital lessons emerge from existing solutions and best practices. First and foremost, partnerships between different sectors are an indispensable component of finding scalable solutions. Across the most successful initiatives an explicit partnership arrangement between multiple sectors of society is crucial to tackling the magnitude of the current situation.

Second, in an environment of ongoing disruption, interventions are most effective if they are sustainably designed for the long term rather than reactive or based only on past successes. For example, efforts to place unemployed youth in apprenticeships in traditional job categories may not provide a high return on investment for the company or the individuals involved if those job categories are likely to be obsolete in five years' time. Instead there may be greater opportunity in entirely new high-growth occupations for which new forms of apprenticeships may need to be created.

This approach can be seen in Digital Jobs Africa by the Rockefeller Foundation, which responds to the current disruptions by catalyzing sustainable information communication technology (ICT)-enabled employment opportunities and skills training for African youth.[2] Partnering with actors from the private sector, government, civil society, and the development community, the initiative gives youth access to digital job opportunities while building and refining transferable skills that make them resilient in the future economy.

Third, technology is a key enabler to reach scale. Cisco's Networking Academy,[3] for example, partners with education institutes and local nongovernmental organizations in more than 170 countries to deliver an ICT training program that combines on- and offline modules and is tailored to different regions.

Fourth, initiatives that tap into core business processes and match the public good with private interest are often very successful and demonstrate sustainable results. 5by20,[4] for example, is an initiative by the Coca-Cola Company that enables women entrepreneurs in Coke's value chain by breaking down the barriers they face. The offered programs include business skills training courses as well as access to financial services and support networks of peers or mentors.

**Notes**

1 Information about the Employment, Skills & Human Capital Initiative is available at http://www.weforum.org/projects/employment-skills-and-human-capital.

2 Information about the Digital Jobs Africa is available at http://reports.weforum.org/disrupting-unemployment/digital-jobs-africa/.

3 Information about Cisco's Networking Academy is available at http://reports.weforum.org/disrupting-unemployment/networking-academy/.

4 Information about 5by20 is available at http://reports.weforum.org/disrupting-unemployment/5by20/.

of African economies toward services. As described earlier in this chapter, data show that the transport and communication sector (including ICTs) has experienced one of the highest productivity gains in sub-Saharan Africa since 2000. Once again, a skilled and educated workforce will be needed to scale up, multiply successful ICT businesses, and facilitate the shift toward a higher-value-added service-based economy.[33]

**On the upside, macroeconomic stability in the region has been improving since the last *Report*, as countries have been reining in inflation and government debt has been stable at around 40 percent of GDP on average.** But the region needs to remain vigilant with regard to its macroeconomic stability.[34] Important downside risks remain—for example, a slowdown in growth in key emerging markets that have been a driving force for Africa's economies would present severe difficulties; economies that have benefitted from capital inflows could feel the effects of rising interest rates in the United States; and energy-exporting countries could suffer from the four-year low in oil prices. Africa's limited integration into the global economy has helped to prevent spillovers from the global economic crisis to the continent (with the exception of South Africa). And although integrating into the global economy more fully provides opportunities, it also renders the region more vulnerable to external shocks. Recent work by the IMF suggests that higher growth in advanced or emerging markets translates one-to-one into higher growth in sub-Saharan Africa and vice versa.[35] Enhancing competitiveness will be critical for attracting sustained investment, and hence sustainable growth.

**Table 2: The Global Competitiveness Index 2014–2015: Africa and selected comparators**

| | GCI 2014–2015 | | | GCI 2013–2014 |
|---|---|---|---|---|
| Economy | Rank/144 | Direction | Score | Rank/148 |
| China | 28 | ↑ | 4.9 | 29 |
| Mauritius | 39 | ↑ | 4.5 | 45 |
| Russian Federation | 53 | ↑ | 4.4 | 64 |
| South Africa | 56 | ↓ | 4.4 | 53 |
| Brazil | 57 | ↓ | 4.3 | 56 |
| **Southeast Asian average** | | | **4.3** | |
| Rwanda | 62 | ↑ | 4.3 | 66 |
| India | 71 | ↓ | 4.2 | 60 |
| Morocco | 72 | ↑ | 4.2 | 77 |
| Botswana | 74 | → | 4.2 | 74 |
| Algeria | 79 | ↑ | 4.1 | 100 |
| **Latin America and the Caribbean average** | | | **4.0** | |
| Tunisia | 87 | ↓ | 4.0 | 83 |
| Namibia | 88 | ↑ | 4.0 | 90 |
| Kenya | 90 | ↑ | 3.9 | 96 |
| Seychelles | 92 | ↓ | 3.9 | 80 |
| **North African average** | | | **3.9** | |
| Zambia | 96 | ↓ | 3.9 | 93 |
| Gabon | 106 | ↑ | 3.7 | 112 |
| Lesotho | 107 | ↑ | 3.7 | 123 |
| Ghana | 111 | ↑ | 3.7 | 114 |
| Senegal | 112 | ↑ | 3.7 | 113 |
| Cape Verde | 114 | ↑ | 3.7 | 122 |
| Côte d'Ivoire | 115 | ↑ | 3.7 | 126 |
| Cameroon | 116 | ↓ | 3.7 | 115 |
| Ethiopia | 118 | ↑ | 3.6 | 127 |
| Egypt | 119 | ↓ | 3.6 | 118 |
| **Sub-Saharan African average** | | | **3.6** | |
| Tanzania | 121 | ↑ | 3.6 | 125 |
| Uganda | 122 | ↑ | 3.6 | 129 |
| Swaziland | 123 | ↑ | 3.6 | 124 |
| Zimbabwe | 124 | ↑ | 3.5 | 131 |
| Gambia, The | 125 | ↓ | 3.5 | 116 |
| Libya | 126 | ↓ | 3.5 | 108 |
| Nigeria | 127 | ↓ | 3.4 | 120 |
| Mali | 128 | ↑ | 3.4 | 135 |
| Madagascar | 130 | ↑ | 3.4 | 132 |
| Malawi | 132 | ↑ | 3.2 | 136 |
| Mozambique | 133 | ↑ | 3.2 | 137 |
| Burkina Faso | 135 | ↑ | 3.2 | 140 |
| Sierra Leone | 138 | ↑ | 3.1 | 144 |
| Burundi | 139 | ↑ | 3.1 | 146 |
| Angola | 140 | ↑ | 3.0 | 142 |
| Mauritania | 141 | → | 3.0 | 141 |
| Chad | 143 | ↑ | 2.8 | 148 |
| Guinea | 144 | ↑ | 2.8 | 147 |

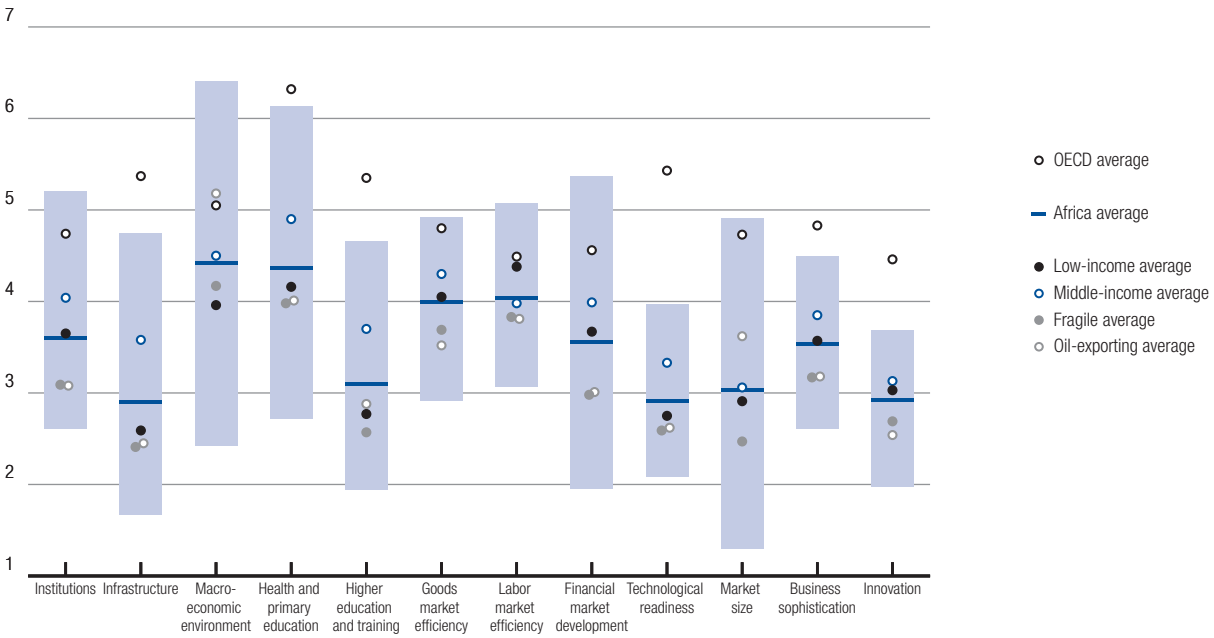
Sources: World Economic Forum 2013b, 2014a.

**Finally, improvements in goods market efficiency have been remarkable, primarily on the back of improvements in domestic competition (see Figure 11e).** Among the *Report*'s constant sample of 24 economies, the number of days to start a business, for instance, has halved from about two months in 2006 to below one month in 2014. A recent World Bank report finds that sub-Saharan Africa had the highest number of business regulatory reforms in 2013, with over three-fourths of the region's economies improving their business regulations for local entrepreneurs.[36] A strong business environment is critical, as it will set the operating framework for a strong private sector and, hence, for employment creation; it will also facilitate foreign direct investment. At a time when international investment flows were stalling elsewhere, foreign direct investment into the region reached US$57 billion in 2013. In particular, investors have focused on infrastructure development both in the transport and in the utilities sectors. The potential of a large domestic market with an increasing middle class has also gained the interest of consumer-oriented service sectors, such as ICTs, finance, tourism, and retail. In contrast, according to the *World Investment Report 2014*, the share of foreign direct investment directed to the primary sector has been gradually declining in Africa, while that of the greenfield projects service sector has increased significantly.[37]

## Africa's competitiveness divide

**Aggregate numbers mask big differences among African economies, which range from the region's best-performing economy Mauritius (39th) to the its worst-performing economy, Guinea (144th), indicating that the region is far from a homogeneous entity in terms of competitiveness.** Table 2 shows the GCI performance of all African economies covered and comparator regions and countries. Mauritius and South Africa, ranked 39th and 56th, respectively, are the continent's top performers and come in above the Southeast Asian average—an improvement since the last *Report* when they ranked below that comparator region. They also rank above the emerging market economies of Brazil and India. They are followed by a second cluster of countries—Rwanda (62nd), Morocco (72nd), Botswana (74th), and Algeria (79th)—which are more competitive than Latin America and the Caribbean on average. A third group of African economies—Tunisia, Namibia, Kenya, and Seychelles—cluster between the Latin American and North African averages. Egypt (119th) and Libya (126th) do less well than the North African average, while a number of countries—Zambia, Gabon, Lesotho, Ghana, Senegal, Cape Verde, Côte d'Ivoire, Cameroon, and Ethiopia—do better than the sub-Saharan average.

**Figure 12: GCI score dispersion among groups of African economies, OECD comparison**
GCI Score (1–7)




Source: World Economic Forum, 2014a.

Note: The length of each bar is determined by the score of the best- and worst-performing economy in the Africa 2015 sample. **Low-income countries** include Burkina Faso, Ethiopia, The Gambia, Kenya, Malawi, Mali, Mozambique, Rwanda, Sierra Leone, Tanzania, and Uganda; **Middle-income countries** include Botswana, Cape Verde, Egypt, Ghana, Lesotho, Mauritius, Morocco, Namibia, Senegal, Seychelles, South Africa, Swaziland, Tunisia, and Zambia; **Oil-exporting countries** include Algeria, Angola, Cameroon, Chad, Gabon, Libya, and Nigeria; **Fragile countries** include Burundi, Côte d'Ivoire, Guinea, Madagascar, Mauritania, and Zimbabwe. **OECD countries** include Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Rep., Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

**These wide differences in the overall performance of African countries demonstrate that countries and country groups are at very different levels in terms of competitiveness, and that there is no one-size-fits-all blueprint for improving competitiveness.** Following the IMF's classification, the following paragraphs group countries into four distinct groups of African economies: oil exporters, middle-income economies, non-fragile low-income economies, and fragile economies.[38] Figure 12 underscores the divergence within the region across the 12 pillars of competitiveness, showing the average performance of the OECD as an international benchmark (shown by a black circle) and the African average (shown by a blue bar). To complement the analysis further, Table 3 shows the score performance at an individual country level. The aim of this classification is to facilitate discussion and draw some general conclusions about the strengths and weaknesses of these country groups. Yet it is important to note the limitations of such a general analysis, which would need to be complemented by an in-depth country analysis of the specific challenges and priorities (see individual country profiles in Part 3).[39]

**Two basic requirements for competitiveness—infrastructure (pillar 2) and health and primary education (pillar 4)—suffer from the largest competitiveness gaps with other regions ("between" regions). They are also cause of the largest divides within the region, where the differences between the best- and worst-performing economies account for more than three points on the scale of 1–7 (see Figure 12).** More positively, this means that some pockets of quality exist that can measure up to other regions. The performance of a few select economies in the area of health and primary education, for instance, is encouraging, where—as previously seen—the region otherwise underperforms other comparator regions by a wide margin. These are the small open economies of Mauritius, Seychelles, and Cape Verde, which score around 6 on the scale of 1–7, as well as four out of five North African economies, which all score above 5 (see Table 3). In these countries, people can expect to live to more than 70 years and enrollment in primary education is well above 90 percent. Figure 12 and Table 3 provide additional information on the similar divergence in these countries' performance in infrastructure. Although Mauritius receives the region's best assessment (42nd), followed by Seychelles (53rd), Morocco (55th), and South Africa (60th), the majority of countries in the sample score lower than 3 (out of 7). Some countries, such as Chad and Guinea, score under 2, further illustrating the immense infrastructure challenge on the continent.

**The data also point to a large divide within the region in the areas of macroeconomic and financial market performance.** Africa boasts some economies with efficient financial markets: most prominent is South

**Table 3: The Global Competitiveness Index 2014–2015, selected pillars: Score dispersion among African economies**
(GCI score 1–7)

| | | | BASIC REQUIREMENTS | | | | EFFICIENCY ENHANCERS* | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Country/Economy | Global Competitiveness Index | 1st pillar: Institutions | 2nd pillar: Infrastructure | 3rd pillar: Macroeconomic environment | 4th pillar: Health and primary education | 5th pillar: Higher education and training | 6th pillar: Goods market efficiency | 7th pillar: Labor market efficiency | 8th pillar: Financial market development | 9th pillar: Technological readiness |
| Middle-income | Mauritius | 4.52 | 4.60 | 4.74 | 4.66 | 6.14 | 4.66 | 4.92 | 4.33 | 4.74 | 3.97 |
| | South Africa | 4.35 | 4.50 | 4.29 | 4.45 | 3.96 | 4.04 | 4.71 | 3.80 | 5.37 | 3.86 |
| | Morocco | 4.21 | 4.21 | 4.38 | 4.72 | 5.66 | 3.56 | 4.41 | 3.81 | 4.02 | 3.57 |
| | Botswana | 4.15 | 4.47 | 3.19 | 6.30 | 4.14 | 3.59 | 4.12 | 4.56 | 4.22 | 3.58 |
| | Tunisia | 3.96 | 3.70 | 3.80 | 4.03 | 6.00 | 4.28 | 4.03 | 3.51 | 3.35 | 3.38 |
| | Namibia | 3.96 | 4.19 | 4.17 | 4.62 | 4.63 | 3.23 | 4.13 | 4.31 | 4.43 | 3.42 |
| | Seychelles | 3.91 | 4.04 | 4.50 | 4.89 | 5.98 | 4.04 | 4.18 | 4.44 | 3.65 | 3.73 |
| | Zambia | 3.86 | 4.12 | 2.67 | 4.16 | 4.56 | 4.16 | 4.65 | 4.06 | 4.37 | 2.99 |
| | Lesotho | 3.73 | 3.86 | 2.77 | 5.69 | 4.03 | 3.23 | 4.24 | 4.16 | 3.27 | 2.37 |
| | Ghana | 3.71 | 3.85 | 3.03 | 3.38 | 4.46 | 3.46 | 4.34 | 3.94 | 4.15 | 3.11 |
| | Senegal | 3.70 | 3.81 | 2.93 | 4.29 | 3.96 | 3.18 | 4.34 | 4.23 | 3.80 | 3.21 |
| | Cape Verde | 3.68 | 3.89 | 3.14 | 4.11 | 5.96 | 3.91 | 4.01 | 3.59 | 3.36 | 3.54 |
| | Egypt | 3.60 | 3.41 | 3.20 | 2.96 | 5.37 | 3.27 | 3.95 | 3.08 | 3.19 | 3.21 |
| | Swaziland | 3.55 | 3.94 | 3.26 | 4.79 | 3.69 | 3.18 | 4.09 | 3.86 | 4.00 | 2.66 |
| Low-income | Rwanda | 4.27 | 5.21 | 3.14 | 4.62 | 5.52 | 2.98 | 4.62 | 5.08 | 4.26 | 3.14 |
| | Kenya | 3.93 | 3.73 | 3.27 | 3.73 | 4.55 | 3.77 | 4.40 | 4.68 | 4.77 | 3.48 |
| | Ethiopia | 3.60 | 3.46 | 2.49 | 4.36 | 4.82 | 2.63 | 3.84 | 4.15 | 3.33 | 2.46 |
| | Tanzania | 3.57 | 3.49 | 2.26 | 4.06 | 4.86 | 2.45 | 3.90 | 4.39 | 3.72 | 2.51 |
| | Uganda | 3.56 | 3.29 | 2.28 | 4.36 | 4.45 | 2.68 | 3.95 | 4.66 | 3.81 | 2.78 |
| | The Gambia | 3.53 | 4.29 | 3.27 | 2.96 | 3.88 | 3.45 | 4.00 | 4.54 | 3.74 | 3.02 |
| | Mali | 3.43 | 3.18 | 3.15 | 4.48 | 3.33 | 2.70 | 4.07 | 3.89 | 3.32 | 2.86 |
| | Malawi | 3.25 | 3.74 | 2.21 | 2.42 | 4.42 | 2.57 | 4.03 | 4.63 | 3.82 | 2.41 |
| | Mozambique | 3.24 | 3.16 | 2.36 | 4.06 | 3.58 | 2.39 | 3.99 | 3.88 | 3.14 | 2.71 |
| | Burkina Faso | 3.21 | 3.28 | 2.01 | 4.55 | 3.18 | 2.42 | 3.81 | 4.22 | 3.14 | 2.49 |
| | Sierra Leone | 3.10 | 3.37 | 2.07 | 3.94 | 3.18 | 2.39 | 3.98 | 4.01 | 3.36 | 2.36 |
| Fragile | Côte d'Ivoire | 3.67 | 3.64 | 3.41 | 4.70 | 3.25 | 3.12 | 4.23 | 4.21 | 3.86 | 2.81 |
| | Zimbabwe | 3.54 | 3.31 | 2.54 | 4.48 | 4.99 | 3.18 | 3.58 | 3.25 | 3.44 | 2.95 |
| | Madagascar | 3.41 | 3.13 | 2.10 | 4.60 | 4.26 | 2.64 | 4.08 | 4.53 | 2.85 | 2.63 |
| | Burundi | 3.09 | 2.92 | 2.01 | 4.02 | 4.64 | 2.14 | 3.49 | 3.89 | 2.37 | 2.10 |
| | Mauritania | 3.00 | 2.76 | 2.59 | 4.00 | 3.48 | 2.16 | 3.35 | 3.07 | 2.50 | 2.71 |
| | Guinea | 2.79 | 2.81 | 1.78 | 3.20 | 3.25 | 2.19 | 3.40 | 4.05 | 2.85 | 2.35 |
| Oil-exporting | Algeria | 4.08 | 3.41 | 3.12 | 6.41 | 5.61 | 3.69 | 3.48 | 3.15 | 2.72 | 2.59 |
| | Gabon | 3.74 | 3.72 | 2.86 | 6.03 | 4.01 | 2.78 | 3.81 | 4.23 | 3.57 | 2.95 |
| | Cameroon | 3.66 | 3.53 | 2.47 | 4.45 | 4.70 | 3.22 | 3.99 | 4.11 | 3.51 | 2.76 |
| | Libya | 3.48 | 2.62 | 2.88 | 5.36 | 4.55 | 3.59 | 3.32 | 3.41 | 1.95 | 2.56 |
| | Nigeria | 3.44 | 3.01 | 2.13 | 4.62 | 2.97 | 2.88 | 4.19 | 4.53 | 4.06 | 3.02 |
| | Angola | 3.04 | 2.61 | 2.01 | 4.70 | 3.54 | 1.94 | 2.92 | 3.52 | 2.50 | 2.34 |
| | Chad | 2.85 | 2.66 | 1.67 | 4.68 | 2.72 | 2.05 | 2.94 | 3.72 | 2.74 | 2.09 |

[1.67–2.33[ [2.33–3.00[ [3.00–3.67[ [3.67–4.35[ [4.35–5.04[ [5.04–5.72[ [5.72–6.41]

Source: World Economic Forum, 2014a.
Note: Color coding follows maximum and minimum scores of the sample. The interval [x,y[ is inclusive of x but exclusive of y.
* Excluding the 10th pillar, Market size.

Africa, which ranks 7th globally, followed by Kenya and Mauritius. This good performance stands, however, in stark contrast to many economies characterized by rudimentary financial markets, including two North African economies: Algeria at 137th and Libya at 144th. The problem of inefficient financial markets is illustrated later in this chapter by the fact that the majority of business executives consider the lack of access to finance to be the most problematic factor for doing business on the continent (Figure 14). The inability to allocate savings to their most productive investments constitutes an important barrier for the region, preventing it from fully leveraging its growth potential. The divergence in terms of macroeconomic performance is

largely fueled by the fact that resource-rich economies—for example, Algeria (11th), Botswana (13th), and Gabon (18th)—perform well on the related indicators. This good performance is largely attributable to the better fiscal position resulting from strong resource revenues at the time data were collected.[40] The decline in world oil prices of more 50 percent—from US$115 a barrel in June 2014 to less than US$50 at the time of writing—will have significant consequences for some resource-rich economies because it can expose budget weaknesses. At the same time, it offers an opportunity for energy-importing countries to remove subsidies or use political momentum to gather support for competitiveness-enhancing reforms.

**The competitiveness analysis suggests that oil- and gas-exporting economies are a long way from establishing the fundamentals for a competitive economy.** Because Africa's high growth rates are to some extent rooted in oil- and gas-abundance, whether or not growth will be sustainable moving forward has been subject to much debate. On average, Africa's oil- and gas-rich economies perform as poorly as fragile economies do in eight out of the twelve competitiveness pillars. In particular, these economies are characterized by weak institutions, poor quality or absent infrastructure, a volatile macroeconomic environment, a low level of human capital, and poorly functioning factors and goods markets. Although the poor quality of institutions is somewhat expected in fragile economies, the fact that institutions are weak reveals important insights into the functioning of oil-exporting economies. Although Gabon fares comparatively well in the quality of institutions (79th), its peers mostly populate the lower end of the rankings in this pillar: Chad at 140th, Libya at 142nd, and Angola at 143rd have rankings similar to those of the fragile economies of Burundi (132nd), Guinea (134th), and Mauritania (138th) (see Appendix C). This poor performance raises doubts about their efficient management of resource revenues and their ability to re-allocate revenue proceeds elsewhere in the economy to lay the foundations for more diversified growth while avoiding boom-bust cycles that could jeopardize macroeconomic stability.

In addition to institutional challenges, infrastructure is inadequate in all oil exporters, with all countries in this group ranking below 100. Furthermore, the majority of oil-exporting economies are very poorly assessed in the Inequality-adjusted Human Development Index.[41] This is worrisome because these economies will need to diversify growth to ensure that resource wealth spreads to all parts of the population in order to make growth overall more sustainable in the long run (see Box 3 for a discussion on inclusive growth). To diversify, a skilled workforce is needed. However, the rankings show that all oil exporters perform very poorly in providing education and skills—indeed, Chad ranks last (144th) on health and primary education and, with a score of 2.1, just 143rd on the higher education pillar. Finally, inefficiencies in goods and labor markets are prevalent. Strikingly, for instance, despite the strides Africa has made in goods market efficiency that has garnered recognition, the region's oil- and gas-exporting economies largely remain among the bottom 30 performers globally.

Box 2 expands the analysis to all natural resource–rich countries on the continent that record a poor GCI score because there are numerous mineral-rich African countries that are low income as well as fragile and face competitiveness challenges similar to those of the oil- and gas-rich countries. The IMF categorizes *resource-rich countries* as those countries with energy exports accounting for 30 percent and mineral exports accounting for 25 percent of total exports, or those with revenue from natural resources accounting for more than 20 percent of government revenue. Based on this threshold, Africa counts 22 resource-rich countries (20 in sub-Saharan Africa and 2 in North Africa). The McKinsey Global Institute defines *resource-driven countries* as countries that meet at least one of three criteria: (1) resource exports accounted for 20 percent or more of total exports in 2011; (2) resources on average accounted for more than 20 percent of government revenue from 2006 to 2010; and (3) resource rents were more than 10 percent of GDP in 2010 or the most recent year for which data are available.[42] This definition adds eight more countries to the list of African resource-rich economies. Among the top 20 resource-rich countries in sub-Saharan Africa, nine are classified as low income, with GDP per capita below US$1,025, while only Equatorial Guinea is considered high income; a few others, including Botswana, Namibia, and South Africa, are upper-middle income.[43]

**Overall, low-income economies have registered improvements in their competitiveness since the GCI 2013–2014.** Non-fragile low-income economies are dispersed throughout the middle to the bottom of the rankings, ranging from Rwanda at 62nd to Sierra Leone at 138th. This is a diverse group of countries that includes all low-income countries not classified as oil-exporting or fragile, and where "economic development can be explained by reference to more conventional economic factors."[44] Overall, this group performs better than both oil-exporting and fragile economies across most pillars. The difference between these groups and low-income economies is particularly pronounced in the quality of institutions and goods, labor, and financial market efficiencies. Kenya (ranked 24th) and Rwanda (ranked 55th) boast more efficient financial markets than their peers. Similarly, Rwanda and Gambia have relatively good institutional environments, ranking 18th and 44th, respectively, in this pillar and pulling up the average for this group, which closes with Mali at 126th. A majority in this group have relatively efficient labor markets. As indicated in Table 3, Rwanda, Kenya, and Uganda lead African economies in this pillar, and more than two-thirds

### Box 2: How to make resource-rich economies in the bottom 20 of the GCI ranking more competitive

Despite having higher GDP growth on average than those that are resource-scarce, Africa's resource-rich economies fare poorly and therefore feature prominently in the bottom 20 in the Global Competitiveness Index (GCI) 2014–2015. The bottom 20 takes in several resource-rich African countries, including four oil-exporters (Angola 140th, Chad 143rd, Libya 126th, and Nigeria 127th) and six mineral exporters (Guinea 144th, Mali 128th, Mauritania 141st, Mozambique 133rd, Sierra Leone 138th, and Zimbabwe 124th), two of these mineral exporters (Guinea and Mauritania) being fragile states. The poor performance of resource-rich economies indicates that they have not been able to effectively channel their natural resource revenues to enhance their competitiveness. Indeed, although the resource-rich economies have had the opportunity to enhance their competitive prospects in the wake of commodity-price booms, the data show no notable improvement in their competitiveness and the chapter points to myriad remaining challenges.

The absence of solid institutions has left these economies open to corruption and rent-seeking, which negatively affects their overall competitiveness. More investment and maintenance of infrastructure are needed to reduce indirect costs to businesses and make them more competitive. The business environment would be more efficient with less bureaucracy and enhanced financial development. Overall, these countries have suffered from the "Dutch Disease" syndrome, with real exchange rate appreciations and wages increasingly driving out export and import-competing industries. Taking this into account, governments should support the development of the traded sector and non-natural-resource traded goods.

Currently the commodity price shocks present additional challenges that have magnified the macroeconomic vulnerabilities of these economies and undermined their ability to undertake competitiveness-enhancing investments. For oil-exporters, the recent oil price plunge of more than 50 percent between September 2014 and February 2015, tipping below US$50 per barrel in January 2015, has significantly reduced oil-rich countries' revenues and magnified their macroeconomic vulnerabilities.[1] Other commodity exports have seen similar declines; for example, the price of iron ore dropped by 51 percent between January 2014 and February 2015. The resulting declines in revenues have deteriorated countries' fiscal and external positions, with concomitant adverse consequences on government spending capacity, thereby limiting their ability to invest in competitiveness-enhancing programs.

Going forward, it will be imperative for these resource-rich countries to put in place the fundamentals for enhanced competitiveness and broad-based economic development. As argued by McKinsey, resource-rich countries "should reframe their economic strategies around three key imperatives: effectively developing their resource sector, capturing value from it, and transforming that value into long-term prosperity."[2] This reframing will include building the resource sector's institutions and governance, developing infrastructure, ensuring robust fiscal policy and competitiveness, supporting local content, deciding how to spend resource windfalls wisely, and transforming resource wealth into broader based economic development.

**Notes**

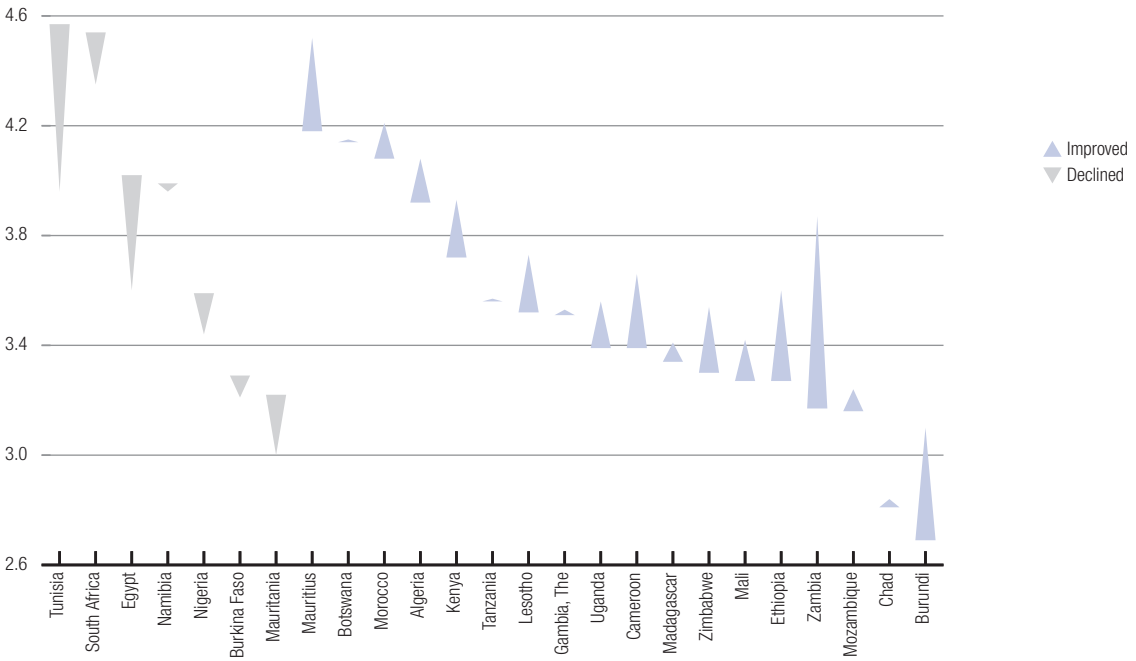
1 AfDB 2014.

2 Dobbs et al. 2013, p. 26.

of these economies are in the upper half of the global rankings. On the other hand, a majority of low-income African economies perform poorly in the areas of infrastructure, education, and technological readiness, placing them in the bottom third of the global rankings in these areas.[45]

**Africa's middle-income economies on average compare well with other regions, such as Latin America and the Caribbean, having put in place the basic requirements of competitiveness.** Africa's middle-income economies face a more complex and diverse set of competitiveness challenges than all other groups. Having entered the middle-income group, these countries will need to put into place the fundamentals that will allow them to transition to higher-value-added activities. In this light, some important variations in performance are evident, and middle-income African economies range from Mauritius at 39th to Swaziland at 123rd. Although middle-income economies outperform on average their regional peers in institutional quality, they barely reach the middle score of this pillar (4 on a scale of 1–7). As described earlier, these countries generally have already built a better infrastructure than their peers (with the exception of Zambia, Lesotho, and Senegal, which score below 3 on a scale of 1–7) and have particularly well-functioning goods and financial markets. To progress, business will require a talent pool on which to draw, and this is an area where most middle-income economies have reached a bottleneck. With a few exceptions, most of them place somewhere in the lower half of the rankings of the pillars that gauge a country's ability to fully leverage its human resource potential. South Africa, for example, ranks just 113th in the labor market efficiency pillar and has a university enrollment rate of just 19 percent, compared with 94 percent in the United States and 99 percent in the Republic of Korea.[46] Going forward, increasing education attainment rates and adapting education to match the skills needed by the private sector as well as making the labor market more flexible will be critical for the required structural transformation.

**Figure 13: Change in the performance of African economies**
GCI score (1–7), ACR 2007 compared with ACR 2015




Source: Data sourced from the GCR 2006–2007 (World Economic Forum, 2006) and the GCR 2014–2015 (World Economic Forum, 2014a).

## Africa's competitiveness then and now: Re-visiting Africa's competitiveness over the past decade

Figure 13 provides a view of competitiveness improvements at two points in time: 2006 and 2014. To complement this analysis, Appendix D shows the evolution in performance of all 24 African economies in the constant sample grouped into fragile, middle-and low-income, and oil-exporting economies.[47]

**Africa's middle-income and oil-exporting economies exhibit a mixed picture when it comes to improvements in competitiveness compared to nine years ago.** Mauritius and Zambia register the largest improvements in competitiveness, but South Africa, Egypt, and Tunisia show declines, the latter two following the events of the Arab Spring. The data suggest that the region's current best-performing economy, Mauritius (at 39th, replacing South Africa two years ago), has made impressive strides toward improved competitiveness on the back of the wide-ranging structural reforms that began in 2006. This improvement has been particularly visible in its creation of an enabling environment in its financial, goods, and labor markets. Similarly, Zambia has made the most progress in the region, particularly upgrading the quality of its institutions and improving goods market efficiencies, now ranked 96th.

These countries stand in contrast to the performance of South Africa, which has been experiencing a gradual but steady decline in its competitiveness since 2006 and ranks 56th in this year's *Report,* down from 35th in 2006. The country continues to benefit from strong private institutions, such as auditing and reporting standards, good transport infrastructure (by regional standards), and efficient goods and financial markets as well as its relatively innovative companies. However, its Achilles' heel remains opaque public institutions, poor health and education, and an extremely rigid labor market. Other middle-income economies, such as Botswana and Namibia, have maintained a relatively stable performance across the years. Both benefit from comparatively good institutions but critically neglect their human resource base, both in terms of health and education. Of the North African middle-income group, Egypt and Tunisia have not succeeded in putting their economies on a more stable footing since the Arab Spring, although the fact that these economies are slowly stabilizing and starting to focus on economic reforms holds promise for the future. Conversely, we see that Morocco (72nd)—the most competitive economy in North Africa—has been registering a gradual upward trend, reflecting efforts made over the years to develop its business environment. Oil-exporting economies demonstrate a mixed performance over the past nine years: Cameroon has seen slight improvements because its public institutions are developing, although this is reflected in its score in this pillar but not in the rankings, as other countries have been doing relatively better. At the same time, countries such as Chad and Nigeria are stagnating in their overall performance of competitiveness.

**The majority of fragile and low-income economies register slight improvements.** On the upside, we see improvement in competitiveness, albeit from a very low base, in the majority of fragile economies. This progress is most notable in Burundi:

## Box 3: Measuring inclusive growth

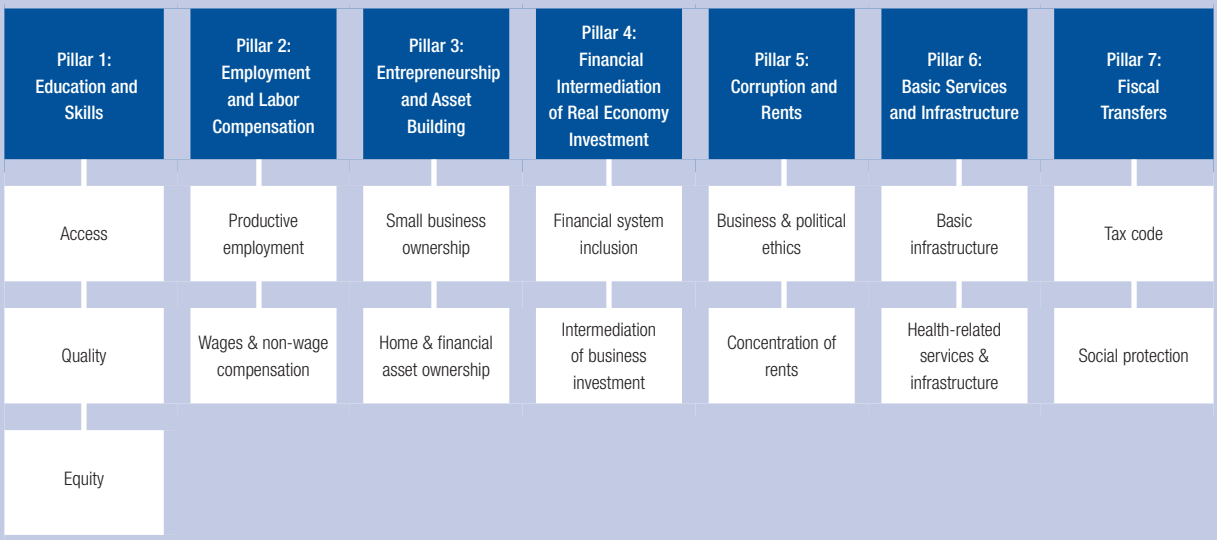
Africa has enjoyed a significant increase in economic growth over the past decade, yet unequal distribution of its benefits has limited the ability of that growth to reduce poverty and improve living standards. Instead, in many countries in the region, the gap between rich and poor is widening, youth unemployment is rising, and access to basic services remains restricted to a small share of the population. The share of wealth held by the top decile has increased over the last several years and concentration of wealth on the continent is the second highest of all regions in the world.[1] Against this background is a growing need for analytical frameworks and evidence-based solutions to tackle these challenges and ensure that growth translates into improved living standards and benefits the population at large.

The international community has made significant progress in defining inclusive growth, building on the work of the Organisation for Economic Co-operation and Development (OECD), World Bank, and regional development banks. One widely accepted definition of *inclusive growth* involves output growth that is sustained over decades, is broad-based across economic sectors, creates productive employment opportunities for the majority of the country's population, and reduces poverty.[2] Reductions in excessive income inequality have also emerged as a prerequisite for growth; this concept is supported by mounting evidence that inequality undermines growth.[3] In summary, inclusive growth is about both the pace and pattern of economic growth.[4]

The World Economic Forum's workstream on inclusive growth aims to mobilize a better response to the challenge of inequality by assembling a comparative analysis of the extent to which countries make use of the wide spectrum of policy incentives and institutional mechanisms that influence the pattern and pace of broad-based progress in living standards. Consisting of six policy domains and thirteen subdomains, the Forum's Inclusive Growth and Development framework (Figure A) identifies a range of policy incentives and institutional mechanisms that have a bearing on the inclusivity of growth. This multidimensional framework includes areas such as creating an enabling environment for human capital formation, reinforcing the wage and productivity growth link, fostering entrepreneurship and investment, reinforcing business and political ethics, promoting gender parity, reviewing fiscal policy (tax code and social protection), and providing improved public services and infrastructure.

A beta version of the benchmarking tool and related analysis will be released by early fall 2015 as part of a series of public-private dialogues with key experts and decision makers from multiple policy domains and countries in a structured series of evidence-based discussions. The objective is to contribute to a better appreciation within societies of how the desire for a more inclusive model of economic growth and development can be translated into a practical national or regional strategy. An important element of this undertaking is working in conjunction with the *Report*'s partner organizations: the World Bank's country strategies support programs that primarily target the bottom 40 percent of the population as part of achieving the organization's twin goals of inclusive growth by 2030 (the other being reducing the percent of people living in extreme poverty (<$1.25 PPP) to 3 percent of the world's population). Under the umbrella of its 10-year strategy 2013–22, the African Development Bank's first and overarching objective is to promote growth that is more inclusive, leading not just to equality of treatment and opportunity but to deep reductions in poverty and a corresponding large increase in jobs. Toward achieving this end, the African Development Bank pays special attention to fragile states, agriculture and food security as well as gender.[5]

**Figure A: Inclusive Growth and Development benchmarking framework**




**Source:** World Economic Forum 2015d, forthcoming.

**Notes**

1 Credit Suisse Research Institute 2014.

2 Commission on Growth and Development 2008; Ianchovichina and Lundstrom 2009.

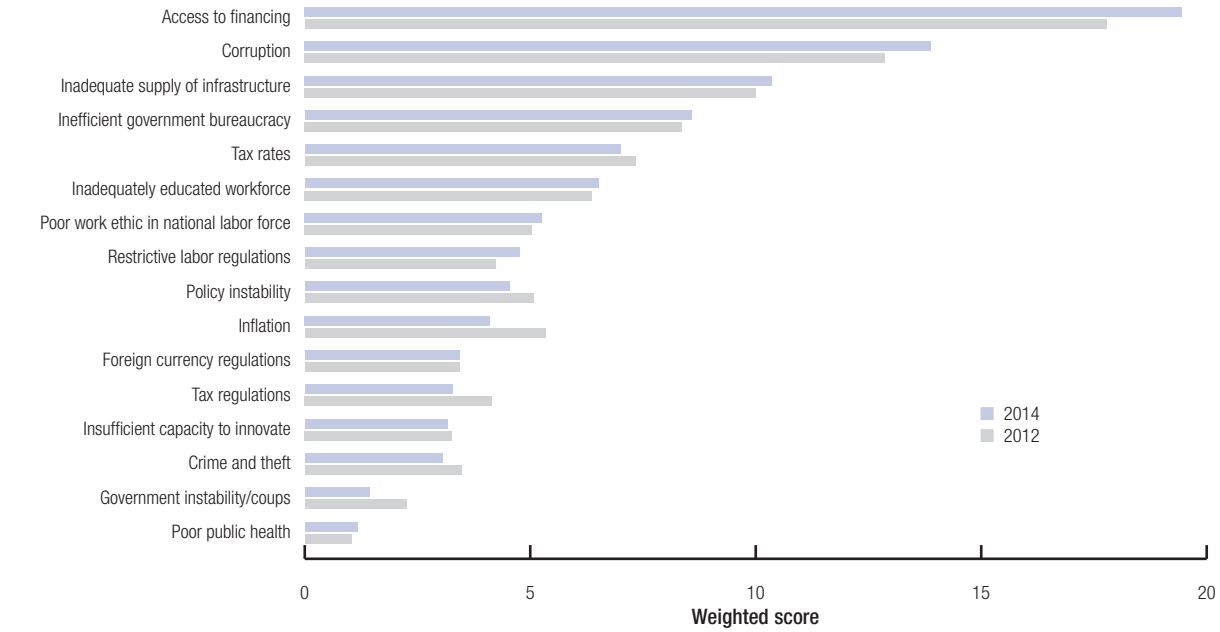
3 Berg and Ostry 2011; Ostry et al. 2014.

4 Ianchovichina and Lundstrom Gable 2012.

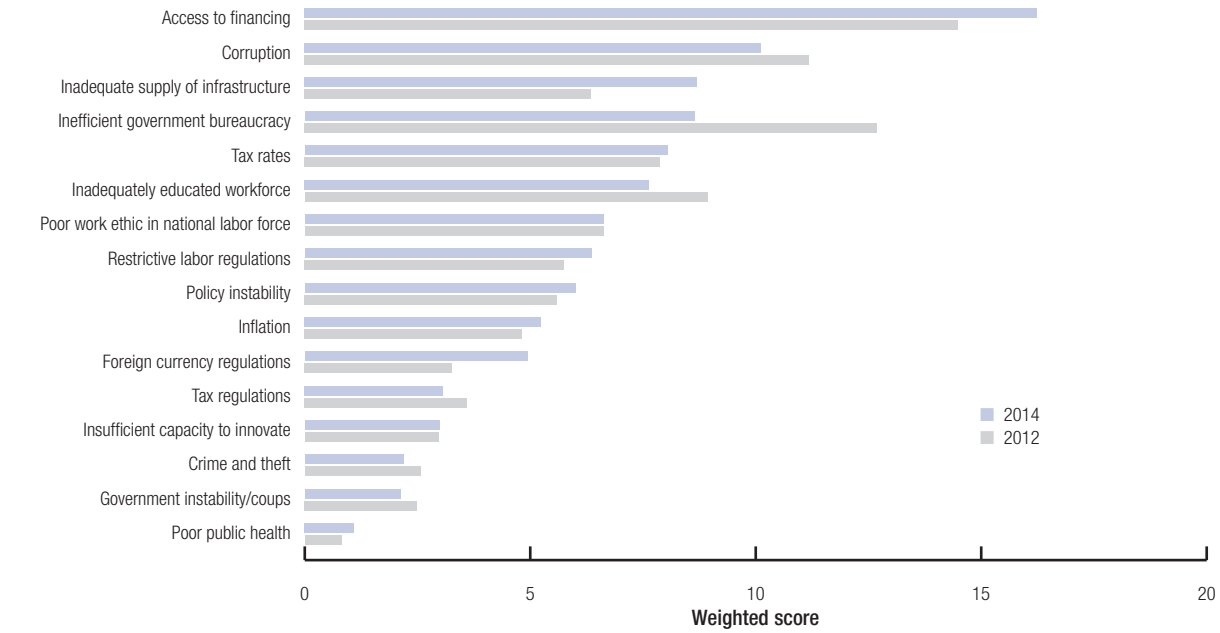
5 AfDB 2013. The Strategy also outlines the five following operational priorities to improve Africa's quality of growth: (1) infrastructure development, (2) regional economic integration, (3) private-sector development, (4) governance and accountability, and (5) skills and technology.

**Figure 14: Most problematic factors for doing business (2012 and 2014 scores compared)**

14a: Sub-Saharan Africa




14b: North Africa




Source: World Economic Forum Executive Opinion Survey, 2012, 2014.
Note: From the list of factors above, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figures show the responses weighted according to their rankings.

although ranked a low 139th, the country has shown a steady improvement since the 2013 *Report.* Zimbabwe likewise has been showing gradual improvement since its nadir in performance in 2009. In contrast, Madagascar—another fragile economy in our sample—has been stagnating, while Mauritania has declined to 141st place. When it comes to low-income economies, Figure 13 suggests a small but positive development in six out of seven economies in our 2006 constant sample. Among these, Ethiopia and Kenya register the largest improvements while only Burkina Faso has seen a slight decline in competitiveness.

## The most problematic factors for doing business in Africa

The results of the GCI provide a sense of the many factors that are holding back Africa's competitiveness. To complement this analysis, each year the World Economic Forum collects the perspective of top executives about the main bottlenecks to doing business in their countries. From a list of 16 factors, respondents are asked to select the five most problematic among them and rank them from 1 (most problematic) to 5. Figure 14 shows that this year, similar to the 2013 *Report,* access to financing, corruption, and the inadequate supply of infrastructure

not only remain the most important hindrances to doing business in sub-Saharan countries, but are considered to be so by a larger share of respondents. These factors also represent the most important barriers to doing business in North Africa. While in the last *Report* inefficient government bureaucracy was considered the second most important barrier in North Africa, concerns about this factor have been somewhat alleviated. Interestingly, business leaders across the region are concerned about an inadequately educated workforce, indicating an insufficient education and, in some of the more advanced economies, also a skills mismatch in the region,[48] as well as poor work ethic.

However, businesses in both subregions are concerned about somewhat different challenges in regard to all other most problematic factors. For instance, government instability coupled with policy uncertainty continue to be a worry for business leaders in North African countries, whereas inflation is a greater concern in sub-Saharan countries. It is interesting to note that, similar to the findings of the 2013 *Report,* public health receives little attention from business leaders. This is somewhat counterintuitive given the continent's major health challenges, which culminated in the recent Ebola pandemic.

## CONCLUSIONS

This chapter has provided input into the debate of what it would take for Africa to transform its economies to reach a higher level of competitiveness by analyzing the results of 38 African economies in the Global Competitiveness Index 2014–2015. Although high and persistent economic growth rates characterize Africa's past decade, the same cannot be said for the region's overall performance in competitiveness, which has been stagnating. Most African countries find themselves in a development stage where basic requirements—such as sound institutions and macroeconomic policies, adequate infrastructure, and a healthy and educated workforce—will be necessary to establish a solid basis for sustainable growth. Yet these are the areas that constitute some of the biggest gaps with other regions. The continent's persistent infrastructure deficit and poor education outcomes as well as its difficulties in providing the right set of skills to match the needs of its businesses constitute the most important barriers to transforming African economies. This is particularly significant in view of the shifts of employment toward the service sector over the past two decades and the region's rapidly growing workforce. In this context, investments in public goods ranging from infrastructure to education and health are needed. Relatedly, in view of the potential for a larger value-added share of the service sector to GDP, efforts to foster greater technological adoption among the population and businesses must be made. Undoubtedly, much progress has been achieved on the continent that gave rise to innovative business models. Examples include M-PESA, the service exports in Mauritius, and Kenya's rise as a regional financial, consumer retail, and telecommunications exporter in East Africa. Yet the ICT frontier remains a moving target, and Africa will need to keep up with other regions that are pressing ahead. On the upside, however, the analysis points to the generally improving macroeconomic stability in the region—evident, for example, in lower inflation although, even with this progress, important downside risks to stability remain—and the rapid reforms in the goods market.

A more detailed look at the performance of individual country groups reveals a competitiveness divide across the continent, as demonstrated by wide divergences in performance. As in the past, Mauritius and South Africa continue to perform as well or better than other emerging market economies such as Brazil and India. In particular, Mauritius has been pressing ahead steadily since 2006, and now ranks as the most competitive African economy, ahead of South Africa. A second cluster of countries, including Rwanda, Morocco, Botswana, and Algeria, performs better than the Latin American average, while a third and wider set of countries, including Tunisia, Namibia, Kenya, Seychelles, Zambia, Gabon, Lesotho, Ghana, Senegal, Cape Verde, Côte d'Ivoire, Cameroon, and Ethiopia outperform the sub-Saharan African average; the first four even outperform the North African average.

In view of these divergences, this year's chapter classifies African economies into four specific groups—oil-exporting economies, fragile economies, non-fragile low-income economies, and middle-income economies—continuing the analysis of the *2013 Report.* The analysis suggests that Africa's middle-income economies on average compare well with other regions, such as Latin America and the Caribbean, as they have in place comparatively strong basic requirements. However, oil- and gas-exporting economies are a long way from establishing the fundamentals needed for competitive economies. Low-income economies and selected fragile economies, such as Burundi, Côte d'Ivoire, and Zimbabwe, have made slow but encouraging improvements since the 2013 *Report.*

Having identified the main competitiveness challenges, the following chapters explore in greater detail specific barriers and challenges to transforming Africa's economies. Chapters 2.1 and 2.2 look at agriculture and services, respectively, addressing the two main sectors that account for the largest share of employment. Increasing productivity in these sectors could help unleash Africa's development through productivity enhancements and greater integration into global and regional value chains. Chapter 2.3 brings these together by exploring how Africa could tap the potential of global value chains to transform its economies by developing and expanding new activities and building dynamic and competitive manufacturing, agriculture, and service sectors.

## NOTES

1 Estimates suggest that by 2020 more than half of the continent's population will be below the age of 25 (IMF 2014a).

2 The Human Development Index scores are available for each of the countries highlighted in this *Report* in the Country Profiles of Part 3.

3 Lipton 2012.

4 The World Bank's *Doing Business 2015: Going Beyond Efficiency* shows that over the past five years, 11 different sub-Saharan African countries have appeared on the annual list of the 10 global top improvers. Some, such as Burundi, Cape Verde, Côte d'Ivoire, and Rwanda, have done so multiple times.

5 Timmer et al. 2014.

6 Duarte and Restuccia 2010; Herrendorf et al. 2013; McMillan and Harttgen 2014.

7 AfDB, OECD, and UNDP 2013.

8 Part of the difficulty in measuring structural transformation in Africa stems from the lack of updated data on the composition of value-added. As GDP rebasing takes place with some time lag, we might not be capturing part of the changes that have occurred in recent years. For Nigeria, for example, the GGDC 10-sector database does not yet provide a complete value-added time-series consistent with the GDP rebasing carried out in 2014, since full details and potential additional refinements behind the revision have not been published yet. Currently available data may thus underestimate the size of the service and manufacturing sector in Nigeria, assigning disproportionate weight to the agriculture and mining sectors.

9 Alternatively, sector value-added as a percent of GDP can be drawn from the World Bank's World Development Indicators database. Yet this allows only for a breakdown into agriculture, industry, and services. On an aggregate level, the two databases support the same story.

10 This may in part be the result of declining employment in the sector.

11 Also see Inklaar and Timmer 2014.

12 Ghani et al. 2012.

13 AfDB et al. 2013.

14 The 12 pillars are measured using both quantitative data from public sources (such as inflation, Internet penetration, life expectancy, and school enrollment rates) and data from the World Economic Forum's Executive Opinion Survey (the Survey), conducted annually among top executives in all of the countries assessed. The Survey provides crucial data on a number of qualitative issues (e.g., corruption, confidence in the public sector, quality of schools) for which no hard data exist.

15 In order to capture the resource intensity of an economy, we use as a proxy the exports of mineral products as a share of overall exports according to the sector classification developed by the International Trade Centre in their Trade Performance Index. In addition to crude oil and gas, this category contains all metal ores and other minerals as well as petroleum products, liquefied gas, coal, and precious stones. The data used cover the years 2009 through 2013 or the most recent year available. Further information on these data can be found at http://legacy.intracen.org/appli1/TradeCom/Documents/ TradeCompMap-Trade%20Performance%20Index-Technical%20 Notes-EN.pdf.

All countries with more than 70 percent of their exports made up of mineral products are considered to be to some extent factor driven. The stage of development for these countries is adjusted downward smoothly depending on the exact primary export share. The higher the mineral export share, the stronger the adjustment and the closer the country will move to stage 1. For example, a country that exports 95 percent of mineral exports and that, based on the income criteria, would be in stage 3 will be in transition between stages 1 and 2. The income and primary exports criteria are weighted identically. Stages of development are dictated solely by income for countries that export less than 70 percent minerals. Countries that export only primary products would automatically fall into the factor-driven stage (stage 1).

16 The data for Libya derive from the Global Competitiveness Index 2014–2015, which was published in early September 2014. The data, therefore, do not reflect current developments in the country. These are expected to be reflected in the next iteration of the GCI 2015–2016.

17 The BRIC economies are Brazil, the Russian Federation, India, and China; they exclude South Africa.

18 To provide the most complete picture of Africa's competitiveness, Part 3 of this *Report* features a country profile for Benin and Liberia based on the GCI 2013–2014 results. For a detailed description of the Executive Opinions Survey, see Browne et al. 2014.

19 *Education* refers to primary education and health (pillar 4) and higher education and training (pillar 5), although the latter is, strictly speaking, classified as an efficiency enhancer in the Global Competitiveness Index.

20 World Economic Forum 2013a.

21 UNCTAD 2013.

22 World Economic Forum 2013a.

23 Even in developed economies, the infrastructure gap is widening as a result of demographics, lack of public financing, inadequate public-private partnership delivery models, and unplanned operations and maintenance of infrastructure. The OECD benchmark is, therefore, to be seen as a second best.

24 World Economic Forum 2012b.

25 World Economic Forum 2014b.

26 IMF 2014b.

27 And indeed, new data from the Global Risks Perception Survey indicate that Africa stands least prepared to address unemployment and underemployment. See World Economic Forum 2015a, 2015b. See also *The Africa Competitiveness Report 2013,* Chapter 1 (World Economic Forum 2013a) on the youth unemployment challenge.

28 World Bank 2014a.

29 IMF 2015.

30 AfDB et al. 2013.

31 Qiang and Rossotto 2009.

32 See *The Global Information Technology Report 2015* (World Economic Forum 2015c) for a detailed discussion on economic and social impact of ICTs.

33 World Bank and African Development Bank 2012.

34 This pillar consists of quantitative data: (1) government budget balance, (2) gross national savings, (3) inflation, and (4) government debt as well as qualitative data on country credit rating. It is important to note that this pillar evaluates the stability of the macroeconomic environment, so it does not directly take into account the way in which public accounts are managed by the government. This qualitative dimension is captured in the institutional pillar of the GCI.

35 IMF 2014b.

36 World Bank 2014b.

37 UNCTAD 2014, p. 10.

38 We follow the IMF's country classification applied in the *Regional Economic Outlooks* on sub-Saharan Africa based on the most recent data on per capita gross national income (averaged over three years) and the 2013 World Bank's (IDA) Resource Allocation Index (IRAI). Oil-exporting countries are those where oil exports make up more than 30 percent of total exports. Middle-income countries not classified as oil-exporter or fragile countries are those that had had average per capita gross national income in the years 2011–13 of more than US$1,035.00 (calculated by the World Bank using the Atlas method, which reduces the impact of exchange rate fluctuations); and the IRAI (scores higher than 3.2). Low-income countries not classified as fragile or oil exporters had an average income per capita gross national income in the years 2011–13 equal to or lower than US$1,035.00 (World Bank, Atlas method) and IRAI scores higher than 3.2; and fragile countries not classified as oil exporters had IRAI scores of 3.2 or less, with the exception of Malawi—on the basis that it is not classified as "fragile" in the World Bank's harmonized list of fragile states (see IMF's *Regional Economic Outlook* October 2014). The criteria are extended to North African economies.

39 See Appendix C and individual country profiles in Part 3 for more detailed country-level information.

40 This pillar evaluates the stability of the macroeconomic environment, so it does not directly take into account the way in which public accounts are managed by the government. This qualitative dimension is captured in the institutional pillar of the GCI. The data refer to the GCI 2014–2015 and may not reflect the most recent developments in energy prices. These will be reflected in the GCI 2015–2016 that will launch at the end of September, 2015.

41 The Inequality-adjusted Human Development Index is available at http://hdr.undp.org/en/data.

42 Dobbs et al. 2013.

43 Some of these resource-rich countries—such as Equatorial Guinea—are not covered in this chapter because they are not included in the GCI.

44 See IMF 2014b.

45 Technically speaking, Rwanda ranks 86th in the health and primary education pillar, and Kenya 87th in the technological readiness pillar.

46 See World Economic Forum 2014a.

47 In the case of Gambia, the difference between two points in time conceals gradual improvements in its overall competitiveness between 2006 and 2009, which were undone by a decline in the following years (see Appendix D).

48 AfDB et al. 2014.

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# Appendix A: Computation and structure of the Global Competitiveness Index 2014–2015

This appendix presents the structure of the Global Competitiveness Index 2014–2015 (GCI). The numbering of the indicator matches the numbering of the data tables. The number preceding the period indicates to which pillar the indicator belongs (e.g., indicator **1**.11 belongs to the 1st pillar and indicator **9**.04 belongs to the 9th pillar).

The computation of the GCI is based on successive aggregations of scores from the indicator level (i.e., the most disaggregated level) all the way up to the overall GCI score. Unless noted otherwise, we use an arithmetic mean to aggregate individual indicators within a category.[a] For the higher aggregation levels, we use the percentage shown next to each category. This percentage represents the category's weight within its immediate parent category. Reported percentages are rounded to the nearest integer, but exact figures are used in the calculation of the GCI. For example, the score a country achieves in the 11th pillar accounts for 50 percent of this country's score in the *innovation and sophistication factors* subindex, irrespective of the country's stage of development. Similarly, the score achieved on the *transport infrastructure* subpillar accounts for 50 percent of the score of the *infrastructure* pillar.

Unlike the case for the lower levels of aggregation, the weight put on each of the three subindexes (*basic requirements*, *efficiency enhancers*, and *innovation and sophistication factors*) is not fixed. Instead, it depends on each country's stage of development, as discussed in the chapter.[b] For instance, in the case of Burundi—a country in the first stage of development—the score in the *basic requirements* subindex accounts for 60 percent of its overall GCI score, while it represents just 20 percent of the overall GCI score of Sweden, a country in the third stage of development. For countries in transition between stages, the weighting applied to each subindex is reported in the corresponding profile at the end of this volume. For instance, in the case of Gabon, currently in transition from stage 1 to stage 2, the weight on each subindex is 51.5 percent, 41.4 percent, and 7.1 percent, respectively, as reported in the country profile on page 126 of *The Global Competitiveness Report 2014–2015*.

Indicators that are not derived from the Executive Opinion Survey (the Survey) are identified by an asterisk (*) in the following pages. The Technical Notes and Sources section at the end of the *Report* provides detailed information about each of these indicators. To make the aggregation possible, the indicators are converted to a 1-to-7 scale in order to align them with the Survey results. We apply a min-max transformation, which preserves the order of, and the relative distance between, country scores.[c]

Indicators that are followed by the designation "1/2" enter the GCI in two different pillars. In order to avoid double counting, we assign a half-weight to each instance.[d]

Weight (%) within immediate parent category

**BASIC REQUIREMENTS ..... 20–60%**[b]

**1st pillar: Institutions ..... 25%**

**A. Public institutions ..... 75%**

1. Property rights ..... 20%
   - 1.01 Property rights
   - 1.02 Intellectual property protection[1/2]

2. Ethics and corruption ..... 20%
   - 1.03 Diversion of public funds
   - 1.04 Public trust in politicians
   - 1.05 Irregular payments and bribes

3. Undue influence ..... 20%
   - 1.06 Judicial independence
   - 1.07 Favoritism in decisions of government officials

4. Government efficiency ..... 20%
   - 1.08 Wastefulness of government spending
   - 1.09 Burden of government regulation
   - 1.10 Efficiency of legal framework in settling disputes
   - 1.11 Efficiency of legal framework in challenging regulations
   - 1.12 Transparency of government policymaking

5. Security ..... 20%
   - 1.13 Business costs of terrorism
   - 1.14 Business costs of crime and violence
   - 1.15 Organized crime
   - 1.16 Reliability of police services

**B. Private institutions ..... 25%**

1. Corporate ethics ..... 50%
   - 1.17 Ethical behavior of firms

2. Accountability ..... 50%
   - 1.18 Strength of auditing and reporting standards
   - 1.19 Efficacy of corporate boards
   - 1.20 Protection of minority shareholders' interests
   - 1.21 Strength of investor protection*

## 2nd pillar: Infrastructure.....25%

**A. Transport infrastructure.....50%**

2.01 Quality of overall infrastructure
2.02 Quality of roads
2.03 Quality of railroad infrastructure[e]
2.04 Quality of port infrastructure
2.05 Quality of air transport infrastructure
2.06 Available airline seat kilometers*

**B. Electricity and telephony infrastructure.....50%**

2.07 Quality of electricity supply
2.08 Mobile telephone subscriptions*[1/2]
2.09 Fixed telephone lines*[1/2]

## 3rd pillar: Macroeconomic environment .....25%

3.01 Government budget balance*
3.02 Gross national savings*
3.03 Inflation*[f]
3.04 Government debt*
3.05 Country credit rating*

## 4th pillar: Health and primary education.....25%

**A. Health.....50%**

4.01 Business impact of malaria[g]
4.02 Malaria incidence*[g]
4.03 Business impact of tuberculosis[g]
4.04 Tuberculosis incidence*[g]
4.05 Business impact of HIV/AIDS[g]
4.06 HIV prevalence*[g]
4.07 Infant mortality*
4.08 Life expectancy*

**B. Primary education.....50%**

4.09 Quality of primary education
4.10 Primary education enrollment rate*

# EFFICIENCY ENHANCERS .....35–50%[b]

## 5th pillar: Higher education and training.....17%

**A. Quantity of education.....33%**

5.01 Secondary education enrollment rate*
5.02 Tertiary education enrollment rate*

**B. Quality of education.....33%**

5.03 Quality of the education system
5.04 Quality of math and science education
5.05 Quality of management schools
5.06 Internet access in schools

**C. On-the-job training.....33%**

5.07 Local availability of specialized research and training services
5.08 Extent of staff training

## 6th pillar: Goods market efficiency .....17%

**A. Competition.....67%**

1. Domestic competition .....variable[h]

6.01 Intensity of local competition
6.02 Extent of market dominance
6.03 Effectiveness of anti-monopoly policy
6.04 Effect of taxation on incentives to invest
6.05 Total tax rate*
6.06 Number of procedures required to start a business*[i]
6.07 Time required to start a business*[i]
6.08 Agricultural policy costs

2. Foreign competition .....variable[h]

6.09 Prevalence of trade barriers
6.10 Trade tariffs*
6.11 Prevalence of foreign ownership
6.12 Business impact of rules on FDI
6.13 Burden of customs procedures
6.14 Imports as a percentage of GDP*[j]

**B. Quality of demand conditions .....33%**

6.15 Degree of customer orientation
6.16 Buyer sophistication

## 7th pillar: Labor market efficiency .....17%

**A. Flexibility.....50%**

7.01 Cooperation in labor-employer relations
7.02 Flexibility of wage determination
7.03 Hiring and firing practices
7.04 Redundancy costs*
7.05 Effect of taxation on incentives to work

**B. Efficient use of talent.....50%**

7.06 Pay and productivity
7.07 Reliance on professional management[1/2]
7.08 Country capacity to retain talent
7.09 Country capacity to attract talent
7.10 Female participation in labor force*

## 8th pillar: Financial market development.....17%

**A. Efficiency.....50%**

8.01 Availability of financial services
8.02 Affordability of financial services
8.03 Financing through local equity market
8.04 Ease of access to loans
8.05 Venture capital availability

**B. Trustworthiness and confidence .....50%**

8.06 Soundness of banks
8.07 Regulation of securities exchanges
8.08 Legal rights index*

## 9th pillar: Technological readiness.....17%

**A. Technological adoption.....50%**

9.01 Availability of latest technologies
9.02 Firm-level technology absorption
9.03 FDI and technology transfer

**B. ICT use.....50%**

9.04 Internet users*
9.05 Broadband Internet subscriptions*
9.06 Internet bandwidth*
9.07 Mobile broadband subscriptions*
2.08 Mobile telephone subscriptions*[1/2]
2.09 Fixed telephone lines*[1/2]

## 10th pillar: Market size.....17%

**A. Domestic market size .....75%**

10.01 Domestic market size index*[k]

**B. Foreign market size .....25%**

10.02 Foreign market size index*[l]

## INNOVATION AND SOPHISTICATION FACTORS .....5–30%[b]

### 11th pillar: Business sophistication .....50%

11.01 Local supplier quantity
11.02 Local supplier quality
11.03 State of cluster development
11.04 Nature of competitive advantage
11.05 Value chain breadth
11.06 Control of international distribution
11.07 Production process sophistication
11.08 Extent of marketing
11.09 Willingness to delegate authority
7.07 Reliance on professional management[1/2]

### 12th pillar: R&D Innovation.....50%

12.01 Capacity for innovation
12.02 Quality of scientific research institutions
12.03 Company spending on R&D
12.04 University-industry collaboration in R&D
12.05 Government procurement of advanced technology products
12.06 Availability of scientists and engineers
12.07 PCT patent applications*
1.02 Intellectual property protection[1/2]

## NOTES

a Formally, for a category $i$ composed of $K$ indicators, we have:

$$category_i = \frac{\sum_{k=1}^{K} indicator_k}{K}$$

b As described in the chapter, the weights are as specified below. Refer to Table 2 of the chapter for country classification according to stage of development:

| | Stage of development | | | | |
|---|---|---|---|---|---|
| | Factor-driven stage (1) | Transition from stage 1 to stage 2 | Efficiency-driven stage (2) | Transition from stage 2 to stage 3 | Innovation-driven stage (3) |
| **GDP per capita (US$) thresholds*** | **<2,000** | **2,000–2,999** | **3,000–8,999** | **9,000–17,000** | **>17,000** |
| Weight for basic requirements | 60% | 40–60% | 40% | 20–40% | 20% |
| Weight for efficiency enhancers | 35% | 35–50% | 50% | 50% | 50% |
| Weight for innovation and sophistication factors | 5% | 5–10% | 10% | 10–30% | 30% |

* For economies with a high dependency on mineral resources, GDP per capita is not the sole criterion for the determination of the stage of development. See text for details.

c Formally, we have:

$$6 \times \left( \frac{\text{country score} - \text{sample minimum}}{\text{sample maximum} - \text{sample minimum}} \right) + 1$$

The *sample minimum* and *sample maximum* are, respectively, the lowest and highest country scores in the sample of economies covered by the GCI. In some instances, adjustments were made to account for extreme outliers. For those indicators for which a higher value indicates a worse outcome (e.g., disease incidence, government debt), the transformation formula takes the following form, thus ensuring that 1 and 7 still corresponds to the worst and best possible outcomes, respectively:

$$-6 \times \left( \frac{\text{country score} - \text{sample minimum}}{\text{sample maximum} - \text{sample minimum}} \right) + 7$$

d For those categories that contain one or several half-weight variables, country scores are computed as follows:

$$\frac{(\text{sum of scores on full-weight variables}) + \frac{1}{2} \times (\text{sum of scores on half-weight variables})}{(\text{count of full-weight variables}) + \frac{1}{2} \times (\text{count of half-weight variables})}$$

e "N/Appl." is used for economies where there is no regular train service or where the network covers only a negligible portion of the territory. Assessment of the existence of a network was conducted by the World Economic Forum based on various sources.

f In order to capture the idea that both high inflation and deflation are detrimental, inflation enters the model in a U-shaped manner as follows: for values of inflation between 0.5 and 2.9 percent, a country receives the highest possible score of 7. Outside this range, scores decrease linearly as they move away from these values.

g The impact of malaria, tuberculosis, and HIV/AIDS on competitiveness depends not only on their respective incidence rates but also on how costly they are for business. Therefore, in order to estimate the impact of each of the three diseases, we combine its incidence rate with the Survey question on its perceived cost to businesses. To combine these data we first take the ratio of each country's disease incidence rate relative to the highest incidence rate in the whole sample. The inverse of this ratio is then multiplied by each country's score on the related Survey question. This product is then normalized to a 1-to-7 scale. Note that countries with zero reported incidence receive a 7, regardless of their scores on the related Survey question. In the case of malaria, countries receive a 7 if the World Health Organization (WHO) has classified them as malaria-free countries or included them in the supplementary list of areas where malaria has never existed or has disappeared without specific measures.

h The *competition* subpillar is the weighted average of two components: *domestic competition* and *foreign competition*. In both components, the included indicators provide an indication of the extent to which competition is distorted. The relative importance of these distortions depends on the relative size of domestic versus foreign competition. This interaction between the domestic market and the foreign market is captured by the way we determine the weights of the two components. Domestic competition is the sum of consumption (C), investment (I), government spending (G), and exports (X), while foreign competition is equal to imports (M). Thus we assign a weight of (C + I + G + X)/(C + I + G + X + M) to *domestic competition* and a weight of M/(C + I + G + X + M) to *foreign competition*.

i Indicators 6.06 and 6.07 combine to form one single indicator.

j For indicators 6.14, imports as a percentage of GDP, we first apply a log-transformation and then a min-max transformation.

k The size of the domestic market is constructed by taking the natural log of the sum of the gross domestic product valued at purchased power parity (PPP) plus the total value (PPP estimates) of imports of goods and services, minus the total value (PPP estimates) of exports of goods and services. Data are then normalized on a 1-to-7 scale. PPP estimates of imports and exports are obtained by taking the product of exports as a percentage of GDP and GDP valued at PPP. The underlying data are reported in the data tables section (see Tables 10.03, 6.14, and 10.04).

l The size of the foreign market is estimated as the natural log of the total value (PPP estimates) of exports of goods and services, normalized on a 1-to-7 scale. PPP estimates of exports are obtained by taking the product of exports as a percentage of GDP and GDP valued at PPP. The underlying data are reported in the data tables.

# Appendix B:
# The Global Competitiveness Index 2014–2015: Africa and comparator economies, by subindex

| | | | SUBINDEXES | | | | | |
|---|---|---|---|---|---|---|---|---|
| | GCI 2014–2015 | | Basic requirements | | Efficiency enhancers | | Innovation and sophistication factors | |
| Country/region | Rank | Value | Rank | Value | Rank | Value | Rank | Value |
| **NORTH AFRICA** | | | | | | | | |
| Morocco | 72 | 4.21 | 57 | 4.74 | 78 | 3.92 | 82 | 3.50 |
| Algeria | 79 | 4.08 | 65 | 4.64 | 125 | 3.34 | 133 | 2.91 |
| Tunisia | 87 | 3.96 | 85 | 4.38 | 94 | 3.74 | 93 | 3.40 |
| Egypt | 119 | 3.60 | 121 | 3.73 | 106 | 3.58 | 113 | 3.18 |
| Libya | 126 | 3.48 | 111 | 3.86 | 137 | 3.03 | 143 | 2.49 |
| **North African average** | | **3.87** | | **4.27** | | **3.52** | | **3.09** |
| **SUB-SAHARAN AFRICA** | | | | | | | | |
| Mauritius | 39 | 4.52 | 38 | 5.04 | 59 | 4.24 | 53 | 3.85 |
| South Africa | 56 | 4.35 | 89 | 4.30 | 43 | 4.45 | 37 | 4.07 |
| Rwanda | 62 | 4.27 | 67 | 4.62 | 91 | 3.77 | 66 | 3.64 |
| Botswana | 74 | 4.15 | 72 | 4.53 | 84 | 3.87 | 110 | 3.22 |
| Namibia | 88 | 3.96 | 81 | 4.40 | 97 | 3.71 | 91 | 3.41 |
| Kenya | 90 | 3.93 | 115 | 3.82 | 66 | 4.12 | 40 | 4.03 |
| Seychelles | 92 | 3.91 | 50 | 4.85 | 105 | 3.58 | 69 | 3.62 |
| Zambia | 96 | 3.86 | 109 | 3.88 | 86 | 3.85 | 57 | 3.76 |
| Gabon | 106 | 3.74 | 95 | 4.15 | 119 | 3.37 | 131 | 2.93 |
| Lesotho | 107 | 3.73 | 102 | 4.09 | 130 | 3.21 | 117 | 3.12 |
| Ghana | 111 | 3.71 | 123 | 3.68 | 89 | 3.78 | 68 | 3.62 |
| Senegal | 112 | 3.70 | 120 | 3.75 | 102 | 3.62 | 65 | 3.65 |
| Cape Verde | 114 | 3.68 | 91 | 4.27 | 127 | 3.29 | 109 | 3.23 |
| Côte d'Ivoire | 115 | 3.67 | 119 | 3.75 | 108 | 3.58 | 86 | 3.47 |
| Cameroon | 116 | 3.66 | 116 | 3.79 | 113 | 3.48 | 84 | 3.47 |
| Ethiopia | 118 | 3.60 | 117 | 3.78 | 120 | 3.37 | 119 | 3.09 |
| Tanzania | 121 | 3.57 | 124 | 3.67 | 114 | 3.43 | 107 | 3.26 |
| Uganda | 122 | 3.56 | 126 | 3.59 | 110 | 3.53 | 104 | 3.30 |
| Swaziland | 123 | 3.55 | 108 | 3.92 | 126 | 3.32 | 108 | 3.25 |
| Zimbabwe | 124 | 3.54 | 114 | 3.83 | 133 | 3.12 | 127 | 2.95 |
| Gambia, The | 125 | 3.53 | 125 | 3.60 | 117 | 3.40 | 79 | 3.52 |
| Nigeria | 127 | 3.44 | 140 | 3.18 | 82 | 3.89 | 103 | 3.30 |
| Mali | 128 | 3.43 | 128 | 3.54 | 129 | 3.25 | 97 | 3.36 |
| Madagascar | 130 | 3.41 | 129 | 3.52 | 128 | 3.25 | 105 | 3.27 |
| Malawi | 132 | 3.25 | 139 | 3.20 | 122 | 3.35 | 115 | 3.17 |
| Mozambique | 133 | 3.24 | 133 | 3.29 | 131 | 3.19 | 120 | 3.05 |
| Burkina Faso | 135 | 3.21 | 135 | 3.25 | 132 | 3.16 | 128 | 2.95 |
| Sierra Leone | 138 | 3.10 | 141 | 3.14 | 136 | 3.06 | 130 | 2.93 |
| Burundi | 139 | 3.09 | 130 | 3.40 | 144 | 2.62 | 137 | 2.68 |
| Angola | 140 | 3.04 | 137 | 3.21 | 140 | 2.84 | 144 | 2.36 |
| Mauritania | 141 | 3.00 | 138 | 3.21 | 143 | 2.69 | 138 | 2.63 |
| Chad | 143 | 2.85 | 143 | 2.93 | 142 | 2.74 | 141 | 2.55 |
| Guinea | 144 | 2.79 | 144 | 2.76 | 138 | 2.88 | 142 | 2.55 |
| **Sub-Saharan African average** | | **3.58** | | **3.76** | | **3.42** | | **3.25** |
| **BRICs** | | | | | | | | |
| China | 28 | 4.89 | 28 | 5.34 | 30 | 4.68 | 33 | 4.14 |
| Russian Federation | 53 | 4.37 | 44 | 4.94 | 41 | 4.49 | 75 | 3.54 |
| Brazil | 57 | 4.34 | 83 | 4.40 | 42 | 4.46 | 56 | 3.82 |
| India | 71 | 4.21 | 92 | 4.25 | 61 | 4.19 | 52 | 3.86 |
| **BRIC average** | | **4.45** | | **4.73** | | **4.45** | | **3.84** |
| **Latin America and the Caribbean average** | | **3.97** | | **4.32** | | **3.87** | | **3.49** |
| **Southeast Asian average** | | **4.29** | | **4.62** | | **4.10** | | **3.74** |

# Appendix C:
# The Global Competitiveness Index 2014–2015: Africa and comparator economies, by pillar

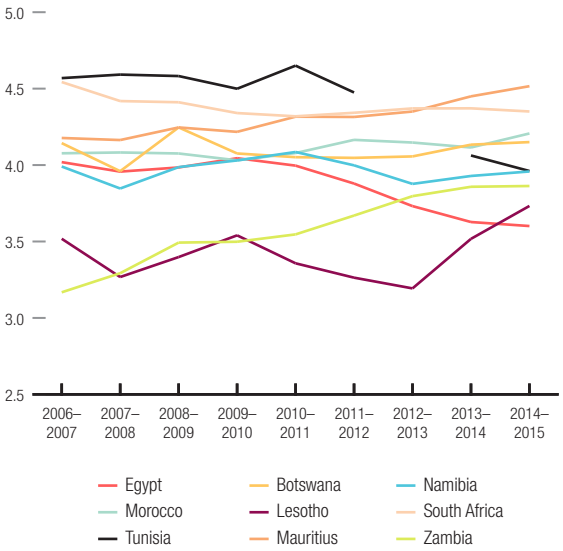
| | | | SUBINDEXES (1st–5th pillars) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | GCI 2014–2015 | | 1st pillar: Institutions | | 2nd pillar: Infrastructure | | 3rd pillar: Macroeconomic environment | | 4th pillar: Health and primary education | | 5th pillar: Higher education and training | |
| Country/Region | Rank | Value | Rank | Value | Rank | Value | Rank | Value | Rank | Value | Rank | Value |
| **NORTH AFRICA** | | | | | | | | | | | | |
| Morocco | 72 | 4.21 | 49 | 4.21 | 55 | 4.38 | 66 | 4.72 | 76 | 5.66 | 104 | 3.56 |
| Algeria | 79 | 4.08 | 101 | 3.41 | 106 | 3.12 | 11 | 6.41 | 81 | 5.61 | 98 | 3.69 |
| Tunisia | 87 | 3.96 | 81 | 3.70 | 79 | 3.80 | 111 | 4.03 | 53 | 6.00 | 73 | 4.28 |
| Egypt | 119 | 3.60 | 100 | 3.41 | 100 | 3.20 | 141 | 2.96 | 97 | 5.37 | 111 | 3.27 |
| Libya | 126 | 3.48 | 142 | 2.62 | 113 | 2.88 | 41 | 5.36 | 119 | 4.55 | 102 | 3.59 |
| **North African average** | | **3.87** | | **3.47** | | **3.48** | | **4.70** | | **5.44** | | **3.68** |
| **SUB-SAHARAN AFRICA** | | | | | | | | | | | | |
| Mauritius | 39 | 4.52 | 35 | 4.60 | 42 | 4.74 | 74 | 4.66 | 42 | 6.14 | 54 | 4.66 |
| South Africa | 56 | 4.35 | 36 | 4.50 | 60 | 4.29 | 89 | 4.45 | 132 | 3.96 | 86 | 4.04 |
| Rwanda | 62 | 4.27 | 18 | 5.21 | 105 | 3.14 | 79 | 4.62 | 86 | 5.52 | 122 | 2.98 |
| Botswana | 74 | 4.15 | 39 | 4.47 | 101 | 3.19 | 13 | 6.30 | 127 | 4.14 | 101 | 3.59 |
| Namibia | 88 | 3.96 | 50 | 4.19 | 66 | 4.17 | 78 | 4.62 | 115 | 4.63 | 115 | 3.23 |
| Kenya | 90 | 3.93 | 78 | 3.73 | 96 | 3.27 | 126 | 3.73 | 120 | 4.55 | 95 | 3.77 |
| Seychelles | 92 | 3.91 | 54 | 4.04 | 53 | 4.50 | 57 | 4.89 | 55 | 5.98 | 85 | 4.04 |
| Zambia | 96 | 3.86 | 52 | 4.12 | 118 | 2.67 | 103 | 4.16 | 118 | 4.56 | 80 | 4.16 |
| Gabon | 106 | 3.74 | 79 | 3.72 | 114 | 2.86 | 18 | 6.03 | 130 | 4.01 | 126 | 2.78 |
| Lesotho | 107 | 3.73 | 68 | 3.86 | 116 | 2.77 | 28 | 5.69 | 128 | 4.03 | 116 | 3.23 |
| Ghana | 111 | 3.71 | 69 | 3.85 | 108 | 3.03 | 133 | 3.38 | 121 | 4.46 | 106 | 3.46 |
| Senegal | 112 | 3.70 | 74 | 3.81 | 111 | 2.93 | 97 | 4.29 | 131 | 3.96 | 119 | 3.18 |
| Cape Verde | 114 | 3.68 | 66 | 3.89 | 104 | 3.14 | 106 | 4.11 | 57 | 5.96 | 89 | 3.91 |
| Côte d'Ivoire | 115 | 3.67 | 86 | 3.64 | 93 | 3.41 | 68 | 4.70 | 140 | 3.25 | 121 | 3.12 |
| Cameroon | 116 | 3.66 | 91 | 3.53 | 126 | 2.47 | 90 | 4.45 | 112 | 4.70 | 117 | 3.22 |
| Ethiopia | 118 | 3.60 | 96 | 3.46 | 125 | 2.49 | 95 | 4.36 | 110 | 4.82 | 131 | 2.63 |
| Tanzania | 121 | 3.57 | 93 | 3.49 | 130 | 2.26 | 109 | 4.06 | 108 | 4.86 | 134 | 2.45 |
| Uganda | 122 | 3.56 | 115 | 3.29 | 129 | 2.28 | 96 | 4.36 | 122 | 4.45 | 129 | 2.68 |
| Swaziland | 123 | 3.55 | 61 | 3.94 | 97 | 3.26 | 60 | 4.79 | 134 | 3.69 | 120 | 3.18 |
| Zimbabwe | 124 | 3.54 | 113 | 3.31 | 124 | 2.54 | 87 | 4.48 | 106 | 4.99 | 118 | 3.18 |
| Gambia, The | 125 | 3.53 | 44 | 4.29 | 95 | 3.27 | 142 | 2.96 | 133 | 3.88 | 107 | 3.45 |
| Nigeria | 127 | 3.44 | 129 | 3.01 | 134 | 2.13 | 76 | 4.62 | 143 | 2.97 | 124 | 2.88 |
| Mali | 128 | 3.43 | 126 | 3.18 | 103 | 3.15 | 86 | 4.48 | 138 | 3.33 | 128 | 2.70 |
| Madagascar | 130 | 3.41 | 128 | 3.13 | 135 | 2.10 | 81 | 4.60 | 125 | 4.26 | 130 | 2.64 |
| Malawi | 132 | 3.25 | 77 | 3.74 | 131 | 2.21 | 144 | 2.42 | 123 | 4.42 | 132 | 2.57 |
| Mozambique | 133 | 3.24 | 127 | 3.16 | 128 | 2.36 | 110 | 4.06 | 135 | 3.58 | 138 | 2.39 |
| Burkina Faso | 135 | 3.21 | 117 | 3.28 | 141 | 2.01 | 83 | 4.55 | 141 | 3.18 | 136 | 2.42 |
| Sierra Leone | 138 | 3.10 | 107 | 3.37 | 136 | 2.07 | 117 | 3.94 | 142 | 3.18 | 137 | 2.39 |
| Burundi | 139 | 3.09 | 132 | 2.92 | 140 | 2.01 | 112 | 4.02 | 114 | 4.64 | 142 | 2.14 |
| Angola | 140 | 3.04 | 143 | 2.61 | 139 | 2.01 | 71 | 4.70 | 136 | 3.54 | 144 | 1.94 |
| Mauritania | 141 | 3.00 | 138 | 2.76 | 123 | 2.59 | 115 | 4.00 | 137 | 3.48 | 141 | 2.16 |
| Chad | 143 | 2.85 | 140 | 2.66 | 144 | 1.67 | 73 | 4.68 | 144 | 2.72 | 143 | 2.05 |
| Guinea | 144 | 2.79 | 134 | 2.81 | 143 | 1.78 | 138 | 3.20 | 139 | 3.25 | 140 | 2.19 |
| **Sub-Saharan African average** | | **3.58** | | **3.62** | | **2.81** | | **4.38** | | **4.21** | | **3.01** |
| **BRICs** | | | | | | | | | | | | |
| China | 28 | 4.89 | 47 | 4.22 | 46 | 4.66 | 10 | 6.41 | 46 | 6.08 | 65 | 4.42 |
| Russian Federation | 53 | 4.37 | 97 | 3.45 | 39 | 4.82 | 31 | 5.54 | 56 | 5.97 | 39 | 4.96 |
| Brazil | 57 | 4.34 | 94 | 3.47 | 76 | 3.98 | 85 | 4.49 | 77 | 5.65 | 41 | 4.92 |
| India | 71 | 4.21 | 70 | 3.84 | 87 | 3.58 | 101 | 4.22 | 98 | 5.35 | 93 | 3.86 |
| **BRIC average** | | **4.45** | | **3.74** | | **4.26** | | **5.17** | | **5.76** | | **4.54** |
| **Latin America and the Caribbean average** | | **3.97** | | **3.51** | | **3.72** | | **4.58** | | **5.46** | | **4.15** |
| **Southeast Asian average** | | **4.29** | | **3.94** | | **3.88** | | **5.08** | | **5.56** | | **3.94** |

| | SUBINDEXES (6th–12th pillars) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6th pillar: Goods market efficiency | | 7th pillar: Labor market efficiency | | 8th pillar: Financial market development | | 9th pillar: Technological readiness | | 10th pillar: Market size | | 11th pillar: Business sophistication | | 12th pillar: Innovation | |
| Country/Region | Rank | Value | Rank | Value | Rank | Value | Rank | Value | Rank | Value | Rank | Value | Rank | Value |
| **NORTH AFRICA** | | | | | | | | | | | | | | |
| Morocco | 58 | 4.41 | 111 | 3.81 | 69 | 4.02 | 78 | 3.57 | 56 | 4.17 | 78 | 3.88 | 90 | 3.11 |
| Algeria | 136 | 3.48 | 139 | 3.15 | 137 | 2.72 | 129 | 2.59 | 47 | 4.39 | 131 | 3.22 | 128 | 2.60 |
| Tunisia | 107 | 4.03 | 129 | 3.51 | 117 | 3.35 | 90 | 3.38 | 64 | 3.87 | 88 | 3.78 | 99 | 3.01 |
| Egypt | 118 | 3.95 | 140 | 3.08 | 125 | 3.19 | 95 | 3.21 | 29 | 4.78 | 95 | 3.70 | 124 | 2.65 |
| Libya | 139 | 3.32 | 133 | 3.41 | 144 | 1.95 | 130 | 2.56 | 85 | 3.33 | 135 | 3.01 | 144 | 1.98 |
| **North African average** | | **3.84** | | **3.39** | | **3.05** | | **3.06** | | **4.11** | | **3.52** | | **2.67** |
| **SUB-SAHARAN AFRICA** | | | | | | | | | | | | | | |
| Mauritius | 25 | 4.92 | 52 | 4.33 | 26 | 4.74 | 63 | 3.97 | 113 | 2.83 | 33 | 4.48 | 76 | 3.22 |
| South Africa | 32 | 4.71 | 113 | 3.80 | 7 | 5.37 | 66 | 3.86 | 25 | 4.91 | 31 | 4.49 | 43 | 3.64 |
| Rwanda | 42 | 4.62 | 9 | 5.08 | 55 | 4.26 | 98 | 3.14 | 125 | 2.52 | 84 | 3.83 | 53 | 3.46 |
| Botswana | 97 | 4.12 | 36 | 4.56 | 57 | 4.22 | 76 | 3.58 | 97 | 3.12 | 116 | 3.47 | 102 | 2.97 |
| Namibia | 96 | 4.13 | 55 | 4.31 | 46 | 4.43 | 89 | 3.42 | 119 | 2.74 | 94 | 3.72 | 91 | 3.10 |
| Kenya | 62 | 4.40 | 25 | 4.68 | 24 | 4.77 | 87 | 3.48 | 74 | 3.62 | 44 | 4.38 | 38 | 3.69 |
| Seychelles | 88 | 4.18 | 44 | 4.44 | 103 | 3.65 | 70 | 3.73 | 143 | 1.46 | 66 | 3.99 | 73 | 3.25 |
| Zambia | 37 | 4.65 | 88 | 4.06 | 50 | 4.37 | 105 | 2.99 | 110 | 2.88 | 60 | 4.10 | 54 | 3.42 |
| Gabon | 126 | 3.81 | 69 | 4.23 | 105 | 3.57 | 108 | 2.95 | 109 | 2.89 | 133 | 3.18 | 122 | 2.68 |
| Lesotho | 80 | 4.24 | 76 | 4.16 | 123 | 3.27 | 137 | 2.37 | 139 | 2.01 | 123 | 3.37 | 110 | 2.87 |
| Ghana | 67 | 4.34 | 98 | 3.94 | 62 | 4.15 | 100 | 3.11 | 69 | 3.71 | 70 | 3.94 | 63 | 3.31 |
| Senegal | 68 | 4.34 | 68 | 4.23 | 85 | 3.80 | 96 | 3.21 | 104 | 2.96 | 77 | 3.90 | 57 | 3.39 |
| Cape Verde | 110 | 4.01 | 126 | 3.59 | 115 | 3.36 | 80 | 3.54 | 144 | 1.30 | 114 | 3.48 | 101 | 2.98 |
| Côte d'Ivoire | 82 | 4.23 | 73 | 4.21 | 78 | 3.86 | 117 | 2.81 | 94 | 3.23 | 100 | 3.66 | 69 | 3.28 |
| Cameroon | 113 | 3.99 | 81 | 4.11 | 108 | 3.51 | 120 | 2.76 | 91 | 3.30 | 98 | 3.68 | 71 | 3.27 |
| Ethiopia | 124 | 3.84 | 78 | 4.15 | 120 | 3.33 | 133 | 2.46 | 66 | 3.81 | 127 | 3.32 | 109 | 2.87 |
| Tanzania | 122 | 3.90 | 47 | 4.39 | 96 | 3.72 | 131 | 2.51 | 75 | 3.61 | 112 | 3.49 | 98 | 3.03 |
| Uganda | 119 | 3.95 | 27 | 4.66 | 81 | 3.81 | 119 | 2.78 | 86 | 3.32 | 109 | 3.53 | 96 | 3.06 |
| Swaziland | 98 | 4.09 | 105 | 3.86 | 71 | 4.00 | 125 | 2.66 | 136 | 2.09 | 101 | 3.63 | 112 | 2.86 |
| Zimbabwe | 133 | 3.58 | 137 | 3.25 | 112 | 3.44 | 109 | 2.95 | 132 | 2.31 | 130 | 3.28 | 125 | 2.63 |
| Gambia, The | 111 | 4.00 | 38 | 4.54 | 94 | 3.74 | 103 | 3.02 | 142 | 1.65 | 71 | 3.93 | 89 | 3.11 |
| Nigeria | 87 | 4.19 | 40 | 4.53 | 67 | 4.06 | 104 | 3.02 | 33 | 4.70 | 87 | 3.78 | 114 | 2.82 |
| Mali | 104 | 4.07 | 102 | 3.89 | 122 | 3.32 | 112 | 2.86 | 122 | 2.66 | 102 | 3.62 | 92 | 3.10 |
| Madagascar | 102 | 4.08 | 39 | 4.53 | 132 | 2.85 | 127 | 2.63 | 114 | 2.77 | 117 | 3.46 | 94 | 3.09 |
| Malawi | 108 | 4.03 | 28 | 4.63 | 79 | 3.82 | 135 | 2.41 | 123 | 2.63 | 108 | 3.54 | 115 | 2.80 |
| Mozambique | 116 | 3.99 | 104 | 3.88 | 126 | 3.14 | 122 | 2.71 | 101 | 3.07 | 125 | 3.34 | 118 | 2.76 |
| Burkina Faso | 127 | 3.81 | 70 | 4.22 | 127 | 3.14 | 132 | 2.49 | 111 | 2.87 | 136 | 3.00 | 107 | 2.89 |
| Sierra Leone | 117 | 3.98 | 95 | 4.01 | 116 | 3.36 | 138 | 2.36 | 133 | 2.27 | 128 | 3.28 | 130 | 2.58 |
| Burundi | 135 | 3.49 | 103 | 3.89 | 142 | 2.37 | 142 | 2.10 | 141 | 1.74 | 139 | 2.91 | 133 | 2.46 |
| Angola | 143 | 2.92 | 128 | 3.52 | 140 | 2.50 | 140 | 2.34 | 65 | 3.84 | 144 | 2.61 | 142 | 2.12 |
| Mauritania | 138 | 3.35 | 141 | 3.07 | 141 | 2.50 | 123 | 2.71 | 131 | 2.33 | 142 | 2.85 | 136 | 2.41 |
| Chad | 142 | 2.94 | 120 | 3.72 | 136 | 2.74 | 143 | 2.09 | 106 | 2.92 | 143 | 2.77 | 139 | 2.34 |
| Guinea | 137 | 3.40 | 89 | 4.05 | 134 | 2.85 | 139 | 2.35 | 127 | 2.44 | 141 | 2.85 | 141 | 2.25 |
| **Sub-Saharan African average** | | **4.01** | | **4.14** | | **3.64** | | **2.89** | | **2.86** | | **3.54** | | **2.96** |
| **BRICs** | | | | | | | | | | | | | | |
| China | 56 | 4.42 | 37 | 4.55 | 54 | 4.30 | 83 | 3.53 | 2 | 6.86 | 43 | 4.38 | 32 | 3.91 |
| Russian Federation | 99 | 4.09 | 45 | 4.42 | 110 | 3.50 | 59 | 4.19 | 7 | 5.77 | 86 | 3.79 | 65 | 3.29 |
| Brazil | 123 | 3.85 | 109 | 3.83 | 53 | 4.30 | 58 | 4.21 | 9 | 5.66 | 47 | 4.32 | 62 | 3.31 |
| India | 95 | 4.13 | 112 | 3.81 | 51 | 4.34 | 121 | 2.75 | 3 | 6.26 | 57 | 4.18 | 49 | 3.53 |
| **BRIC average** | | **4.12** | | **4.15** | | **4.11** | | **3.67** | | **6.14** | | **4.17** | | **3.51** |
| **Latin America and the Caribbean average** | | **4.06** | | **3.85** | | **3.92** | | **3.62** | | **3.60** | | **3.89** | | **3.10** |
| **Southeast Asian average** | | **4.47** | | **4.41** | | **4.14** | | **3.48** | | **4.15** | | **4.04** | | **3.43** |

# Appendix D: Trends in scores: All African economies, 2006 constant sample

The figures in this appendix show the performance of the 24 economies that have been covered in the Global Competitiveness Index since 2006. So that the trends can be considered by economy type, each category is presented separately; these groupings, which follow the International Monetary Fund's classifications, are discussed in the chapter's "Africa's competitiveness divide" section and shown also in Figure 12.

**Figure D1: Middle-income economies**
GCI score (1–7)




Note: Data for Tunisia were not collected in 2012–2013.

**Figure D2: Low-income economies**
GCI score (1–7)

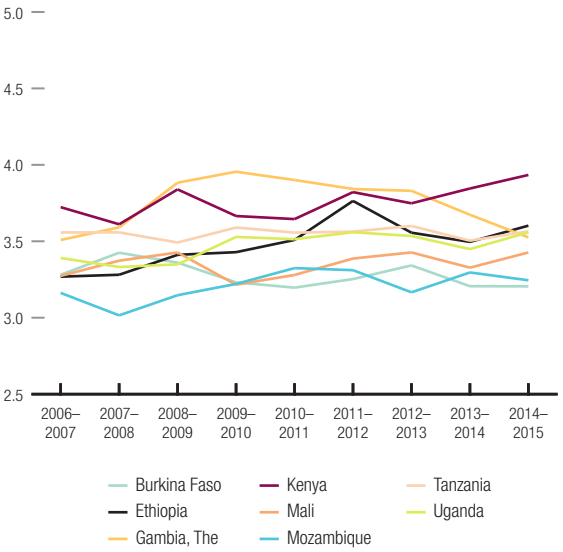



**Figure D3: Oil-exporting economies**
GCI score (1–7)

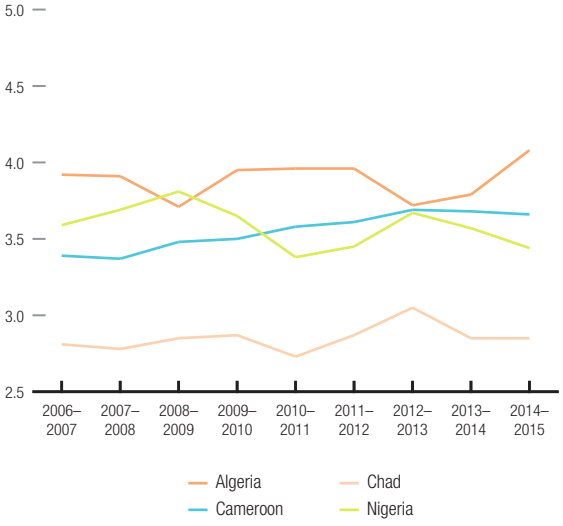
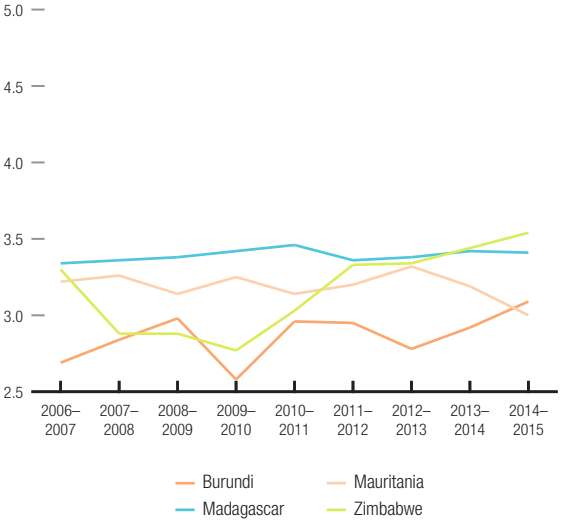



**Figure D4: Fragile economies**
GCI score (1–7)




Sources: World Economic Forum, 2006–2014.
Note: Only those countries that have been covered without interruption since 2006 are shown, with the exception of Tunisia (not covered in 2012–2013).