

# INTEGRATION FOR AFRICA'S ECONOMIC PROSPERITY

## KEY MESSAGES

- The Continental Free Trade Agreement (CFTA) can offer substantial gains for all African countries as new and timely analytics show.
- Night light data suggest that barriers to trade from border impediments have fallen over the past 20 years.
- Eliminating today's applied bilateral tariffs would increase intra-Africa trade by up to 15 percent, but only if rules of origin are simple and transparent.
- To move to systemwide rules of origin and avoid product-specific rules of origin, regional economic community (REC) member countries should move to a single value added rule—say, 40 percent of value added from within the REC—with a more lenient threshold for less developed countries. They should also exempt shipment sizes below \$1,000.
- Removing nontariff barriers with countries outside Africa could increase trade and boost the continent's tariff revenues by up to \$15 billion.
- The World Trade Organization's Trade Facilitation Agreement (TFA) is expected to reduce trading costs by 14–18 percent and increase world trade by 0.5 percent, with developing and especially least developed countries benefiting the most. It is also likely to reduce the time needed to import goods by a day and a half and the time needed to export goods by almost two days.
- Implementing the TFA would increase the gains to about 4.5 percent of Africa's GDP, or an additional \$31 billion, bringing the total real income gains to \$134 billion. (A 0.2 percent tariff on imports from high-income countries could bring in \$850 million to finance trade facilitation projects.)
- Bold reforms, especially at the institutional level, can synchronize financial governance frameworks across Africa and remove any remaining legal restrictions to cross-border financial flows and transactions. To harmonize payment systems, RECs should pursue stronger technological advances that facilitate movement of funds across borders.
- Electricity markets in Africa have developed vertically within national boundaries rather than horizontally across countries. Trade in electricity would bring many benefits, especially to small countries, if the hard infrastructure is at scale and functioning—and if soft infrastructure (logistics) is trustworthy.
- Africa's infrastructure financing needs are estimated to be \$130–\$170 billion a year. But total commitments came to just \$63 billion in 2016, representing a financing gap of approximately \$67–\$107 billion a year. To close Africa's infrastructure deficit, RECs could consider regional infrastructure bonds, while countries could further mobilize domestic resources and provide incentives for the private sector to join public–private partnership operations for regional public infrastructure.

All RECs have ambitious and wide-ranging objectives that reflect the desire to accommodate interests across members and accelerate industrial development

Africa has been integrating along various dimensions for the past 60 years. In a first phase, during the 1960s and 1970s, inward-looking integration reflected the desire to develop independently from the former colonial rulers. Economic unification was to be the solution to Africa's development dilemma, and many thought that this required a political union. But most leaders of the young African states were reluctant to encourage the erosion of national sovereignty and the emergence of a supranational authority to coordinate and manage the affairs of the African Union.

Starting in the 1980s, initiatives entered a second, more outward-looking phase of RECs under the Abuja Treaty, which became operational in 1994. While still a work in progress, a third phase saw the launch of the CFTA in March 2018, reflecting the African Union's Agenda 2063, its 50-year vision launched on the 50th anniversary of the Organization of African Unity.<sup>1</sup> Titled "The Africa We Want," Agenda 2063 calls for "a prosperous Africa based on inclusive growth and sustainable development." If anything, the CFTA recognizes in its deeper reach the many dimensions of integration. This chapter reviews the progress in regional integration and the opportunities and challenges that the CFTA presents. Throughout, the focus is on manufactures, since industrialization is the overarching challenge facing Africa.

Over the past decades, much has been written about Africa's promise and progress on regional integration, notably in the series of reports *Assessing Regional Integration in Africa*, published since 2004. As noted in the eighth edition—prepared jointly by the African Union Commission, the United Nations Economic Commission for Africa, and the African Development Bank—the CFTA has the potential to provide new impetus and dynamism to economic integration in Africa. That report spelled out in considerable detail the need to base CFTA institutional structures on practical approaches that can work in Africa—and to track progress with the Regional Integration Index.<sup>2</sup>

This chapter emphasizes two dimensions of regional integration that have received little attention in previous evaluations: the free movement of services and capital and the provision of regional public goods (such "hard" infrastructure as roads

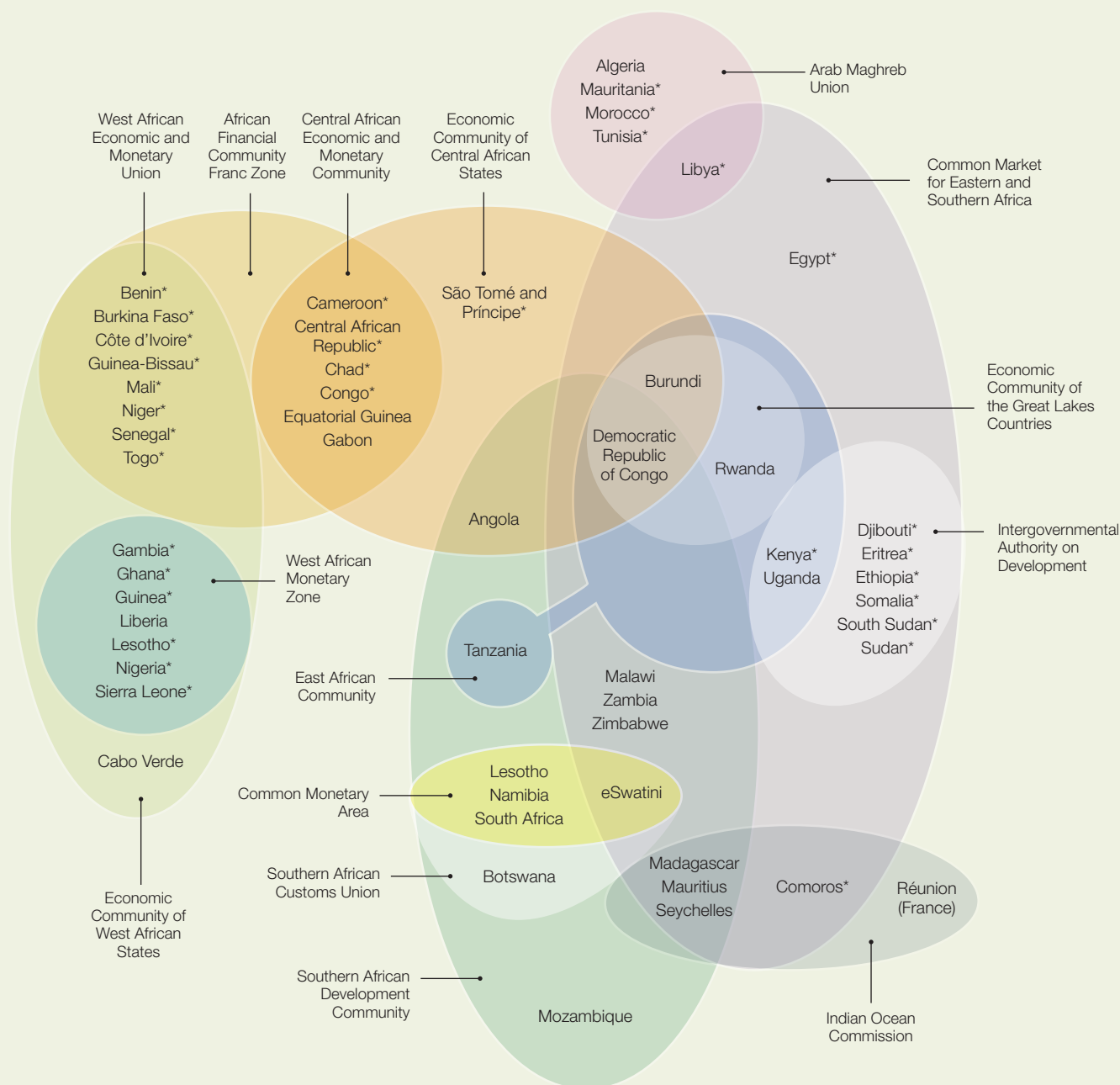
and such "soft" infrastructure as the regulatory environment). The chapter also discusses the challenges of achieving breadth (enlarging the market by removing barriers to trade for many countries), depth (extending integration beyond measures covering trade in goods, which requires trust), and solidarity (for the special and differential treatment of least developed members). Wherever possible, evaluations compare the eight African RECs recognized as the building blocks of the African Union with three other South–South regional integration arrangements: the Andean Community, Association of Southeast Asian Nations (ASEAN), and Southern Common Market (Mercosur).

The chapter takes for granted that regional integration is good politics and, ultimately, good economics in the fragmented African landscape. But to survive—and thrive—African regional integration arrangements must extend beyond good intentions and have a sound economic basis. While this is also the starting point of other progress reports, the emphasis here is on measurable achievements rather than on what should be done. Wherever possible, indicators of progress avoid relying on commonly used composite indices that can mask the underlying diversity of challenges ahead.

All RECs have ambitious and wide-ranging objectives that reflect the desire to accommodate interests across members and accelerate industrial development. They deal with removing tariffs and nontariff barriers and implementing trade facilitation measures and harmonizing rules of origin when several RECs are included, as in the Tripartite Free Trade Area, which brings together the East African Community (EAC), the Common Market for Eastern and Southern Africa (COMESA), the Southern African Development Community (SADC), and now the CFTA. The 15 African trade and economic organizations (plus the African Union) have memberships that overlap considerably (figure 3.1).

At a deeper level, integration requires cooperation between governments and people: to foster peace and security, conserve shared natural resources, develop and manage regional infrastructure, and share systems of rules and policy regimes. Integration thus provides regional public goods. These forms of cooperation call for

**FIGURE 3.1** Africa trade and economic organizations



Source: <https://au.int/en/organs/recs>.

Note: Asterisks indicate the 29 members of the Community of Sahel-Saharan States.

collective action, which requires trust and some supranational delegation of authority.

## INTEGRATING THE AFRICAN MARKET: OUTCOMES SO FAR

With 16 landlocked countries, Africa is more fragmented than any other continent. The small size of many countries and the resulting fragmentation of domestic markets result in various diseconomies of scale, impeding economic development. In 2017, 76 percent of African countries had fewer than 30 million people, and about half had a GDP of less than \$10 billion. Deeper market integration for goods, infrastructure services, and key factors of production (labor and capital) is especially important for Africa's small and fragmented economies and for their global competitiveness.

A borderless Africa is the foundation of a competitive continental market that could serve as a global business center. It would allow agricultural and industrial production across national boundaries and therefore offer economies of scale to investors, while creating much bigger markets and providing new opportunities for small firms and large. It would help eliminate monopoly positions while enhancing cross-border spillovers between coastal and landlocked countries. At a deeper level, regional integration can improve regional security, since the expansion of international trade often correlates with a reduced incidence of conflict.

Regional integration in support of broad-based economic and human development has been part of the African Development Bank's mandate since its creation in 1963. It is also a key priority for the African Union under the New Partnership for Africa's Development, Agenda 2063, and the RECs. The vision articulated by several generations of African leaders is an "integrated continent with free movement of people, goods, capital, and services and infrastructure connections."

### What is integration?

Markets are integrated when arbitrage (buying in locations where prices are low and selling in locations where prices are high) erases differences in prices (nothing is left on the table) and trade costs

are low. Trade costs are high when governments put up barriers and when officials extract informal payments. Trade in goods exemplifies arbitrage. So do the movement of people from locations where wages are low to locations where wages are high and the movement of capital from areas where returns are low to areas where they are high.

Integration in RECs (and in other preferential trade agreements) covers measures that go beyond obligations taken in WTO multilateral negotiations. Either they go deeper in the provisions covered at the WTO (such as tariff reductions beyond levels bound at the WTO and referred to as WTO+), or they cover provisions not covered at the WTO (such as capital and labor regulations, environmental regulations, and regulatory policies and referred to as WTO-X). WTO+ measures in RECs are obligations covering "shallow" integration (generally preferential agreements that deal with border measures), and WTO-X measures cover "deep" integration measures (agreements that include rules on other domestic policies).<sup>3</sup> Economic theory suggests that the degree of trade openness is a determinant of deep integration. In this respect, shallow and deep integration are complementary, with shallow integration generating demand for the governance that the deep integration can provide.<sup>4</sup> Together, these measures reflect efforts at trade facilitation, the expression given to all measures seeking to reduce the costs of crossing borders.

Because it is difficult to appreciate progress in integration, it is useful to have a benchmark whenever possible. Here the benchmarks are three comparable preferential trade agreements among (mostly) developing countries: the Andean Community (5 countries), ASEAN (10), and Mercosur (4).

### Policy measures to integrate goods markets

The first expected outcome of an effective preferential trade agreement is an increase in trade among members—through three channels. The first is reducing tariffs between members. The second is reducing nontariff barriers that arise from policies and from non-policy-induced rent extraction. The third, and hardest to apprehend, is through the two components of trade facilitation:

The vision articulated by several generations of African leaders is an "integrated continent with free movement of people, goods, capital, and services and infrastructure connections"

a “hard” component, related to tangible infrastructure such as ports, roads, highways, and telecommunications, and a “soft” component, related to transparency, customs management, the business environment, and other intangible institutional aspects that affect the ease of trading. The first two are the outcomes of measures taken under shallow integration, and the third is associated with deep integration.

### Tariffs

Traditionally, and certainly for the RECs, the first stage of integration has always been eliminating

tariffs on substantially all trade, where “substantially” is left purposely vague, at least at the WTO. Consider the applied intra-preferential trade agreement tariffs with applied most favored nation (MFN) tariffs for all eight African RECs (and a few more African economic communities) and for the three comparators (table 3.1). Several patterns stand out. First, indeed as imposed by the MFN obligation on non-WTO members, bilateral tariffs do not exceed MFN tariffs, a reminder of the benefits of WTO membership even for non-WTO members. Second, except for the Gulf Cooperation Council, average MFN tariffs are lower for

**TABLE 3.1 Applied tariffs: Average intraregional tariffs and most favored nation tariffs, 2016**

Agreement	Intraregional tariff	Most favored nation tariff
<i>AU-recognized regional economic communities</i>		
Arab Maghreb Union (AMU)	0.05	0.11
Common Market for Eastern and Southern Africa (COMESA)	0.05	0.12
Community of Sahel-Saharan States (CEN-SAD)	0.12	0.13
East African Community (EAC)	0.0	0.13
Economic Community of Central African States (ECCAS)	0.09	0.15
Economic Community of West African States (ECOWAS)	0.11	0.12
Southern African Development Community (SADC)	0.04	0.09
West African Economic and Monetary Union (WAEMU)	0.09	0.12
<i>Other preferential trade agreements</i>		
Agadir Agreement	0.00	0.13
Central African Economic and Monetary Community (CEMAC)	0.0	0.18
Gulf Cooperation Council (GCC)	0.0	0.05
Intergovernmental Authority on Development (IGAD)	0.09	0.16
Pan-Arab Free Trade Area (PAFTA)	0.00	0.09
Southern African Customs Union (SACU)	0.0	0.08
West African Monetary Zone (WAMZ)	0.12	0.13
<i>Comparators</i>		
Andean Community	0.0	0.09
Association of Southeast Asian Nations (ASEAN)	0.01	0.07
Southern Common Market (Mercosur)	0.00	0.12

Source: Data from the International Trade Centre. Most data for 2016 are from Espitia et al. (2018).

Note: All averages are simple averages of applied tariffs calculated in two steps. First, averages on the statutory schedules at the six-digit Harmonized System level are averaged for each country. Second, an average is taken among all group members. Column 1 reports the bilateral averages and column 2 the average applied most favored nation rates. Tariffs at the regional trade agreement level are obtained by taking a simple average across members.

The first expected outcome of an effective preferential trade agreement is an increase in trade among members



Many nontariff barriers are opaque, difficult to identify, and difficult to distinguish from nontariff measures. Often nontariff measures do not have a trade focus, even though they affect trade flows

the comparator group. Mercosur has an average MFN tariff similar to tariffs in the African preferential trade agreements. Third, except for the EAC, there is a very sharp difference between the average bilateral tariffs of the RECs and those of the comparator group, which are mostly zero.

In the absence of compensation mechanisms for members of a customs union, differences in economic power have also contributed to a common external tariff (CET) unfavorable to households, especially low-income households. Producer interests, especially in the most powerful REC members, have resulted in CET schedules with exception lists unfavorable to consumers, especially to low-income households. Even taking into account temporary protection measures, the CET has (or will, for the Economic Community of West African States, ECOWAS) raise the cost of living for households, especially those in the poorest deciles. Producer interests in the large partners largely determined the negotiated outcome (box 3.1).<sup>5</sup>

The EAC is the only fully operational customs union in Africa. It is currently reviewing its three-band CET—0 percent for raw materials and capital goods, 10 percent for intermediate goods, and 25 percent for final goods—complemented by a sensitive items list (products such as wheat and milk have tariffs above 30 percent). This review, which could lead to a fourth band, reflects, at least partly, pressures from globalization-induced repercussions.<sup>6</sup> The outcome of the current negotiations will likely be a form of “universalism” whereby each member acquiesces to the demands of other members in return for getting support for its own demands. This possible backtracking when adjustments to the CET are well under way would create further adjustment costs and likely reduce credibility for future integration efforts.

In sum, political economy pressures internal to the RECs resulting from heterogeneity along economic, cultural, and institutional dimensions—but also from globalization-driven competition pressures—have left the RECs far from completing stage 1 of economic integration. Although *Assessing Regional Integration in Africa VIII* concludes that five of eight RECs (COMESA, EAC, the Economic Community of Central African States [ECCAS], ECOWAS, and SADC) have reached free

trade area status, the applied tariffs for intra-REC trade suggest otherwise.<sup>7</sup> Only EAC has completed stage 1 (and stage 2) of integration, and it is the only REC that closely monitors progress, with its Common Market Scorecard (box 3.2).

### **Nontariff barriers**

Tariff liberalization alone has generally proven unsuccessful in providing genuine market access, which has drawn attention to nontariff measures that restrict market access and competition.<sup>8</sup> Nontariff measures may be intended to influence competition in export and import markets, as tariffs do (such as quotas, subsidies, and export restrictions), or they may have public policy aims, such as protecting health, safety, and the environment (technical barriers to trade). While nontariff measures influenced by public policy concerns have consumer welfare as their stated goal, they may nonetheless be designed to benefit producers, in the form of hidden protection. Both types of nontariff measures have trade consequences.<sup>9</sup>

Nontariff barriers are also explicitly identified for elimination during stage 1 of integration as policy-imposed restrictions to trade. Very difficult to measure, many nontariff barriers are opaque, difficult to identify, and difficult to distinguish from nontariff measures, which have shifted generally from a protectionist motive toward a precautionary one. And not all are the results of policy. For example, excessive verifications to extract rents also represent important barriers to trade. Even looking only at policy-imposed nontariff barriers, separating them from the increasing array of nontariff measures is difficult. Often nontariff measures do not have a trade focus, even though they affect trade flows. In some instances, they stimulate trade flows because they provide information, and even when they diminish trade flows, they can increase efficiency because they take into account the full social costs of production.

Even when nontariff measures do not have an overtly protectionist aim, compliance with differing requirements across countries is complex and costly for companies seeking to export. African nontariff barriers are particularly intrusive for smaller firms, female traders, and informal cross-border traders. Mentioned most frequently are customs and trade procedures, immigration

### BOX 3.1 Common external tariffs: Challenges for poor countries

As regional economic communities (RECs) deepen integration by moving from a free trade agreement to a customs union with a common external tariff (CET), small countries can be left on the sidelines during the negotiations if appropriate measures do not accommodate their peculiar status. Rwanda and Liberia illustrate the contrast between depth and breadth across RECs.

The East African Community (EAC) exemplifies relatively deep integration, reaching customs union status by 2005, before expanding membership from three to five members when Burundi and Rwanda joined in 2009. As latecomers, Burundi and Rwanda adopted a three-band CET (0 percent for raw materials, 15 percent for semifinished products, and 25 percent for finished products)—and a sensitive items list of products exempt from the three-band tariff schedule, with tariffs up to 70 percent. Both newcomers received an adjustment period of two years.

Despite the EAC's fairly transparent trade policy and emphasis on removing nontariff barriers, the high tariffs for the sensitive items list fell disproportionately on goods consumed by poor people in Rwanda. Prices of these goods increased by an average of 3.8 percent. In addition, government revenue from tariffs fell by about half in the following two years because of the lower CET. On the positive side, the CET led to an average increase in exports of 1–2 percent.<sup>1</sup>

In contrast, the Economic Community of West African States (ECOWAS) has a less transparent trade policy. When Liberia joined in 2015, the trade liberalization scheme that had been adopted in 1994 was not yet implemented. The five-band CET was fairly high, at 0 percent for necessities, 5 percent for raw materials and capital equipment, 10 percent for intermediate products, 20 percent for consumer products, and 35 percent for goods for regional development.

Adopting the CET will more than double Liberia's import-weighted tariff, from 6.3 percent to 14.7 percent, pushing up urban household spending by 3 percent and rural household spending by 6 percent just to maintain their current well-being.<sup>2</sup> In effect, adopting the CET called for a deep adjustment in Liberia's statutory tariff regime, with an upward adjustment for 45 percent of the tariff lines and a downward adjustment for 25 percent. Tariffs will increase by at least 15 percentage points on some 233 products. These changes will harm producers, since most imported goods are not produced domestically, and consumers will have to pay more for imported goods.

In addition, ECOWAS adopted temporary special protection measures in 2013, which penalized the five members with the lowest per capita GDP: Gambia, Guinea, Guinea-Bissau, Liberia, and Niger. These members export primarily raw agricultural and mining products. Even during the adjustment period, the special protection measures allow no leeway from raising most favored nation tariffs, even though they can exceed the CET rate by up to 20 percentage points, with a cap at 70 percent.

For Côte d'Ivoire, the CET raises the cost of living by about 3 percent among all income groups.<sup>3</sup> The CET is slightly progressive, though losses are slightly lower for the richest 1 percent of households. For Guinea, the CET is regressive.

So, for both the EAC and ECOWAS, the CET raises the cost of living of poorer households by raising the cost of goods consumed by poor people more than the cost of other goods. In ECOWAS, the smaller low-income country members, with similar interests and tariff structures, would benefit from closer cooperation and a common negotiating stance to alter the composition of the CET, which is ill-suited to their needs.

#### Notes

1. Frazer 2012.

2. de Melo, Laski, and Mancellari 2014.

3. Cadot and Gourdon 2014, table 7.

### **BOX 3.2 Monitoring progress toward a customs union in the East African Community**

The East African Community (EAC) Common Market Protocol is one of the most ambitious globally. The EAC is a customs union that covers goods, capital, and services. For goods, in addition to zero tariffs on intraregional trade, there is a common external tariff toward nonpartners and the removal of nontariff barriers. For capital, free movement covers 20 operations related to securities, direct investments, and credit operations, and personal capital operations are to be free of restrictions. For services, partner states are obliged to guarantee the free movement of services and service suppliers. This amounts to fairness and nondiscrimination. Especially important, in addition to progressively removing restrictions, EAC customs laws prevent member states from introducing any new restrictions on the provision of goods, capital, and services.

Monitoring progress is essential to detect implementation problems related to technical capacities, domestic political factors, and overlapping trade negotiations. The EAC Common Market Scorecard, introduced in 2014 and updated in 2016, assesses progress. A team of 14 trade lawyers and a statistician reviewed and coded 683 laws and regulations and administered a survey to 60 respondents. These regulations were then coded and assembled into indices reported in the scorecard, which measures *de jure* compliance through national laws not *de facto* compliance.

For free movement of capital, the 2014 scorecard reported that all but 2 of the 20 operations faced at least one restriction by at least one partner. And exemptions to the protocol or new restrictions—often guided by prudential supervision or money laundering concerns—were introduced without notification. The scorecard tallies the application of the 20 operations for each country and makes recommendations, taking into account the risk of financial contagion and the potential risk of reducing oversight of domestic regulators. The 2016 scorecard reported that members carried out few reforms in the freedom of capital movement and increased the use of exemptions while still not complying with the notification requirement, suggesting that exemptions could substitute for a reduction in restrictions.

For free movement of services, more than 500 sectoral laws and regulations cover professional services (legal, accounting, architectural, and engineering), road transport, distribution, and telecommunications legislation. Countries adopted a positive list, scheduling only subsectors they were willing to open. Some 63 nonconforming measures were identified, most relating to professional services. These were against the World Trade Organization principles of transparency in services, set up to attract trade and investment. None of the partner states complied with the obligation to inform the EAC Council. The 2016 scorecard reported a slight improvement, with 59 nonconforming measures.

For free trade in goods, the 2014 scorecard reported that while all partners have eliminated tariffs on intraregional trade, they also introduced charges equivalent to tariffs, such as additional taxes and surcharges that affect import costs or import unit values. Nonrecognition of EAC certificates of origin at the borders and fake certificates of origin were also reported, as were nontariff barriers related to technical barriers to trade in dairy, pharmaceuticals, and aluminum. The 2016 scorecard showed an increase in reported nontariff barriers, often for goods on the sensitive items list, suggesting that the high tariffs were insufficient to protect domestic industries. It also acknowledged faster resolution of reported nontariff barriers. Unresolved nontariff barriers, common to all EAC countries, included a lack of harmonization of working hours at customs, a lack of coordination among institutions testing goods, a lack of harmonization of road tolls, and numerous monetary charges for exports of milk.

Other measures affect the freedom of trade in goods. Because all member states are also members of other free trade areas, the common external tariff was not applied to all non-EAC countries, resulting in a total revenue loss of \$22.7 billion in 2014. The 2016 scorecard reports that countries continue to rely on tariff equivalent measures and to not recognize certificates of origin, significantly reducing the benefits of the customs union.



procedures, quality inspection procedures, transport-related requirements, and roadblocks. Agricultural products and leather and wood products frequently face technical measures (sanitary and phytosanitary measures and technical barriers to trade).<sup>10</sup> The index values for border control measures are also relatively high.

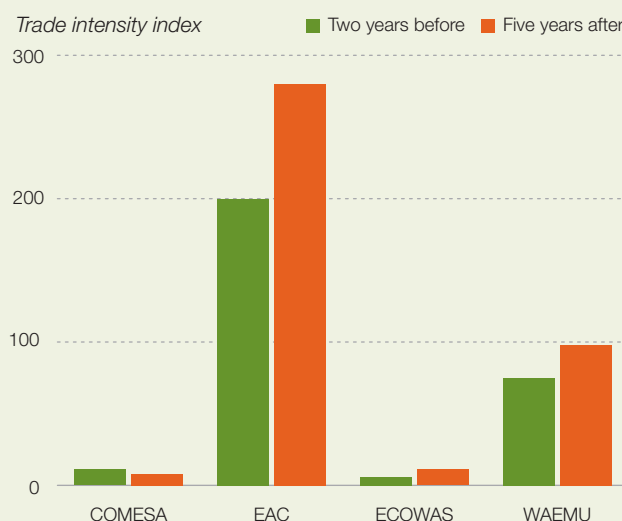
Unfortunately, such descriptive indices are of limited value for measuring progress, even just for legal engagements, which requires tracking the nontariff barriers reported by each partner (and accepted by the others), then checking whether they have been removed. The EAC Common Market Scorecard does such detailed monitoring for goods, capital, and services (see box 3.2). For example, in the EAC, where rules of origin are still necessary because countries are also members of other RECs, the scorecard reports that certificates of origin are not always recognized and are sometimes fake. The scorecard also monitors whether countries have enacted and applied legislation to penalize those producers of fake certificates. Other RECs serious about progress on *de jure* market access should follow in the EAC's footsteps.

### Goods trade within regional economic communities remains low, at 2–5 percent

Successive reports have noted that intra-Africa trade remains low.<sup>11</sup> Has integration since the Abuja Treaty increased intra-Africa trade? To detect changes in trade patterns around the time of implementation, intra-REC trade shares 5 and 10 years after implementation are compared with those 2 years before the announcement of reduced trade barriers. These values remain low, in the 2–4 percent range, while extrabloc import shares hover in the 20–30 percent range.<sup>12</sup> The exception is ASEAN, where intrabloc import shares increased from an already high base. Intrabloc import shares across all RECs and the other two comparators remain low. That is the case even though intrabloc shares increased substantially for ECOWAS and SADC as well as for the West African Economic and Monetary Union (WAEMU), where a common currency and language should have intensified intraregional trade.

The trade intensity indices in figure 3.2 take into account the overall growth of REC trade in

**FIGURE 3.2 Trade intensity indices two years before and five years after implementation of regional economic communities**



Source: Adapted from de Melo and Tsikata (2015), table 2.

Note: The trade intensity index is the ratio of the bloc's share in member exports to its share in nonmember exports. Time periods are 1991–92 and 1997–98 for COMESA and ECOWAS, 1997–98 and 2003–04 for EAC, and 1992–93 and 1998–99 for WAEMU. WAEMU members are not included in the values for ECOWAS.

world trade since intrabloc trade is now normalized by the bloc's share in nonmember exports. The EAC and, to less extent, WAEMU stand out with a strong rise in intra-REC trade. These patterns contrast sharply with those for ECOWAS and COMESA, where leading economies Nigeria and Egypt have practically no trade with other REC members.

In sum, with the possible exception of the EAC, there is little evidence that the moderate increases in intraregional trade were driven by reduced barriers to intrabloc trade. The overall small increases in intra-Africa trade could also reflect that policies to reduce barriers to cross-border trade are largely ineffective if weak rule of law or inappropriate regulatory policy creates insecurity in international transactions.<sup>13</sup>

### Regionalizing trade in new manufactured products

Has integration led to new products being shipped to geographically closer locations? A

This shift toward geographically closer partners might reflect growing trust, greater knowledge of demand, or characteristics of the products, each of which could translate into lower trade costs

pillar of Africa's development strategy is to accelerate industrialization by promoting regional value chains, since countries are often said to get richer by producing the goods that rich countries consume. Is there evidence that trade in new products is developing along regional supply chains? Figure 3.3 compares the average distance of partners for manufactures for two decades, 1995–2005 and 2005–10, to detect whether new manufactures are shifting toward REC members. It shows a robust shift in exports of new products toward REC partners over 2005–15 relative to 1995–2005. All new manufactures are shipped to closer destinations in 2005–15 than were manufactures in 1995–2005 (all points are below the 45 degree line). For example, the average distance of trade for manufactured products fell from approximately 6,500 kilometers (km) for traditional products to 3,800 km for new products for ASEAN and from 4,500 km to 3,900 km for EAC. This shift toward geographically closer partners might reflect growing trust, greater knowledge of demand, or characteristics of the

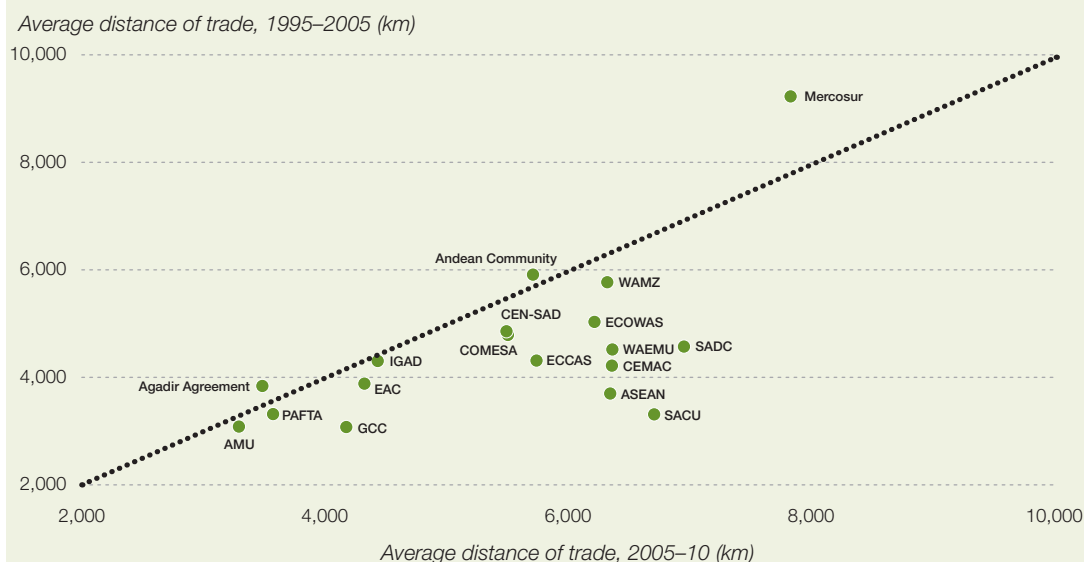
products, each of which could translate into lower trade costs.<sup>14</sup>

This pattern holds across a larger sample of countries where newly exported manufactures (over three or more years) are both high-cost relative to traditional goods and are sold only on markets with low trade costs (close, contiguous, or part of a regional trade agreement). And when the newly exported goods reach the age of 10, they are still exported mostly toward geographically and culturally closer destinations, unlike traditional goods.<sup>15</sup>

### Trade costs are falling everywhere, but more slowly for African regional economic communities

Volumes and patterns of trade display two very strong regularities: the volume of bilateral trade is proportional to the countries' economic size and inversely proportional to the distance, a robust, if approximate, proxy for trade costs. These regularities have been observed repeatedly for goods trade and somewhat less for services trade, where

**FIGURE 3.3** New manufactured products are going regional



Source: Data from the four-digit level of the Harmonized System Comtrade (mirror data).

Note: The dotted line is the 45° fitted line. New products are products exported for at least three consecutive years during 2005–15 and not exported for three consecutive years during 1995–2005. Products do not include agricultural products, extractive resources, and Harmonized System categories not elsewhere specified, for a total of 993 potential products.

data are spottier. These regularities are captured in the gravity model of trade, from which one can construct time series of bilateral trade costs from observed trade flows. These calibrated trade costs are the ad valorem equivalents of total bilateral trade costs that include all sources of trade costs (tariffs, ad valorem equivalents of nontariff measures, differences in language, hard and soft infrastructure, and so on).<sup>16</sup>

The model predicts that countries improve their standing—that is, trade more intensely—when external trade costs fall faster than internal trade costs and when their external trade costs fall faster than those of others. Calibrated costs are a convenient way to summarize the evolution of trade shares while also explicitly recognizing the primacy of trade costs that have occupied center stage in the African Union’s continental integration agenda.

The three panels in figure 3.4 compare the evolution of trade costs relative to those of the 15 largest importers according to several classifications: by income group across Africa (panel a), relative to comparator income groups (from which African countries are excluded; panel b), and relative to the three comparator trade blocs (panel c). To see more clearly the evolution of trade costs across groupings and across panels during the 20-year period, trade costs in the base year (1995) are normalized to 100. On average, the 25 low-income African countries had bilateral trade costs that were 274 percent above those of the 15 largest importers in 1995 and 238 percent in 2015. These estimates are not that high considering that, on average, the trade costs of the other high-income countries were 115 percent above those of the top importers in 2015. Still, bilateral trade costs are roughly two to three times those of the largest importers.

- Panel a shows some catchup for all African country groups. Catchup was greatest for upper-middle-income countries, which started from a lower trade cost disadvantage, while low-income countries started from the highest.
- Panel b shows that all comparator countries except the lower-middle-income ones started from a higher cost disadvantage and caught up, a pattern that is also evident from the evolution of trade shares in world trade during this period.

- Panel c compares the evolution of average bilateral trade costs of three African RECs with those of the Andean Community, ASEAN, and Mercosur, whose trade costs are lower than those of the African countries in panel a.

Summing up, the comparisons in figure 3.4 confirm some catchup over the past 20 years, mostly for upper-middle-income countries, and a lag of African least developed countries and landlocked countries relative to comparators.<sup>17</sup>

### Deep integration beyond the multilateral trade agenda: Factor markets and other provisions

Before 2000, 90 percent of the 81 preferential trade agreements notified to the WTO dealt exclusively with trade in goods. A drastic change occurred over 2000–15, when 64 percent of the 194 preferential trade agreements notified to the WTO included provisions on trade in services.<sup>18</sup> This extension of coverage to services, observed in free trade agreements around the world, reflects the increasing importance of services as complementary inputs to production but also the slow progress in multilateral negotiations toward liberalizing trade in services and in dealing with regulatory measures.

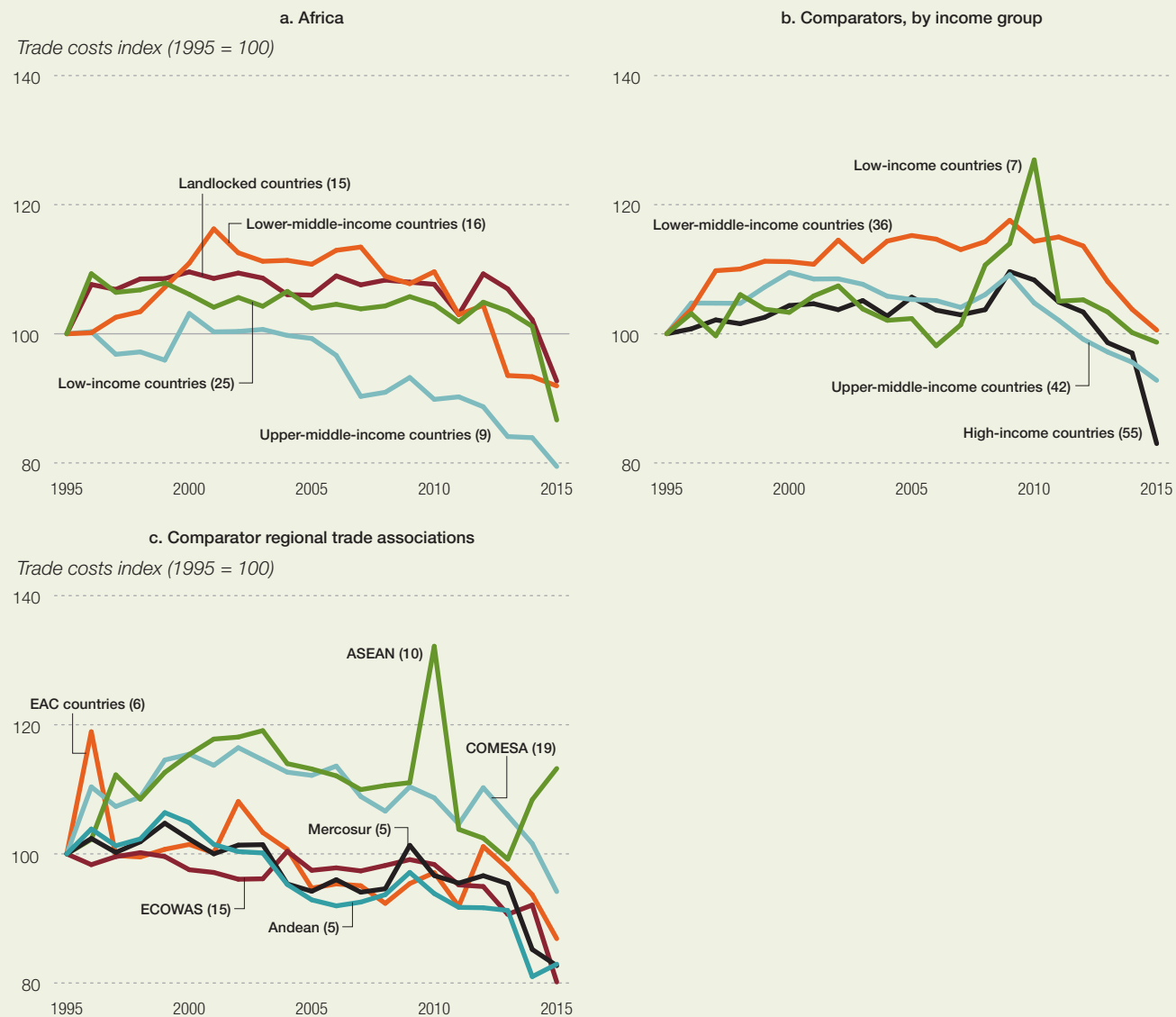
This section compares the depth of integration in seven African regional trade agreements with data and in other South–South preferential trade agreements. The comparisons are for measures covered in WTO negotiations (but labeled WTO+ to signify that they go deeper than measures taken at the multilateral level) and measures not covered in the multilateral negotiations (called WTO-X measures). For both categories, covered provisions are categorized by their legal enforceability. This distinction is based on the wording in the provision. For example, “parties shall cooperate” is deemed not legally enforceable, while “neither party may expropriate or nationalize a covered investment” is deemed legally enforceable.

Not surprisingly, legal enforceability is much higher for the WTO+ provisions, which are covered under the WTO, than for the WTO-X provisions, which are not covered under the WTO (figure 3.5). For all the WTO+ provisions combined, the aggregate coverage ratio (across all

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There has been some catchup over the past 20 years, mostly for upper-middle-income countries, and a lag of African least developed countries and landlocked countries

**FIGURE 3.4** Africa's calibrated trade costs are falling, in line with global trends, 1995–2015



Source: United Nations Economic and Social Commission for Asia and the Pacific and World Bank trade costs dataset.

Note: Figure shows average trade costs for all goods (aggregated), calibrated relative to the bilateral trade with the 15 largest world importers: United States, China, Germany, Japan, United Kingdom, France, Hong Kong, Netherlands, the Republic of Korea, Italy, India, Canada, Mexico, Belgium, and Spain. Numbers in parentheses are the number of countries in each group.

categories) is only slightly lower in African RECs (58 percent) than in other South–South regional trade agreements (64 percent). But the legal enforceability is significantly lower. For the WTO-X provisions, legal enforceability in African RECs (5 percent) is slightly lower than in other South–South regional trade agreements (6 percent). But

for both the WTO+ and the WTO-X provisions, on average in each category, legal enforceability is almost always lower in African regional trade agreements than in other South–South regional trade agreements.<sup>19</sup>

The high coverage ratio of WTO-X provisions in African regional trade agreements could

**FIGURE 3.5** Coverage of provisions covered by the World Trade Organization and provisions not covered by the World Trade Organization in seven African regional trade agreements and South–South regional trade agreements, by legal enforceability



GATS is General Agreement on Trade in Services; TRIPS is Trade-Related Aspects of International Property Rights.

Source: de Melo, Nouar, and Solleder (2019) with data from Hoffman, Osnago, and Ruta (2017).

Note: African regional trade agreements included are CEMAC, COMESA, EAC, ECOWAS, SACU, SADC, and WAEMU. Percentages are by category of provisions covered distinguishing those that are legally enforceable. For example, for agreements covered by WTO-X provisions, for the 7 African RECs, of the 49 (7 × 7) provisions for capital and labor requirements, 31 percent (15) are covered, with 12 percent (6) deemed legally enforceable.

reflect three factors. First, high coverage could be inspired by coverage in EU agreements, where regional integration arrangements are the main diplomatic arm of the European Union.<sup>20</sup> Second, high coverage could be a way to build trust by including the preferences of all participants. Third, and related, high coverage could be a sign of compromise among countries with large differences in preferences. This is akin to “universalism” in the politics of rent-sharing in regional trade agreements, where every government wants a share of the spoils when voting on protection so that all countries vote for measures that are not in their interest in exchange for getting the support of other members for measures they benefit from.<sup>21</sup>

Producer services—in finance, consulting, accounting, transportation, and information and

communication technologies—are all complementary inputs in production and thus necessary to expand the production of intermediate and final goods. Many are specialized inputs, for investment-related obligations, domestic trade-related regulations, and capital and labor regulations. On average, African regional trade agreements have lower enforceability than other South–South agreements—particularly for investment-related obligations, which have both lower coverage and lower enforceability.

Access to a wide range of inputs from domestic and foreign suppliers is needed for participation in supply chain trade. Panel regressions on bilateral trade in parts and components carried out for 155 South–South regional trade agreements over 1980–2014 show that three measures of depth of



integration enter positively and statistically significantly in the intensity of bilateral trade.<sup>22</sup>

The importance of trade in parts and in services that are complementary inputs into goods trade raises the issue of barriers to trade in services. Few such barriers discriminate between services provided by domestic firms and services provided by foreign firms. Average estimated values of ad valorem tariff equivalents of the barriers to trade at the AU level and for comparator groups (estimates at the REC level) are in table 3.2.<sup>23</sup> These estimates are constructed from a careful reading of regulatory texts for 103 countries. They show great dispersion in estimates across RECs.

The ad valorem tariff equivalents are always higher for all categories of services in Africa (using an average across African RECs as an indicator for Africa) than in Organisation for Economic Co-operation and Development (OECD) countries. Estimates are orders of magnitude higher for the hard infrastructure component of trade costs: rail, road, and maritime transport. For the soft infrastructure component, the ad valorem equivalents for banking and insurance are also higher in Africa (see table 3.2). Significantly, the average

ad valorem tariff equivalent is also higher in Africa than in comparators.

The barriers to trade in services suggested by these high ad valorem tariff equivalents are increasingly recognized as important determinants of manufacturing productivity. Firm-level estimates show that policies that restrict foreign access to upstream service markets reduce the productivity of downstream firms using these services.<sup>24</sup> Similar results are reported at the sector level across a large sample of developing countries at different stages of development.<sup>25</sup> Notably, policies that reduce barriers to cross-border trade are largely ineffective when indicators of the quality of institutions (weak rule of law, bad regulatory quality) have low values.

In conclusion, the business climate has been improving across Africa and in individual countries. A record 80 business climate reforms in 37 of 48 Sub-Saharan countries in 2017 represents a 14 percent increase over 2016.<sup>26</sup> Even so, the ad valorem tariff equivalents suggest room for improvement (see table 3.2). Between 2018 and 2019, there were 107 reforms across 40 countries in Sub-Saharan Africa, which has registered the

**TABLE 3.2 Service trade restrictions are generally much higher in Africa than elsewhere, 2015**

*Ad valorem tariff equivalents (percent)*

Service	African Union <sup>a</sup>	Comparator group			
		ANDEAN	ASEAN	Mercosur	OECD+EU
Accounting	35	32	50	30	29
Legal services	47	27	68	32	31
Air transport	28	28	58	58	15
Rail transport	59	8	62	28	16
Road transport	32	8	60	22	18
Banking	15	18	21	12	2
Insurance	31	30	26	24	14
Fixed line	485	9	175	11	35
Mobile line	3	0	1	1	1
Retail	3	2	5	1	1
Maritime transport	28	25	50	39	9
Average (simple)	70	17	52	23	16

Source: Calculations from ad valorem tariff equivalent data in Jafari and Tarr (2015, table 3).

a. Simple average across RECs.

largest number of reforms among regions since 2012.<sup>27</sup>

## Labor mobility

In 2017, 22 percent of immigrants in Africa came from outside the continent, showing that Africa is home to many migrants from the rest of the world (table 3.3). Migration from Africa to the rest of the world, particularly to Europe and Asia, also increased between 2005–10 and 2010–15.<sup>28</sup>

### Migration patterns and trends

In 2017, West Africa had the highest intraregional migration—97 percent of intra-Africa migration remained in the region (86 percent of 88.8). That was followed by East Africa (73 percent, or 64.7 percent of 88.6) and Central Africa (58 percent, or 48.8 percent of 84.1). Regions with higher intra-Africa migration are also more open in their visa policies. Sharing a common currency is correlated with a more open visa policy in well-integrated regions, such as in WAEMU, but not necessarily in less-integrated regions, such as the Central African Economic and Monetary Community (CEMAC).

Remittance flows are another yardstick of migration's importance. Interregional trade and remittances are both important channels for growth spillovers. In 2015, total intraregional remittances in Sub-Saharan Africa accounted for a third of total remittances—\$11.5 billion, or

0.6 percent of GDP. This is higher than in Asia, Europe, and the Americas, where they account for less than 0.3 percent GDP.<sup>29</sup>

### Mismatches between regulation and implementation

Since most migration is within the continent, it helps to understand the rules and treaties on free movement of persons within the regional integration framework and the way they relate to migration. Free movement of persons is an important measure of integration, as captured in the Regional Integration Index.<sup>30</sup> Whether regional integration promotes intraregional mobility is conditional on harmonizing national laws<sup>31</sup> and effectively implementing the regulatory framework across countries. All RECs, except the Intergovernmental Authority on Development (IGAD), have free movement of persons protocols that aim to eliminate obstacles to people's free mobility.<sup>32</sup> But full implementation of these protocols encounters many obstacles.

Free movement of persons protocols, including regulations on labor mobility, differ across RECs and in countries belonging to the same REC. And not all countries in a REC have ratified the associated free movement of persons protocol. Even if all member countries have ratified it, they may not all have implemented it, resulting in a mismatch between the protocol and its application. Even for the relatively well-integrated ECOWAS, some

Not all countries in a REC have ratified the associated free movement of persons protocol. Even if all member countries have ratified it, they may not all have implemented it

**TABLE 3.3** Nearly 80 percent of Africa's immigrants came from elsewhere in the region, 2017 (percent)

Origin	Destination						
	Africa	Central Africa	East Africa	North Africa	Southern Africa	West Africa	Outside Africa
<b>Africa</b>	77.7	13.1	30.3	5.2	3.3	25.8	22.3
<b>Central Africa</b>	84.1	48.8	11.1	10.6	1.4	12.2	15.9
<b>East Africa</b>	88.6	13.7	64.7	9.3	0.7	0.2	11.4
<b>North Africa</b>	42.7	4.6	29.9	6.5	0.1	1.7	57.3
<b>Southern Africa</b>	55.8	4.6	33.2	0.4	16.4	1.2	44.2
<b>West Africa</b>	88.8	2.3	0.1	0.4	0.0	86.0	11.2
<b>Outside Africa</b>	46.9	2.4	8.5	26.9	2.1	7.0	

Source: Data from the United Nations Department of Economic and Social Affairs.

When all member countries ratify and implement a free movement of persons protocol, it is correlated with higher migration

efforts are still required to achieve full realization of the right of residence and establishment and of functioning labor market policies.

Several factors contribute to this gap. One is a lack of harmonization of rules and regulations across countries. A second is the lack of reliable data on subregional migration flows.<sup>33</sup> A third is differences in the levels of development of members, which make some countries more attractive than others to migrants. A fourth is the lack of information and acceptance of those policies by African citizens, who may not have the relevant information to enter another country, such as the required travel documents. Institutional, infrastructure, and safety constraints make the journey between countries difficult.<sup>34</sup> Migrants can also face discrimination in the labor market,<sup>35</sup> which may be a disincentive to intraregional mobility. Finally, because of fears that these flows may disrupt local labor markets,<sup>36</sup> policymakers may be reluctant to open their borders. To be really successful, free mobility policies should take into account noneconomic implications, including fears related to a loss of national sovereignty or identity.

#### *Regional labor mobility*

Does bilateral migration change after ratification or implementation of a free movement of persons protocol?<sup>37</sup> Yes, but the patterns differ.

- In ECOWAS, migration increased after the REC adopted the protocol since all countries ratified and implemented the first phase.
- In EAC, migration is higher in countries that have implemented the protocol but not in countries that have not. In SADC, the same is true for countries that have ratified the protocol and those that have not.
- In COMESA, adoption of the protocol is correlated with higher migration for countries that have implemented it but not for countries that have not ratified it, at least in the first years after the protocol's adoption.
- In ECCAS, countries that have implemented the protocol have had more migration, but there seems to be a positive dynamic regardless of implementation, with no significant difference in migration between the two groups after 2005.

- In the Arab Maghreb Union (AMU), migration was already increasing in member countries before they formed the REC and then rose at a higher rate for countries that ratified the protocol. However, there was no significant difference between countries that implemented the protocol and those that did not: despite the implementation, two of three countries still require a visa.

To summarize, when all member countries ratify and implement a free movement of persons protocol, it is correlated with higher migration (as in ECOWAS). Ratifying the protocol without effectively implementing it is not correlated with an increase in migration (as in SADC, EAC, and to less extent ECCAS). Moreover, when all countries have ratified the protocol, migration is higher in countries that have implemented the protocol than in countries that have only ratified it (as in EAC). Once a group of countries ratifies or implements the protocol within a REC, there are some positive spillover effects of the protocol's adoption in countries that have not ratified or implemented it (as in EAC, SADC, and to less extent COMESA).

Intraregional migration in Africa is more prevalent than migration from Africa. There is considerable heterogeneity among RECs in their regulations on free movement of persons and in their relationships with migration. Although this heterogeneity can make comparisons among RECs tricky, some general patterns appear. First, ratifying the protocol matters. Indeed, adopting a free movement of persons protocol without having countries ratify it would have little or no effect on migration. Second, implementation beyond ratification matters. Third, in RECs that are relatively well integrated, there can be some positive dynamism and spillover effects on migration in countries that have not ratified or implemented, led by the countries that have ratified and implemented.

#### *Recommendations for labor mobility*

Migration is happening in Africa even if not all free movement of persons protocols are ratified and implemented. Fully implementing all of them might increase flows among African countries. That makes it important to focus on what prevents

countries from implementing the protocols. The Africa Union Passport, launched in July 2016 at the African Union Summit in Kigali, encourages the free movement of people in general and labor mobility in particular. And the first objective of the African CFTA is to “create a single continental market for goods and services, with free movement of business persons and investments, and thus pave the way for accelerating the establishment of the Continental Customs Union and the African customs union.”<sup>38</sup> For these initiatives to be successful and effective, it is useful to proceed by first improving the effectiveness of the policies within each REC before scaling up efforts to the continent. And because integration should happen not only in the goods market but also in factors of production, the discussions should attend more to the free movement of persons.

## Financial integration

Africa generates more than \$520 billion a year in domestic taxes. Its public pension fund assets are growing impressively. It earns more than \$168 billion a year from minerals and fuels. And its central banks hold more than \$400 billion in international reserves.<sup>39</sup> African countries now have a wide variety of financing options beyond foreign aid (\$50 billion), including \$60 billion in remittances and \$60 billion in foreign direct investment inflows.<sup>40</sup> There is also high liquidity in the banking sector, and about 10 African countries have sovereign wealth funds.

In this context of a deepening financial sector, financial integration across countries becomes more important. It has progressed *de jure* through better codification of regulations on international transactions and *de facto* through the actual flows of funds and co-movements of prices. Yet, other nonregulatory barriers to integration persist. A proposal pursued at the continent level would establish three pan-African financial institutions: the African Investment Bank, the African Central Bank, and the African Monetary Fund, all in line with the Consultative Act of the African Union.<sup>41</sup> If implemented, this initiative would accelerate financial integration in the region while guaranteeing appropriate safeguards.

The African Development Bank is supporting five stages in the regional financial integration

strategy (contained in the African Development Bank Group Regional Integration Policy and Strategy). The first, preparatory, stage calls for improving national payment systems, strengthening supervision and regulatory frameworks, and complying with core Basel principles. The second stage involves harmonizing policies for inward foreign direct investment flows, removing barriers to entry of regional and foreign banks, and harmonizing regional physical (hard) infrastructure. The third, cooperative, stage involves gradually liberalizing exchange controls with the rest of the world and implementing regionally agreed convergence criteria. The fourth stage involves merging stock markets, and the fifth involves adopting a regional common currency.

The African Development Bank is supporting regional financial integration by enhancing banking and financial standards and focusing on the African Peer Review Mechanism. It is building capacities for regional payment systems with COMESA, EAC, ECCAS, and ECOWAS. It is implementing the Africa Financial Markets Initiative, with Making Finance Work for Africa and the Association of African Central Banks. And it is building capacity for cross-border and regional regulation of financial institutions with other development partners.

For countries, the desire to integrate with regional markets is driven by the advantages that would accrue from enhanced competition in the domestic market for financial services, from greater opportunities for portfolio diversification and risk-sharing, and even from such external factors as the peer pressure associated with the Washington Consensus prescriptions for free mobility of capital as good macroprudential and financial policy (box 3.3).

Along some dimensions, there is increasing progress toward financial integration, but it is checkered by regional and country differences. Financial market activities remain shallow, since financial markets are still characterized by low capitalization, low liquidity, short-term instrument structures, and a limited number of financial instruments. In 2017, 11 African countries still had no capital markets, and only 15 countries had capital markets that simultaneously traded in treasury bills, sovereign bonds, corporate bonds, and equity instruments (table 3.4).

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Financial integration has progressed *de jure* through better codification of regulations on international transactions and *de facto* through the actual flows of funds and co-movements of prices

### BOX 3.3 Does financial integration drive economic activity in Africa?

Despite the postulated benefits of financial integration to participating economies, it is unclear to what extent the progress in regional financial integration in Africa has catalyzed aggregate economic activity and thus provided the rationale for accelerating financial integration.

Recent research by the African Development Bank shows that improvements in financial integration are associated with higher levels of economic activity. This relationship remains valid even when financial development, human development, institutional quality, and the macroeconomic environment are controlled for. The research assesses the degree and timing of financial integration in Africa and tries to shed light on contemporary patterns of increasing financial globalization relative to regionalization. Using parametric and nonparametric regression analyses, it finds that higher financial integration is generally associated with higher growth and investment, but not necessarily growth of total factor productivity. The relationships become even clearer when the focus is on the so-called nonparametric iso-growth surface plots, which show a threshold of financial development that is consistent with growth in a financially segmented economy.

One of the key policy implications is that tighter interest rate spreads in credit markets enhance growth. So, by strengthening competition in regional banking, in addition to coordinating monetary policy frameworks at a continental level, tighter spreads could stimulate further growth through financial integration.

But these conclusions from just one study should be complemented by alternative views expressing skepticism about the positive growth effects of financial integration carried out under monetary unions that give priority to political goals and lead to overvalued exchange rates and loss of competitiveness, as has been the case in the Franc Zone.

As an extension of regional integration, monetary unions in Africa are seen as a way to achieve prosperity and better governance, sparked to some extent by the example of European monetary integration. But African monetary unions have underperformed, failing to bring about economic prosperity and poverty reduction.<sup>1</sup> In many cases, even the weaker requirements of free trade areas and customs unions have not been met. Yet African political leaders have consistently chosen to forge ahead without first taking the bold institutional and economic coordination measures that would enable monetary unions to strengthen integration in Africa. In the absence of true fiscal and economic coordination, the opportunity cost of maintaining a single currency is too high.

While some studies have found that existing monetary unions in Africa seem to be economically viable, relatively low regional trade and strong shocks and fiscal asymmetries have limited the scope for new or expanded monetary unions to enhance welfare.<sup>2</sup> For example, the wide disparities in per capita income and economic structure across Southern African Development Community members have stalled monetary integration. Lessons from the European Union suggest that the institutional requirements for success are more stringent than previously thought, and there has been limited progress on the needed institutional steps.

A study that modeled the economic costs and benefits of monetary union in the West and Central African CFA franc zones and three monetary/exchange rate unions in Africa (the Central African Economic and Monetary Community, Common Monetary Area, and West African Economic and Monetary Union) gave a qualified yes in some cases but not in others to whether monetary unions are desirable on economic terms and therefore should be expanded.<sup>3</sup> While noting that members of these unions fared better on inflation than the rest of Sub-Saharan Africa and traded twice as much with each other as with other countries, their output performance did not show a clear pattern.

While the treaty creating the African Union envisions a single currency for Africa, and many regional economic communities have plans to create regional currencies, these plans are in most cases more aspirational than concrete guides to national policy.<sup>4</sup> Countries have failed to implement the institutional building needed to make a monetary union successful, such as close coordination of banking supervision, a willingness to come to the assistance of countries in economic crisis, and political federation to coordinate fiscal policies and control deficits (see discussion of the challenges of financial and monetary integration in chapter 1).

Source: Ekpo and Chuku 2017.

#### Notes

1. Monga 2015.
2. Masson, Pattillo, and Debrun 2014.
3. Masson, Pattillo, and Debrun 2014.
4. Masson, Pattillo, and Debrun 2014.



**TABLE 3.4** Structure of capital markets in Africa, 2017

No markets	Treasury bills	Plus sovereign and corporate bonds	Plus equity instruments	All four instruments
Burundi	Congo	Angola	Benin	Algeria
Central African Rep.	Ethiopia	Gambia	Burkina Faso	Botswana
Chad	Guinea	Senegal	Cabo Verde	Egypt
Comoros	Guinea-Bissau	Seychelles	Cameroon	Ghana
Congo, Dem. Rep.	Lesotho		Côte d'Ivoire	Kenya
Eritrea	Madagascar		Gabon	Lesotho
Equatorial Guinea	Malawi		Mauritius	Libya
Liberia	Sierra Leone		Mozambique	Namibia
Mali	Togo		Rwanda	Nigeria
Niger			Zimbabwe	South Africa
São Tomé and Príncipe				eSwatini
				Tanzania
				Tunisia
				Uganda
				Zambia

Source: African Development Bank staff.

Financial integration should lead to the convergence of the costs of and returns to comparable assets

#### **Regulations and institutional restrictions on financial movements**

Overall, financial openness has been progressing slowly (figure 3.6). It spiked in the early 1990s with the increased financial liberalization that was part of the structural adjustment programs of the time. From a de jure perspective, integration is deepest in EAC, with a Chinn-Ito Index of financial openness higher than in other regions and approaching the global average of 0.5. With more stringent restrictions in the AMU, integration and openness are more segmented in countries in North Africa.

#### **Are credit and stock market prices and returns converging?**

Asset prices in equity markets and interest rates in retail banking are other measures of the depth of financial integration. An increase in pan-African banks does not seem to have trickled down into greater financial integration—for two main reasons.<sup>42</sup> Retail lending products are less exposed to pressure from international competition, mainly because proximity to customers is important, and

integration is lessened by asymmetric information and switching costs.

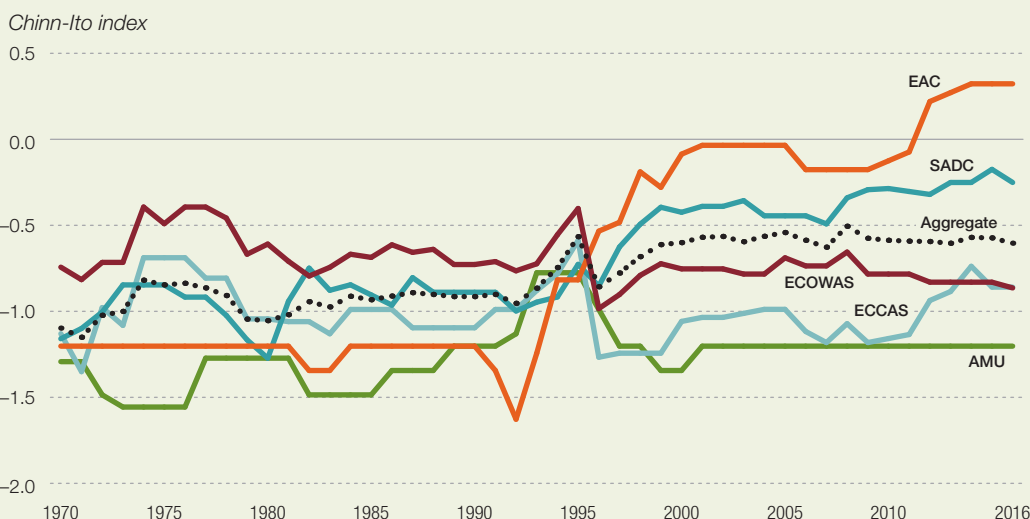
The cross-sectional dispersion of interest rates across countries is a simple indicator of financial integration in credit markets. Under the law of one price, financial integration should lead to the convergence of the costs of and returns to comparable assets. Thus, dispersions in asset costs and returns would imply financial market segmentation.

Two major episodes can be identified in the evolution of Africa-area credit market measures of banking integration (figure 3.7). The first is between 1995 and 1998, when the standard deviation of both deposit (not shown) and lending rates spiked across the region. The period coincided with the wave of financial liberalization and deregulation following structural adjustment policies. This period also coincided with the Asia financial crisis, which had ripple effects across the globe, including frontier economies in Africa, and led to tightening of financial regulations.

A second episode of increased financial segmentation occurred before and during the global

Institutional restrictions to financial flows suggest that a lot more needs to be done from a governance perspective

**FIGURE 3.6** Financial openness is progressing slowly, except in the East African Community, 1970–2016



Source: African Development Bank staff.

Note: The Chinn-Ito index converts the de jure measures on the International Monetary Fund's *Annual Report on Exchange Arrangements and Exchange Restrictions* into a numerical measure of financial openness. It is calculated as a principal component of the indices indicating the presence of multiple exchange rates, restrictions on current account transactions, restrictions on capital account transactions, and requirements to surrender export proceeds. Positive values closer to one indicate more openness to cross-border financial transaction and thus financial integration; negative values indicate greater restrictions in cross-border financial transactions and thus greater financial segmentation.

financial crises of 2007–08. Again, the cross-sectional deviation in the lending and deposit rates spiked across the region. It could be that the global financial crises affected African countries to different degrees and perhaps even in different directions, particularly in the case of lending rates, whose dispersion peaked in 2008. For both lending and deposit rates after the global financial crises, there has been convergence in the indicators of credit market integration and price-based measures of banking integration. By 2017, the standard deviation of lending rates across the region was only 4.4 percent, close to the zero mark, and seven times less than during the global financial crisis in 2008.

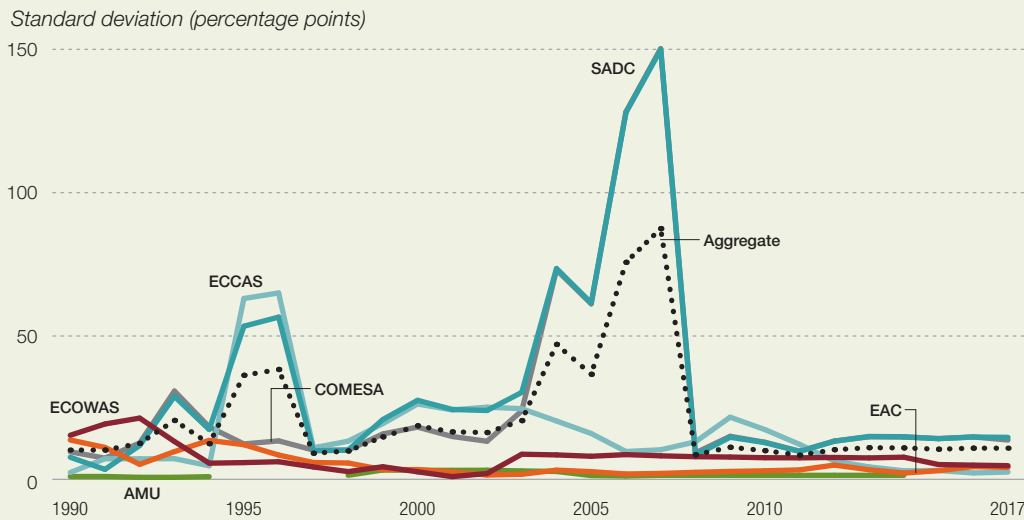
Evidence of financial globalization is stronger in African stock markets. While the stock markets in Ghana and Namibia are more sensitive to the South African stock market, the stock markets in Botswana, Kenya, Nigeria, eSwatini, and Tanzania

are more sensitive to the global market. When a country's equity market and that of the dominant regional market (South Africa) are converging, the value of a time-varying parameter would approach zero. Conversely, when a country's market and a global dominant market (the US market) are converging, the value would approach one. Therefore, values closer to zero indicate regional financial sensitivity, while values closer to one indicate financial globalization.

### Policy recommendations

Despite progress, financial markets in Africa are still weakly integrated. Measures of institutional restrictions to financial flows suggest that a lot more needs to be done from a governance perspective. The correlations between domestic savings and investment rates are still strong, even though they should have been weakening in the absence of barriers to capital movements. Interest

**FIGURE 3.7** Dispersions in lending rates spiked in 1995–98 and 2003–06, revealing fragmented financial markets in Africa, 1990–2016



Source: African Development Bank staff.

Note: Values closer to zero indicate stronger integration in credit markets, and values further from zero indicate greater segmentation.

All RECs should monitor progress toward the free movement of goods, capital, and services

rate spreads on retail banking are still wide but have stabilized in the past few years. And African stock markets are more sensitive to global benchmarks than to the South African benchmark. Bold reforms, especially at the institutional level, are needed to synchronize financial governance frameworks across the region and to remove any remaining legal restrictions to cross-border financial flows and transactions. It is important to pursue stronger technological advances in the harmonization of payment systems across the continent, as this would facilitate actual movement of funds across borders.

- All RECs should monitor progress toward the free movement of goods, capital, and services more closely at a detailed level, along the lines of the EAC Common Market Scorecard. The progress-tracking scorecard is based on indices derived from an in-depth examination of all relevant laws and regulations. This is needed because of the slow progress at eliminating tariffs on intraregional trade and reducing non-tariff barriers documented in the report.
- Monitoring should be carried out regularly at the REC level (for free movement of goods,

capital, and services), as EAC does. Expert reviews need to be carried out systematically and regularly.

- For nontariff barriers on goods trade and barriers to the movement of capital and services, monitoring includes detecting the barriers and reviewing progress.
- Implementing the free movement of persons protocols has increased migration flows, important because there are spillovers from the movement of people between ratifiers and nonratifiers.
- Financial governance frameworks need to be synchronized within and across RECs, with prudential regulations developed and carefully implemented to prevent destabilizing capital flows.

## COOPERATING FOR REGIONAL PUBLIC GOODS

Regional integration has always been about more than market access. Regional cooperation has always been important, if only because of the need for rail, roads, and other means of communication,

and it is now attracting more attention on several fronts. Increasing physical linkages across the African continent have spread environmental externalities beyond national jurisdictions. Beyond the eight RECs and seven other regional organizations aiming at deepening intraregional trade, the majority of regional organizations deal with regional public goods: 5 deal with energy, 15 with the management of rivers and lakes, 3 with peace and security, and 1 with the environment (table 3.5). The large number of organizations dealing with rivers and lakes attests to the importance of transborder issues across Africa.

The subsidiarity principle calls for addressing these issues at the regional level,<sup>43</sup> deciding which level of governance or what size of region is best suited to provide the regional public good.<sup>44</sup> From an economic perspective, the scope of the

established regional institutions should match the region benefiting from the spillover, and the number of countries should be as small as possible to reduce transaction costs.

A regional public good is any good, service, system of rules, or policy regime that is public in nature (in the sense that it would be underprovided and often overused if governed by the market alone), that generates shared benefits for the participating countries, and whose provision is the result of collective action. Regional public goods are transnational public goods. Their distinctive feature is that, unlike national public goods, there is no single body with the authority of a state to ensure the supply of the good. Since collective action refers to a situation with more than two providers, all RECs have to muster some collective action to provide regional public goods.

**TABLE 3.5 Beyond economic integration—to regional public goods**

<b>AU-recognized regional economic communities</b>	<b>River and lake organizations</b>
Arab Maghreb Union	Niger Basin Authority
Common Market for Eastern and Southern Africa	Integrated Development Authority of the Liptako-Gourma Region
Community of Sahel-Saharan States	Lake Chad Basin Commission
East African Community	International Congo-Ubangui-Sangha Commission
Economic Community of Central African States	Limpopo Water Course Commission
Economic Community of West African States	Lake Tanganyika Authority
Intergovernmental Authority on Development	Lake Victoria Basin Commission
Southern African Development Community	Nile Basin Initiative
<b>Other economic organizations</b>	Permanent Okavango River Basin Water Commission
Central African Economic and Monetary Community	Organization for the Management of the Gambia River
Economic Community of the Great Lakes Countries	Organization for the Development of the Senegal River
Gulf of Guinea Commission	Orange-Senqu River Commission
Indian Ocean Commission	Tripartite Permanent Technical Commission
Mano River Union	Volta Basin Authority
Southern African Customs Union	Zambezi Watercourse Commission
West African Economic and Monetary Union	<b>Peace and security organizations</b>
<b>Energy-based organizations</b>	Eastern Africa Standby Force
Maghreb Electricity Committee	International Conference of the Great Lakes Region
Eastern Africa Power Pool	G5 Sahel
West African Power Pool	<b>Environmental organizations</b>
Central Africa Power Pool	Central African Forest Commission
Southern African Power Pool	

Source: African Development Bank staff.

Collective action by governments in the region should then create positive spillovers across the region that are greater than the spillovers that individual governments acting alone could generate. This requires regional governance by a regional body with real authority over member states to deliver regional public goods. States must be willing to cede a significant amount of authority to the body, something that has so far occurred only in the European Union.<sup>45</sup> That is why most regional cooperation is intergovernmental. Each state retains veto power, and the regional organization is a secretariat to coordinate and harmonize policies, set standards, and provide services—but with no authority.

Cooperation on cross-border infrastructure investment, development corridors, and spatial development initiatives are part of the regionalism pursued by the African Economic Community. The Action Plan for Boosting Intra-African Trade, and now the CFTA, call for countries to delegate national sovereignty for closer cooperation. So far, however, most evaluations of regional integration across Africa have concentrated on outcomes in trade in goods—at the expense of cooperation to raise the provision of regional public goods.<sup>46</sup>

Yet, the geography of Africa is the strongest rationale for regional integration. The share of straight-line (artificial) borders is about 80 percent across Africa, the highest across continents. Ethnic partitioning across borders is also strongest in Africa. The mean of the share of an average African country's population that comes from partitioned ethnicities is 47 percent, while for non-African countries it is 18.2 percent.<sup>47</sup> Africa also has the highest share of countries per area across continents, mechanically increasing the importance of transboundary issues.

The benefits of common policies are thus high because of widespread cross-border policy spillovers (air transport, corridors) and physical spillovers (environmental). The costs are also high because differences in policy preferences across member countries are large. Common decision-making internalizes the spillovers, but it moves the common policy away from preferred national policy (in a loss of national sovereignty). In Africa, spillovers are important because transport and

communications infrastructure are underprovided, while the ethno-linguistic diversity across borders suggests strong differences in policy preferences. Evidence of cooperation in three areas is illustrated here: energy and mining, hard infrastructure, and soft infrastructure.

### **Infrastructure regulation for energy and mining**

Most infrastructure industries across Africa have performed poorly. Regionalizing infrastructure reform would help in several ways. First, inefficiencies in infrastructure become more important as barriers to trade fall, if only because goods transit through infrastructure networks. Second, as trade liberalization has resulted in regionalized communication infrastructure, the associated networks will operate more efficiently if organized internationally. Third, the likelihood that national regulation will serve as protection against international competition will be reduced if regulation is regional.<sup>48</sup> Coordinating policies and harmonizing regulations and, to the extent possible, legal institutions are important on the path toward deep regional integration. Developing regional power grids and taxing mining activities show how difficult this can be.

Developing regional electricity markets has been a challenge worldwide. As in developed countries, electricity markets in developing countries have developed vertically within national boundaries rather than horizontally across countries. Physical interconnection through the construction of cross-border lines has been slow to develop. Cross-border trade in electricity is low everywhere.<sup>49</sup> In Africa, with many small countries, trade in electricity would bring many benefits if the hard infrastructure is at scale and functioning—and if soft infrastructure (governance) is trustworthy (boxes 3.4 and 3.5).

Many African countries are pursuing minerals-based industrialization. This requires responsible use of natural resources. African heads of state have adopted the Africa Mining Vision to lessen the continent's exposure to harmful boom-bust cycles. The African Minerals Development Centre was set up to carry out this vision. One of its objectives is to incentivize collective action that would help build a regional approach to

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With regionalized communication infrastructure, the associated networks will operate more efficiently if organized internationally



Increasing the affordability of electricity for low-income households will enable people to transition away from unsafe and hazardous energy sources

#### **BOX 3.4 From desert to powerhouse**

Almost two-thirds of the Sahel's people—in Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Mali, Mauritania, Niger, Nigeria, Senegal, and Sudan—live without electricity, with severe consequences for health, education, and business. Because the lack of energy remains a big impediment to Africa's economic and social development, the African Development Bank has embarked on the Desert to Power Initiative, a huge desert solar program to make Africa a renewable powerhouse.

Stretching across the Sahel region, the program is expected to connect 250 million people with green electricity by tapping into the region's abundant solar resource. It will develop and provide 10 gigawatts of solar energy by 2025 through a combination of public, private, on-grid, and off-grid projects. To fund them, the Bank is cooperating with fellow development funding institutions, climate change funds, and other donors and investors. The blended finance will help fill in capital shortfalls in the renewable energy project cycle.

Increasing the affordability of electricity for low-income households will enable people to transition away from unsafe and hazardous energy sources, such as kerosene. The project will also create jobs and attract private involvement in renewable energy. And it has the potential to increase female participation in economic activities and decisionmaking processes.

Estimated to save 2–4 percent of the continent's GDP every year, the project has been launched with the Green Climate Fund, a global pot of money created by the 194 countries party to the UN Framework Convention on Climate Change.

Source: <https://www.afdb.org/en/news-and-events/desert-to-power-initiative-for-africa-188887/>.

#### **BOX 3.5 Integrating power grids as a regional public good**

Poorly functioning electricity markets with frequent power outages hamper the productivity of African firms. Outage durations are roughly the same for 25 Sub-Saharan low-income countries as for five low-income countries elsewhere. Average estimated losses in annual sales for Africa are about half those for the other low-income countries based on data from the World Bank Enterprise Survey database. This large difference is likely due in part to African firms producing less energy-intensive goods. Better functioning national grids and regional trade in electricity would help. Power pools are a good example of the conditions for providing public goods.

Power pools require incentives and collective action since no single body with the authority of a state exists to ensure the supply of the good. Effective delegation of authority through public, private, or a combination of parties is necessary to develop regional projects like electricity power pools. The regional economic communities promote regional electricity trade through their respective power pools: for the Economic Community of West African States, the West Africa Power Pool; for the Economic Community of Central African States, the Central Africa Power Pool; for the Southern African Development Community, the Southern Africa Power Pool; for the Arab Maghreb Union, the Comité Maghrébin de l'Electricité; and for the Common Market for Eastern and Southern Africa, the Eastern Africa Power Pool. The mandates of each of these African regional power pools vary from planning, development, and coordination of cross-border power generation and interconnections to regional market coordination and capacity building. At the planning stage, engaging in a power pool is subject to the hold-up problem, a major reason for the low trade in electricity.<sup>1</sup>

*(continued)*

### BOX 3.5 Integrating power grids as a regional public good (*continued*)

But many potential benefits from integrating these power grids are significant. The gains include less instability and greater security of supply and increased efficiency. And integration of power grids when electricity is produced by renewables increases environmental sustainability by accelerating the transition to a green economy. For instance, ESKOM, the South African power utility, has secured through a treaty 2,500 megawatts of clean hydropower from the Inga-3 development in the Democratic Republic of Congo.

The ultimate development stage of all the Africa regional power pools is to reach full market operation, where electricity can be traded through the power pool on the network. Since the fixed costs of investments are usually not recouped, electricity would then be considered a regional public good. Two characteristics of public goods apply to the infrastructure necessary for an energy market network. First, a transboundary infrastructure is a club good since nonparticipants can be excluded. Infrastructure also has characteristics of a weighted-sum aggregator as different parties reach different scales, raising the prospects for supply. But maintaining network integrity is a weakest link aggregator, and hence is more challenging than getting support to construct the network. (This challenge also applies to transport corridors.)

The Nord Pool (Denmark, Estonia, Finland, Latvia, Lithuania, Norway, and Sweden) experience suggests success factors for the Africa regional power pools. To build trust, start with a small number of countries as in the Nord Pool, and as suggested by Andrews-Speed for energy-market integration in East Asia. Rely on external finance to increase capacity. Then combine generation with transmission and have sufficient transmission capacity to promote competition (including the monitoring of competitive behavior of market players). This requires physical interconnection complemented by burden sharing and efficient congestion management (by a single system operator if politically possible). Then accept temporarily high prices following a supply shock even though these may be perceived as “unfair.” Success will also depend on effective husbanding of energy resources, good data on the market and reserves, and sustained network integrity and security. And some regulatory oversight, perhaps by a cross-border regulatory agency, is necessary.

#### Note

1. The “hold up” problem refers to a situation where two parties would gain from cooperation but refrain from doing so because of concerns that they may give the other party increased bargaining power and thereby reduce their own profits.

Source: African Development Bank 2013; Andrews-Speed 2011; Oseni and Politt 2016.

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Power pools require incentives and collective action since no single body with the authority of a state exists to ensure the supply of the good

illicit financial flows in extractive industries, estimated at \$25 billion a year.<sup>50</sup> The success of this endeavor rests on coordination. But it has proven difficult. Box 3.6 summarizes the fiscal regimes across 21 African gold exporters and compares the sharing of rents implied by the different regimes. Across WAEMU, despite a community directive applying to all countries, tax rates on gold exports varied between 2 percent and 16 percent in 2016. National reforms reduced this spread somewhat, but the possibility of a race to the bottom persists.

### Hard infrastructure

Roads, ports, railways, and corridors have always been important for African integration. During 2012–15, transport accounted for 22 percent of disbursements across Africa.<sup>51</sup> For the longer run, China and the African Union Commission signed a far-reaching agreement within the framework of the African Union’s Agenda 2063 to link all African capitals by road, train, and air transport.

The world’s least urbanized region, Africa has an urbanization rate of one-third, compared with over one-half in the rest of the world. Africa’s road

Harmonizing  
tax regimes  
and ensuring  
transparency are  
the two main means  
to improve public  
revenue mobilization  
in the mining sector

### BOX 3.6 Cooperating to tax mining

Improving public revenue mobilization in the mining sector is a priority for both the African Union and the United Nations Economic Commission for Africa. Harmonizing tax regimes and ensuring transparency are the two main means to achieve that objective.<sup>1</sup> In the mining sector, governments need to reconcile two objectives: attract foreign direct investment for natural resources exploitation and capture an adequate share of mining income to fund development. These dual goals can lead to competition in the sharing of income between government and investors and could have an impact on countries' fiscal policies.

As early as 2000, Economic Community of West African States (ECOWAS) members stated their strong commitment to harmonizing tax regimes in the extractive sector, with a view to avoiding tax competition and its negative impact on public revenues. West African Economic and Monetary Union (WAEMU) member countries agreed on a common policy and common mining code for the mining sector in 2003, which set the tax and customs benefits that can be granted to mining companies in member states. The code also specifies provisions at the national level (lease term, rights and obligations, amount of fixed fees and duties on plot area) and at the community level (mining tax basis and rates, duration of exemptions, government participation, and terms of the stability clause).

But the code was never implemented. So tax regimes differ widely across members. In the 21 gold-producing African countries, tax regimes applicable to the mining sector and revenue agreements differ considerably.<sup>2</sup> While taxation instruments are fairly standardized, the tax rates, bases, and exemptions and their durations are specific to each country. In many cases, they do not comply with WAEMU directives. As a result, in 2016, gold mining royalties ranged from 2 percent to 12 percent. Corporate tax rates are set in the general tax code in some countries, while in other countries they are higher or lower than those in the tax code. The mean effective tax rate, which is a revenue sharing indicator, varies from 32 percent to 49 percent in WAEMU members.

The relatively high mean effective tax rate in WAEMU members is due to tax reforms conducted in the 2010s, following rising world prices for gold. For instance, new mining codes were adopted in Mali (2012), Côte d'Ivoire (2014), and Burkina Faso (2015). Senegal embarked on a comprehensive reform program in 2012 to improve the consistency and clarity of the tax system. The exercise led to the adoption of a new general tax code, a law amending special tax arrangements, and a new mining code in late 2016. Some countries took measures to increase mining royalties. Burkina Faso and Côte d'Ivoire opted for variable rates, following trends in gold prices, while Mali and Senegal added a second levy. In addition, benefits that excessively favored mining title holders, such as exemptions or discounts on corporate tax rates, were reduced.

Though undertaken at the national level and without coordination among countries, those reforms began a convergence of mean effective tax rates within WAEMU. The average mean effective tax rate rose from 39 percent to 44 percent, and the standard deviation dropped from 9.1 percent to 6.4 percent. But with falling world commodity prices and without a genuine common policy, tax competition may re-emerge. Tax competition would lead to reduced government revenues, benefiting no country. Harmonizing incentives to investments in the mining sector through WAEMU is therefore a prerequisite to maintaining revenue sharing favorable to governments, generating resources for development, and reducing risks of conflict. Such harmonization should occur within a framework encompassing all WAEMU countries, which implies negotiation of an ECOWAS-wide mining code.

#### Notes

1. UNECA, AMDC, and AU 2016; UNECA et al. 2018.

2. <https://fiscalite-miniére.ferdi.fr>.

density of 3.4 km per 1,000 inhabitants is less than half the global average, and its paved road density of 0.7 km per 1,000 inhabitants is just one-fifth the global average.<sup>52</sup> This combination of low urbanization and poor connectivity means that a large chunk of Africa's population does not have access to national and global markets. Moreover, since doubling a city size has been estimated to raise productivity by 3–8 percent in Europe,<sup>53</sup> increasing market access for rural populations is a first-order priority for Africa to raise productivity.

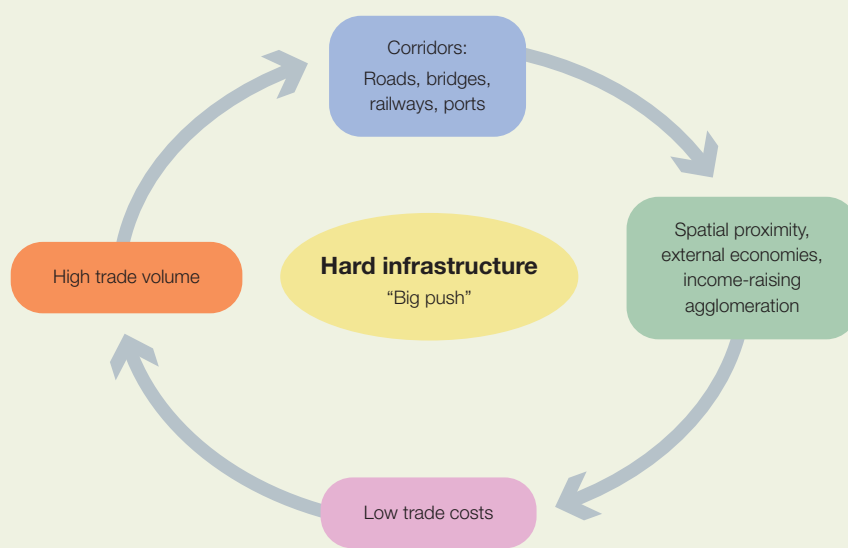
By reducing trade costs, the investment in new hard infrastructure is intended to improve connections across cities, accelerate urbanization, and encourage regional integration. A virtuous cycle leads from investments in hard infrastructure to increased trade that in turn makes further investments profitable (figure 3.8). By contrast, poorly functioning logistics markets lead to a vicious circle of low trade volume and high trade costs (figure 3.9). This strategy has strong support. Recent geographic models, with space ordered and continuous, support the contention that transport infrastructure has agglomeration-creating effects that raise income through positive spillover and multiplier effects. The effects

captured by these more realistic geographic models produce larger gains from trade than those predicted by the traditional space-less trade models used to measure the trade creation and trade diversion effects of preferential trade agreements.<sup>54</sup>

Early studies based on model predictions suggest high returns from the “big push” infrastructure strategy now being pursued under the African Union's Agenda 2063.<sup>55</sup> The African Development Bank and other funding agencies and governments expect transformative results from this high level of funding for hard infrastructure, including accelerating growth and regional integration. New data support these hopes.<sup>56</sup> Outside of South Africa, little rehabilitation of railways has taken place, leading some to conclude that railways are the “colonial” transportation technology while roads are the post-colonial transport technology. Only a quarter of roads are paved in Africa compared with 60 percent in India and two-thirds in China. In 2015, Sub-Saharan Africa had only 3,700 km of highways compared with 24,000 km in India and 111,000 km in China.<sup>57</sup> These statistics support the conclusion that along most dimensions of infrastructure, Sub-Saharan Africa lags behind all developing regions.<sup>58</sup>

By reducing trade costs, the investment in new hard infrastructure is intended to improve connections across cities, accelerate urbanization, and encourage regional integration

**FIGURE 3.8** Investments in hard infrastructure increase trade and make further investment profitable



Source: African Development Bank staff.

Trade costs due to poorly functioning logistics markets may be a greater barrier to trade than tariffs and nontariff barriers

Data for 1960–2015 show strong conditional correlations between economic and political factors and five-year growth in infrastructure (mostly paved roads). More urbanized and faster urbanizing countries have built more roads.<sup>59</sup> Centralization and European settlement are consistently correlated positively with more paved road construction, while mineral dependence is associated with less paved road construction.

Increased market access from improved roads contributed an extra 5–10 percent to urbanization over 1960–2010.<sup>60</sup> Applying these estimates to the proposed Trans-African Highway project, which calls for increasing the network from 1,490 km (in 2010) to 42,000 km, suggests that by 2040 the induced increased market access from the highway would increase urbanization by 0.7–6.0 percent. A road rehabilitation program in Sierra Leone following the civil war had a substantial pro-competition effect, reducing the monopsony power of intermediaries.<sup>61</sup>

The Quadrilateral Highway upgrading in India provides other evidence of the impact of improved transport infrastructure on firm outcomes. Georeferenced data for 311 districts during the period of highway upgrading shows that output increased by 49 percent over the decade for firms in the 0–10 km range from the highway, while there was no growth for firms in the 10–50 km range. This output growth alone should have easily covered the costs of the upgrades.<sup>62</sup>

Although the India case relates to upgrading rather than to new infrastructure, the results suggest what might be expected from the current “big push” across Africa. First, the sharp difference in results between the 0–10 km and 10–50 km distances from a highway suggests that current donor targets of investing in roads so that rural households are within 2 km of a road may lead to overinvestment in rural roads. Close to 60 percent of the population in Africa is already less than 5 km from a regional or national road.<sup>63</sup> Second, the low population density in Africa would probably mean that outcomes will be less favorable than in India. African farmers have lesser transport requirements and generally only over short distances. Intermediate means of transport are thus likely to be more appropriate. Improving pathways would have more economic

impact than rehabilitating secondary roads alone.<sup>64</sup> In Malawi, bus service providers cannot break even because of the low population density.<sup>65</sup> So where population density is low, motorized services need to be subsidized.

### Soft infrastructure

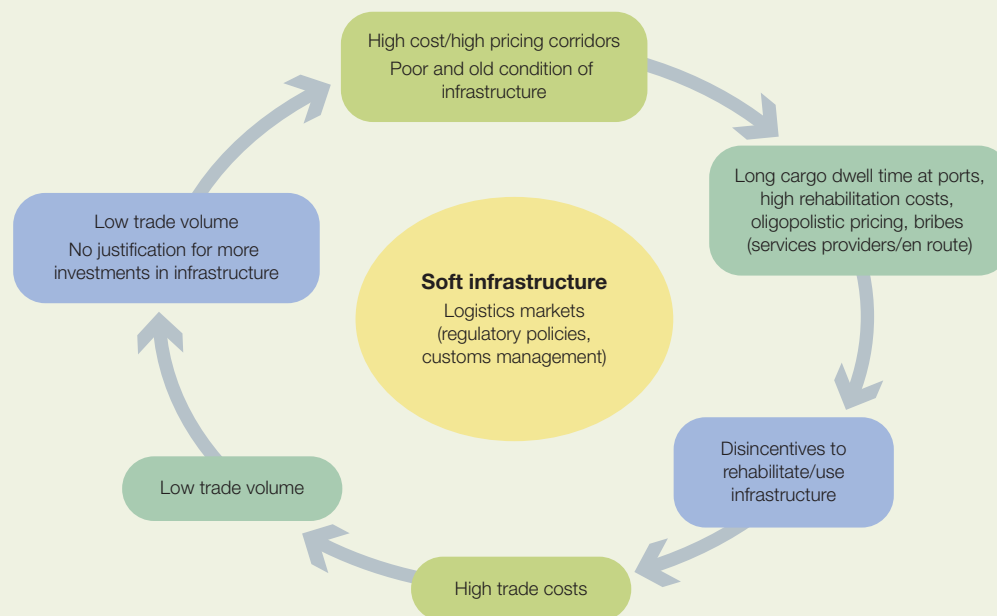
Good logistics are necessary to operate the close-to-seamless transport corridors necessary for successful regional integration (see figure 3.9). Efficient services, including trucking services, freight-forwarding and handling, and smooth terminal operation, are all necessary. Logistics markets operate more efficiently when freight forwarding and handling services and terminal operations are opened up to competition regionally and goods are submitted and cleared through customs expeditiously.<sup>66</sup> Trade costs due to poorly functioning logistics markets may be a greater barrier to trade than tariffs and nontariff barriers.<sup>67</sup> Lack of well-functioning corridors impedes the development of regional value chains, where goods often cross borders several times during production.

Recent estimates on activity along borders over 1993–2012, using data from night time lights, suggest that barriers to trade from border impediments have fallen over the past 20 years (see box 3.7). These patterns suggest three conclusions. First, although borders are still “thick,” they have become progressively thinner, easing concerns expressed in some studies on regional integration in Africa that concentration of activity has increased. Second, membership in a regional trade agreement does not seem to affect agglomeration. Third, trade facilitation projects—an integral component of current and planned integration efforts—can alleviate the fears of unbalanced development across the continent by leading to the development of peripheral areas.

Low costs for air transport are also important for the supply chains of time-sensitive products. Development of the African aviation sector would have positive impacts on employment, tourism, regional integration, trade, investment, and productivity. Recent initiatives to delegate authority for air transport to the continental level should help develop commercial aviation. These include the



**FIGURE 3.9** Unfriendly soft infrastructure explains why transport costs are so high in Africa



Source: African Economic Outlook team.

### BOX 3.7 What night lights reveal about trading across borders

Economic activity is very poorly recorded as remoteness, informality, and poor statistical capabilities combine to produce unreliable GDP and trade data, especially at the subnational level. Poor and sporadic data make it difficult to test whether closer integration concentrates or disperses economic activity.

To get around these data problems, illumination (or night lights) captured at a very detailed level from satellite images during 1995–2013 can be used to study light intensity along cross-border corridors, measured as distance to the border. Once corrected for overglow and other confounding influences, light radiance along cross-border corridors proxies the intensity of economic and trade activity across the continent. In a first step, a 2014 study confirmed that light intensity increased as one moved up to 200 km from the border. In comparing 2000 and 2013 satellite data, the study detected a lower agglomeration effect far from the border in 2013. This is *prima facie* evidence that borders are not as thick now as they used to be, indicating progress in integrating markets.

In a second step, the study split the sample between borders within regional trade agreement areas and borders between countries not in the same regional trade agreement. It found no discernible difference in patterns between the two samples. This suggests that “shallow integration,” as captured by any reductions in tariffs and nontariff barriers, was not strong.

When the sample is split into two groups of “smooth” and “rough” cross-border corridors, according to their score on the World Bank’s Logistic Performance Index, the iron-curtain effect is much steeper, starting at 120 km from the border for the sample with rough borders.

Source: Cadot, Himbert, and Jouanjean 2015.

January 2018 launch by the African Union of the Single African Air Transport Market initiative. The continent is home to 15 percent of the global population and makes up 20 percent of the world's landmass, but its aviation industry represents only 3 percent of the global market. This small share reflects market failures in logistics services in air transport, among other factors (see box 3.8).

### African borders are thinning

Cooperation among countries has been increasing in Africa, and many indicators of efficiency in

both soft and hard infrastructure show improvements. While countries still hesitate to delegate more authority to supranational institutions, the stakes are high. The growing evidence of the expected benefits should inspire countries to move ahead in developing along the regionalism path proposed in Agenda 2063.

One comprehensive measure of the status of integration is the Africa Regional Integration Index,<sup>68</sup> which is useful for broad comparisons of progress in regional integration across RECs. Another is the EAC Common Market Scorecard,

#### BOX 3.8 Open skies in Africa

Air transport volumes are much lower in Africa than in other regions (box map 1). As measured by seat capacity, air traffic in Sub-Saharan Africa (104 million seats) is less dense than in Brazil (120 million seats). Traffic density distribution in Africa is also striking: the main air transport corridors are in the East African region, stretching from South Africa to Kenya and north to Ethiopia (three key air transport hubs).

Across market segments (intercontinental, international, domestic) in 2015, African air travel routes range from highly concentrated (30 percent) to monopolies (70 percent). Africa has a mix of established private carriers (mainly Ethiopian, Kenyan, and South African) and small state-owned airlines that are mostly unsustainable and create market distortions by flying protected routes. In the early 1960s, many newly independent African states founded their own national airlines. Market protection measures have had detrimental effects on transport costs, market integration, air traffic growth, aviation safety and security, and coordinated infrastructure development.

Other challenges to development of the aviation sector include lack of connectivity, in particular in West and Central Africa, and high ticket costs that dampen demand (1.1 flight ticket per capita annually in Africa compared with 5.4 in Latin America and 33 in North America; see box figure 1). Underdeveloped ground infrastructure reduces traffic-handling capacity, while airport charges (to finance sometimes overambitious investments) are high. Other factors that impede growth are safety problems due to poor regulatory oversight, shortages of skills in air and ground operations, and scarcity of financing.

The Yamoussoukro Decision of November 1999 aimed to boost the aviation sector by liberalizing international travel between African countries. While this liberalization has been unevenly implemented, it has contributed to the success of some African carriers such as Ethiopian Airlines, which relies on the Yamoussoukro Decision as a basis for its country partnership negotiations.

The launch by the African Union of the Single African Air Transport Market initiative in January 2018, a key element of the African Union's Agenda 2063, should give new impetus to more effective operationalization of the Yamoussoukro Decision. The agreement was signed by 22 countries, representing about 75 percent of intra-African air transport and a population of around 600 million people. Its success will depend on close collaboration between the industry and government to ease the

*(continued)*

**BOX MAP 1** Global aircraft positions, 11 November 2018 (14:54 GMT)



Source: Flightradar24 2018.

### BOX 3.8 Open skies in Africa (continued)

constraints facing the aviation sector. There have been some successes in deregulating markets, as in Mozambique, which opened its domestic market to foreign airlines.

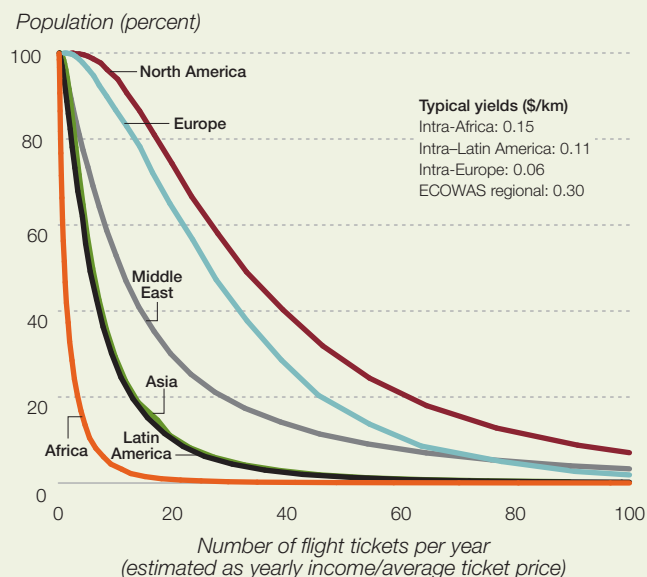
The experience of some African countries in liberalizing air transport markets is instructive for the Single African Air Transport Market initiative. The open skies agreement signed between the European Union and Morocco in December 2006 to promote tourism by lowering airfares and opening new routes led to a 51 percent increase in seats offered by 2010 and a notable increase in new routes. The share of low-cost airlines rose from 3 percent in 2006 to 36 percent in 2010. While competition for the state-owned Royal Air Maroc increased considerably, it continues to operate profitably and retains a dominant market share.

Aviation stakeholders should pursue four main objectives to enable the aviation sector to reach its potential: liberalize the African market; improve the operational efficiency and sustainability of African airlines to reduce airfares; increase private sector participation and promote air transport infrastructure development (airports and air navigation services); and improve implementation of international standards and recommended practices in civil aviation to reach minimum safety and security targets.

Air transport can accelerate connectivity in Africa, which faces particular challenges related to geographic obstacles between communities and countries. The African Development Bank has invested more than \$1 billion over the past 10 years in the aviation sector, 75 percent of it for airport infrastructure and 25 percent for aircraft acquisition.

Source: African Development Bank 2018b; Bernardo and Fageda 2017; Bofinger 2017; CAPA 2018.

### BOX FIGURE 1 Affordability of flight tickets by region



Source: African Development Bank 2018b.

which documents progress in implementing de jure commitments across goods, capital, and service markets. Another approach is to use night light data to view activity along the borders. Recent estimates indicating that impediments to cross-border activities have fallen over the past 20 years are encouraging (see box 3.7).

## THE CONTINENTAL FREE TRADE AREA IN THE BROADER LANDSCAPE OF AFRICAN INTEGRATION

African integration has always meant more than increasing intraregional trade to accelerate industrialization. African integration encompasses development more broadly. Developmental regionalism recognizes an extended agenda of African integration, including a shift from noninterference to nonindifference to poor economic governance, which calls for greater collective action. The African CFTA is one element of this agenda.

An immediate objective of the CFTA is to increase participation in cross-border supply chains by reducing trade costs

The areas covered by the CFTA are numerous, and not all have been finalized.<sup>69</sup>

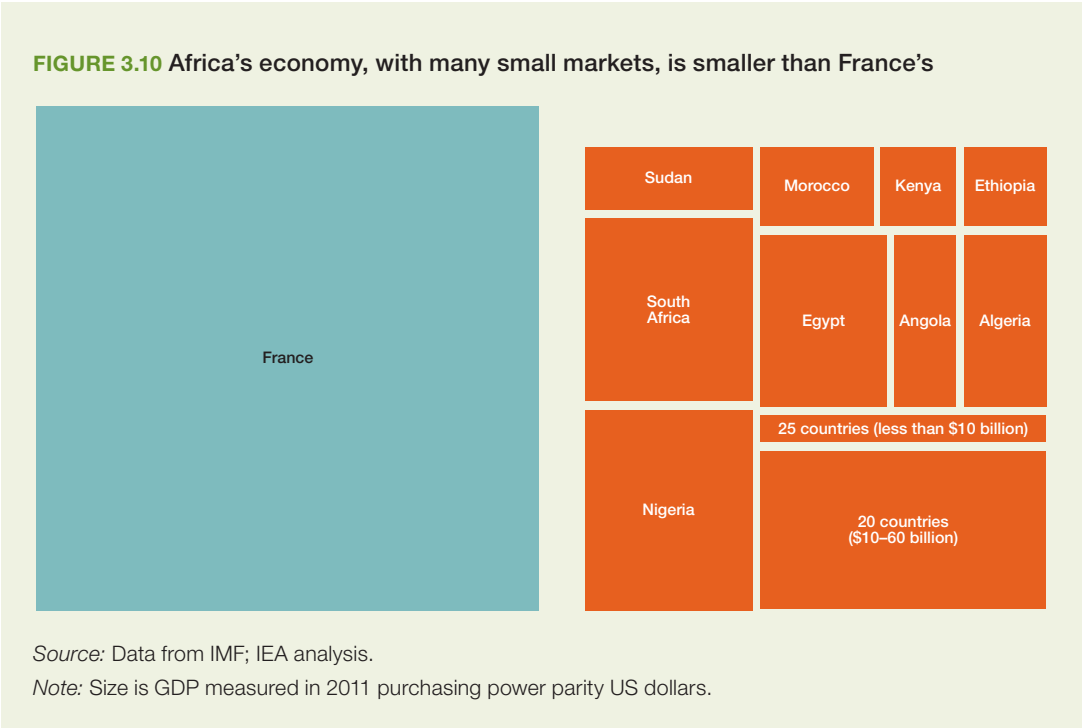
Africa's economic, cultural, and geographic landscapes present challenges to the CFTA. Consider the small size of Africa's 54 economies, smaller than that of France (figure 3.10). In this simple setting of isolated countries, there is a tradeoff between the size of jurisdiction and the preferences of populations. In large political jurisdictions, larger markets lower the cost of production, raise incomes, and lower the cost of providing public goods. These gains come at the cost of not recognizing the heterogeneity of preferences in large populations. Nonetheless, international economic integration as set out by the RECs would, by reducing trade costs, increase the number of economically viable countries because the size of the domestic market would matter less for productivity. It is hard to escape the conclusion that domestic markets across Africa are too "small" in all but a handful of countries<sup>70</sup> and that the solution is to pursue economic integration, the objective of the RECs and the African Union.

Now consider how African countries are heterogeneous along many dimensions that count for successful economic integration. This diversity is

generally considered to be greater in Africa than in other regions and is both a source of richness and a handicap in the quest to integrate and industrialize. Because of economies of scale, successful industrialization also depends on economic integration. The boundaries, inherited from colonial times, are often artificial, splitting ethnic groups and disregarding natural boundaries like rivers and mountains. The realities of the African landscape complicate the quest to integrate economically and to industrialize. Typically, REC members include both coastal and landlocked countries, resource-rich and resource-poor countries, and countries with large and small populations, economies, and land masses. These diversities point to tradeoffs (box 3.9).

Reducing trade costs to increase participation in trade supply chains

An immediate objective of the CFTA is to increase participation in cross-border supply chains by reducing trade costs through regional integration. African countries have participated little in global trade supply chains except in upstream activities as providers of unprocessed goods and raw materials. But experience in textiles and apparel, supermarkets, and automobiles show that African



### BOX 3.9 Tradeoffs in an integration trilemma

Three objectives compete for Africa's integrators: pan-African solidarity across the continent's diverse states, large memberships to break the curse of small markets, and deep integration to reap all the benefits of integration. Solidarity requires special and differential treatment for the least developed countries, along with financial resources (in short supply) to compensate for integration costs—and for trust, which falls as membership size increases.<sup>1</sup> The African Union Road Map calls for increasing the depth of integration while embracing African diversity. Pan-African solidarity still dominates the political rhetoric about rebuilding Africa, consolidating unity, achieving self-reliance, and ensuring peace and security. And the formation of regional economic communities was often motivated more by political cooperation than by economic interests and trade.

The three objectives are difficult to reconcile. African integration is moving along a path of regionalism, where much of the emphasis is on cooperation through the African Governance Platform, as with the Africa Peer Review Mechanism and the Africa Standby Force.<sup>2</sup> Fully reaping economies of scale requires large membership (Common Market for Eastern and Southern Africa, Economic Community of West African States) and low trade barriers. This precludes special and differential treatment for the least developed countries, which segment markets by raising trade costs and effectively limits the size of the market.

Depth of integration (financial markets, mobility of people) calls for greater trust. Trust is more easily achieved in a small membership setting (such as the East African Community) and in contexts with less diversity. Because of the lack of trust needed to delegate authority to supranational institutions, embracing diversity to satisfy political objectives impedes deep integration. And while diversity boosts the potential gains from closer economic integration, realizing the gains requires compensating countries when the expected gains from closer integration are smaller.<sup>3</sup>

#### Notes

1. During the Continental Free Trade Agreement negotiations, South Africa strongly opposed financial compensation (Parshotam 2018). The compromise is that special and differential treatment is to be built into the treaty case by case, and least developed countries have an extended implementation period.
2. The African Governance Platform has six pillars: security; political governance and transition; human rights, justice, and reconciliation; humanitarian/emergency assistance; reconstruction and socioeconomic development in post-conflict countries; and gender equality.
3. The wasteful Common Agricultural Policy, amounting to 1 percent of EU GDP, has often been explained as a political compromise between France and Germany, which gave German manufacturers access to the French market while German taxpayers helped subsidize French farmers. In the African context, the African Union finances only 44 percent of its budget from member state contributions. Reaching financial viability via a 0.2 percent levy on all eligible goods imported to the continent could be controversial under current World Trade Organization rules (see discussion in chapter 8 of UNECA, AU, and African Development Bank 2018).

countries are getting progressively more involved in trade in tasks through regional value chains. Key to this is a reduction in trade costs as goods cross borders multiple times. To develop cross-border supply chains, improving customs management and adopting simple and transparent rules of origin are essential.

Rapidly implementing the TFA would introduce a first set of cost-reducing measures that African WTO members could carry out. The WTO estimates that reducing time delays at customs could lower trade costs by about 15 percent for developing countries.<sup>71</sup> Further estimates at the country level prepared for this report confirm the gains

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Rapidly implementing the TFA would introduce a first set of cost-reducing measures that African WTO members could carry out

In a world  
of spreading  
preferential trade  
agreements and  
greater trade in  
tasks, rules of origin  
stand in the way

from improving transparency and reducing red tape at customs.

In a world of spreading preferential trade agreements and greater trade in tasks, rules of origin stand in the way. One of the challenges of “multilateralizing regionalism”<sup>72</sup> is to prevent rules of origin from working at cross-purposes with the rise in global and regional value chains. Nowhere is this challenge greater than across African RECs. While rules of origin are necessary to prevent transshipment, if too restrictive they will undo any trade-creating effects of preferences since product-specific rules of origin are then tailored to producers’ demand for protection.

### Increasing participation in value chains through deep interventions

Over 1997–2013, supply chain trade has largely eluded Africa, evident in the shares of foreign value added in exports across regions.<sup>73</sup> Exports from Africa have lower shares of foreign value added, while their exports are mostly embodied in the exports of other regions. Sub-Saharan Africa has the least downstream activity. Morocco and Tunisia, which are close to the European market, are the only countries in North Africa that have integrated supply chain trade on the downstream side, while the other countries in the region have concentrated on the upstream side.

The foreign value added shares are lowest for African oil exporters and for countries with nonoil resource-intensive export baskets. The shares are generally lower than in the selected comparators (Poland and Vietnam) but are similar on average

to shares in China and India, two large countries whose companies have engaged in vertical integration. Even if its borders were seamless, Africa would face challenges in developing effective regional supply chains because of its small market size.

Two partial success stories are the rise of apparel exports and the spread of supermarket chains.

A regional supply chain developed in textiles and apparel in Africa, mostly through preferential access to the South African market, which exempted beneficiaries from the 45 percent MFN tariff on apparel and the 30 percent MFN tariff on finished textile goods (box 3.10). This access, combined with a single-transformation rule, led firms in South Africa to relocate to lower cost SACU partners, Lesotho and eSwatini. Two SADC members, Mauritius and Madagascar, also participated in the regional value chain while exporting to US and EU markets.

Several firms in South Africa’s grocery store retail chain have developed outlets in the rest of Africa, an example of integration along a regional value chain (box 3.11). While this expansion could be an opportunity for upgrading suppliers in the region, trade has been dominated by South Africa, and supermarket chains may be using their buying power to limit upgrading.

The textiles and apparel chain and the supermarket chains show the potential for boosting participation by African countries in supply chain trade, which can involve goods crossing borders multiple times. Low tariffs are needed on

#### BOX 3.10 Lessons for regional integration from the textile and apparel sector

Since 2000, apparel exports from the Southern and East African regions have accelerated, driven by preferential trade access through the US African Growth and Opportunity Act and the EU Everything but Arms agreements that allowed selected African countries tariff-free access into US and EU markets (box figure 1). Along with preferential quota access through the Multi-Fiber Agreement, these preferential arrangements kick-started apparel exports from these regions. The US African Growth and Opportunity Act, with its single transformation rules of origin, had a greater initial impact on Kenya, Lesotho, and eSwatini. Madagascar and Mauritius had a different trajectory, exporting to both the United States and the European Union. Mauritius was already an established apparel exporter, and the new trade access consolidated its position.

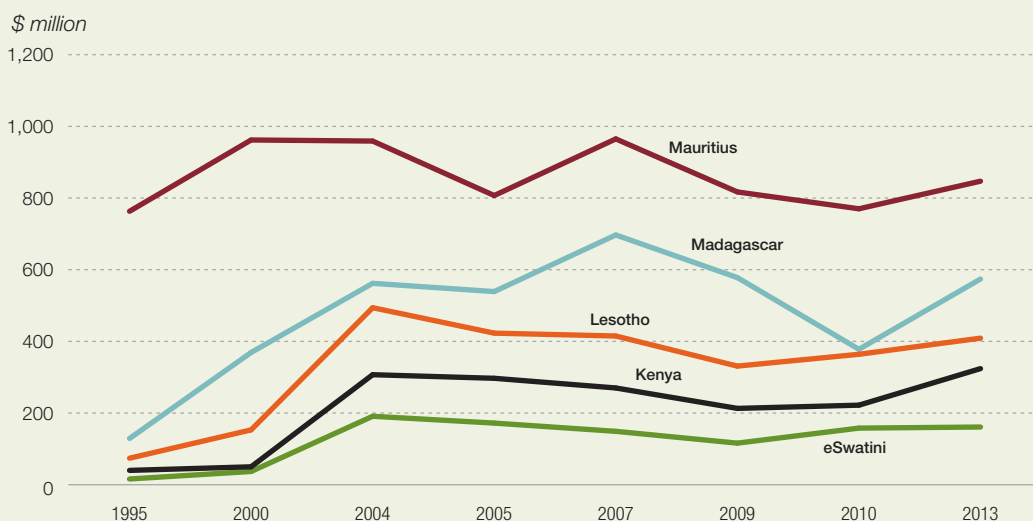
(continued)



### BOX 3.10 Lessons for regional integration from the textile and apparel sector (continued)

Asian transnational firms, already well connected within global value chains, drove this apparel export growth by establishing subsidiary plants in Kenya, Lesotho, eSwatini, Madagascar, and Mauritius. Large locally owned export-oriented firms emerged in Mauritius and Madagascar.

#### BOX FIGURE 1 Sub-Saharan clothing exports to the United States and the EU-15



Source: Data from UN Comtrade.

Several lessons for regional integration and the role of regional value chains that can be drawn from this experience of developing an export apparel industry:

- *Preferential trade access provides access to different market opportunities, which are particularly important in kickstarting regional industrialization by overcoming trade barriers to give firms access to global and regional value chains.*
- *Foreign direct investment and ownership are important.* Lead firms in global value chains determine how suppliers link into and move up apparel value chains and shape how rents are extracted, upgrading occurs, and dynamic capabilities are built. How strongly embedded they are in local economies affects the ability to take advantage of upgrading and market opportunities.
- *Economic hubs create market dynamism.* Dynamic regional economic hubs extend the scope of regional market opportunities and expand the reach of local firms and production units. Regional value chains are often built around strong hub economies, extending supplier chains into neighboring countries and creating export possibilities and learning opportunities for other economies in the region.
- *Good infrastructure oils frictionless trade of inputs and outputs within the region.* Poorly maintained hard infrastructure and cumbersome regulatory frameworks and other soft infrastructure inhibit regionally and locally embedded firms from taking advantage of regional market and linkage opportunities.
- *Policy matters.* Cutting-edge industrial policy, especially measures that take account of the dynamics driving global and regional value chains, allows sectors to flourish, regional linkages to develop, and industrialization to accelerate.

Source: Morris, Plank, and Staritz 2016; Staritz, Morris, and Plank 2016.

A regional supply chain developed in textiles and apparel in Africa, mostly through preferential access to the South African market

Exacting standards and certification, large volume requirements, and competitive pricing make it difficult for local suppliers to get a foothold

### BOX 3.11 South African supermarket chains and their impact on regional integration

Private firms with strong commercial interests in gaining regional market access, lowering other trade barriers, and improving cross-border infrastructure can pressure governments to improve regional integration. But countervailing interests may seek to block integration, and their concerns also need to be addressed, as shown in the development of supermarket chains across the region.

By 2015, South Africa's largest retail chain, Shoprite Holdings, had some 250 outlets in other African countries (box table 1). While revenues in the rest of the continent are still much smaller than those from sales in South Africa, they are rising as a share of smaller neighboring economies. These outlets are mainly supplied from South Africa, which means that these retail giants have a strong interest in easing cross-border constraints. Poor infrastructure and logistics, as well as delays at borders and ports, raise operating costs and constrain expansion. Expansion of these supermarket chains would enable the upgrading of suppliers in the region, which could then also supply the South African market. But trade is currently largely one way: in 2017, the value of South African exports of processed foodstuffs to the rest of the continent was more than five times that of its imports.

**BOX TABLE 1** South African supermarkets in Africa, 2015

Firm	Revenue (\$ million)		Number of stores	
	Total	Rest of Africa	South Africa	Rest of Africa
Shoprite Supermarkets	7,947.3	1,311.0 (16.5 percent)	1,198	250
Massmart	6,107.3	496.1 (8.2 percent)	398	35
Pick n Pay	5,332.5	287.6 (5.4 percent)	1,126	116
Spar	4,298.1	na	1,711	153
Woolworths Food	1,785.0	72.1 (4.1 percent)	397 (total)	

na is not available.

Source: Adapted from Kaplan and Morris (2016).

A key issue is developing domestic suppliers. The supermarket chains may have a longer term interest in developing local suppliers to diversify their supply base. And many supplier trucks come back empty on their return trips, driving intraregional freight rates higher.<sup>1</sup> But the supermarket chains may also be using their buying power to limit upgrading and supplier development to protect their market position.<sup>2</sup>

The countries that are hosting this South African retail expansion are increasingly concerned with the disadvantaged position of domestic suppliers. With the support of local firms, neighboring countries are starting to pressure the supermarket giants to expand domestic supply.<sup>3</sup> Member states of the Southern African Development Community and the Southern African Customs Union have imposed trade restrictions and local content requirements on imports of certain food products from South Africa. For example, Botswana, Zambia, and Zimbabwe ban imports of poultry, maize meal, and cooking oil, and Zimbabwe's competition and tariff by-laws require supermarkets to purchase at least 20 percent of their products domestically.<sup>4</sup>

The retail chains prefer to deal with large suppliers. Exacting standards and certification, large volume requirements, and competitive pricing make it difficult for local suppliers to get a foothold. A lack of finance to upgrade capacity and delayed payments by the large retail chains are

(continued)

**BOX 3.11 South African supermarket chains and their impact on regional integration**  
(continued)

further constraints. Local suppliers often fail to fully understand the procurement criteria of the retail chains.<sup>5</sup>

The supermarket chains in South Africa have all instituted supplier development programs, partly in response to pressure from governments. Indeed, a condition of the Walmart/Massmart merger was the establishment by the company of a 240 million rand supplier development fund. But such initiatives are much less evident in neighboring host countries. In Zambia, Shoprite has signed memoranda of understanding with the Zambia Development Agency and Private Enterprise Programme Zambia to promote small firms. Namibia has a formal retail charter, though it is voluntary.<sup>6</sup> The expansion and harmonization of such charters across the region may be useful in encouraging a more balanced approach to regional development.

*Notes*

1. Vilakazi 2018.
2. das Nair, Chisoro, and Ziba 2018.
3. Kaplan and Morris 2016.
4. das Nair, Chisoro, and Ziba 2018.
5. Ziba and Phiri 2017.
6. das Nair, Chisoro, and Ziba 2018.

Reducing the supply chain barriers to trade could increase global GDP up to six times more than removing tariffs

intermediate inputs, many from outside the region. The average tariff on intermediate goods across African countries is still around 10 percent—twice the average in other regions—and has fallen only slowly over the past 15 years (figure 3.11a). The trade-weighted average is much closer to the simple average in Africa than in the other regions, an indication of little substitutability toward domestic intermediates (figure 3.11b).

**Taking advantage of the World Trade Organization's Trade Facilitation Agreement**

Tariff reductions and market access have become much less relevant for economic growth than a generation ago.<sup>74</sup> The reason? Trade is no longer about manufacturing a product in one country and selling it elsewhere—it is about cooperating across borders and time zones to minimize production costs and maximize market coverage.

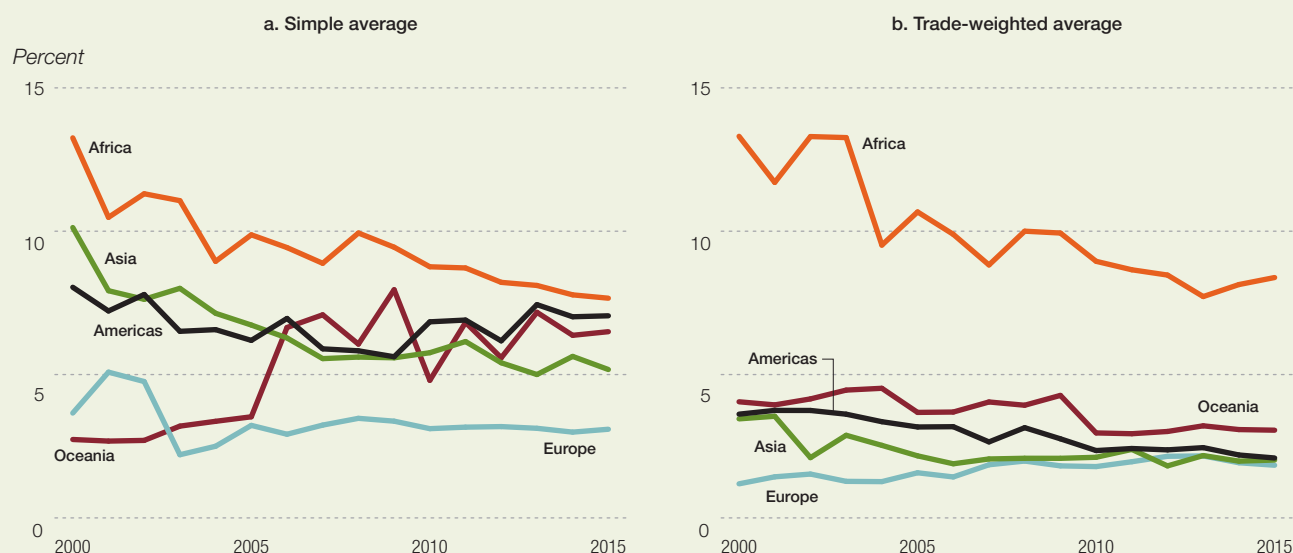
Reducing the supply chain barriers to trade could increase global GDP up to six times more than removing tariffs. If all countries could bring border administration, together with transport and communications infrastructure, up to just

half the level of global best practice, global GDP would grow by \$2.6 trillion (4.7 percent), and total exports would increase by \$1.6 trillion (14.5 percent). By comparison, the elimination of all tariffs worldwide would boost global GDP by only \$400 billion (0.7 percent) and exports by \$1.1 trillion (10.1 percent).<sup>75</sup>

Clearly, global value chains are now the dominant framework for trade. And as seen, African countries such as Rwanda (and Ethiopia and Morocco) are already taking advantage of this paradigm shift. Rather than waste time in unproductive policy discussions over tariffs, they are redirecting their strategies to focus on trade facilitation.

Recognizing this changing reality, 139 of 164 WTO members (including 44 African countries) have ratified the TFA amendment to the WTO agreement.<sup>76</sup> Signed in 2013 and entering into force in 2017, the TFA is the first multilateral trade agreement since the creation of the WTO. The principal aim of the TFA is to reduce the time it takes to cross borders to reduce trade transaction costs tied to nontariff measures.<sup>77</sup> In effect, the TFA is like a tariff agreement without tariff

**FIGURE 3.11** Tariffs on intermediate goods are still higher in Africa than in other regions, 2000–15



Source: Data from the World Integrated Trade Solution.

Note: Intermediate goods are defined according to classification by Broad Economic Categories. Number of African countries: 53 for simple average and 46 for trade-weighted average.

schedules. Best practices on trade facilitation recommended by the World Customs Organization are part of the TFA, but service-related measures are not included. Because the TFA has been ratified by most WTO members, it is rules-based rather than discretionary and includes appeal and review procedures. Low-income countries have been given extensive leeway in delaying implementation of the TFA until they can receive capacity building support. This flexibility may be welcome, but delay in implementing these time-saving trade facilitation measures is equivalent to a loss of competitiveness relative to those who implement them and may slow integration.

The reduction in fixed trade costs related to time in customs and the associated monetary costs should encourage greater diversification of trade to other markets and in other products to the same market. It should also lead to greater participation in supply chain trade at both the regional and global levels, where goods have to cross borders multiple times.

Training customs clearance officials and customs brokers reduces clearance time at customs. According to World Bank Doing Business

estimates, regular training reduces customs clearance time by 34 percent relative to no regular training. Pilot testing of phased implementation of the Automated System for Customs Data reduced clearance times for Angola and Lesotho.<sup>78</sup> Estimated gains from a one-day reduction in clearance times<sup>79</sup> are equivalent to a 1.3 percent reduction in trade costs. Average border compliance time is 23.2 hours for imports and 163 hours for exports, equivalent to a 3.9 percent penalty on exporting activities.<sup>80</sup>

### Harmonizing rules of origin

Because duties and import restrictions may depend on the origin of imports, criteria are needed to determine the country of origin of a product. These are referred to as rules of origin, and they are an integral part of all trade agreements. They are categorized as nonpreferential and preferential. Nonpreferential rules are generally used to establish the country of origin of a good for the allocation of quotas and for contingency protection measures (measures to counteract particular adverse effects of imports in the market of the importing country). Preferential rules

of origin are used to enforce preferential schemes by establishing which products can benefit from preferential access. Preferential rules are further divided into rules on general preferential treatment (under Generalized System of Preferences schemes) and those relating to regional trade agreements. From an economic standpoint, preferential rules of origin have a direct effect on international trade because they affect the rate of import taxation. The increasing fragmentation of production processes across countries means that rules of origin need to be stringent and complex to serve their primary purpose. However, complying with stringent and complex rules can impose substantial additional costs, sometimes even eroding the benefits.

Since the CFTA will not harmonize external tariffs until the customs union stage, countries need to agree on a set of common preferential rules of origin. This will be a monumental task because rules of origin are complex, opaque, and difficult to assess and because of the large number of members who will need to agree on a common set of rules. Negotiations on rules of origin delayed conclusion of the Tripartite Free Trade Area among COMESA, EAC, and SADC because negotiators decided to apply product-specific rules of origin “entailing the highly onerous, time-consuming, and technically demanding process of determining particular rules for over 5,000 products.”<sup>81</sup>

Rules of origin have two main objectives. First, to prevent arbitraging of external tariff difference in free trade areas, which could lead to a race to the bottom as members compete for tariff revenue by choosing lower MFN tariffs. This makes rules of origin redundant in customs unions, although Mercosur does have them. Second, rules of origin are intended to prevent superficial assembly operations, with little or no value added (such as packaging), which would extend the benefits of preferential access to noneligible intermediate producers. A third, less often mentioned, reason is the development objective. During negotiations of the SADC rules of origin, the objective was to enable member states to develop through privileged access to an enlarged market area that would remain protected and relatively isolated from external markets.<sup>82</sup> In effect, the objective was to develop regional value chains behind relatively high tariffs.

As in other free trade agreements, the negotiations on rules of origin for the CFTA are likely to be dominated by strong industry lobbying. During the negotiations so far, West and Central Africa have preferred general rules of origin, which would probably resemble those in the East Asia and the Pacific region. On the other side, Egypt, Kenya, and South Africa have pushed for product-specific rules of origin, and South Africa has lobbied for adoption of the SADC rules of origin on a sector- or product-specific basis.<sup>83</sup>

In this situation, the political economy considerations underlying negotiations would resemble those that have prevailed in the agreements between developing countries and the European Union and the United States, which led to restrictive product-specific rules of origin.<sup>84</sup> If South Africa’s position prevails, the result would be costly rules of origin that would likely deny preferences to the low-income partners (such as Ethiopia, Mozambique, Tanzania, and Zambia). When the more developed partner has a comparative advantage in the upstream capital-intensive sector, such as weaving in textiles and apparel or engine building in the automobile sector, rules of origin create a captive market in the low-income partner, which has no choice but to source (at a higher cost) from the more developed partner.

This is what happened in the hegemonic model followed by the European Union and the United States, which used preferences to create mini-worlds where the gains from specialization could be reaped at the same time as some degree of protection was maintained against efficient Asian firms, especially in the textiles and apparel sector. The outcome was captured by interest groups in the sector in the European Union and the United States, a denial of preferences for intended beneficiaries, and a captive market for the upstream activities in which the European Union and the United States often had a comparative advantage in the integrating region, but not worldwide. Thus, despite large preferential margins in textiles and apparel in the European Union and the United States, the technical requirements related to origin have greatly limited access to these markets. The same pattern could be repeated under CFTA.

In contrast, the East Asia and the Pacific region model is not hegemonic and is relatively simple

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Since the CFTA will not harmonize external tariffs until the customs union stage, countries need to agree on a set of common preferential rules of origin

The CFTA should incorporate relatively simple and transparent rules of origin, like those applied in AFTA and ASEAN

and less demanding in resources. ASEAN's rules of origin are based largely on 40 regional value content specifications. In many cases, the importer has a choice between two rules: a regional value chain rule or a change of tariff classification. To facilitate supply chain trade, the CFTA should incorporate relatively simple and transparent rules of origin, like those applied in AFTA and ASEAN.

Rules of origin will also have to deal with the regime-wide rules covering certification, verification, and cumulation. Because there are few differences in certification and verification methods across the African RECs, agreeing on these should be relatively easy—especially if, as recent evidence suggests, administrative costs are not as high as previously estimated.<sup>85</sup> Thus, it might be easier to agree first on harmonizing rules governing certification and verification. In contrast, provisions on cumulation (treatment of intermediates from other countries in the bloc or countries with special cumulation status) differ across RECs.

Cumulation rules are often associated with different product-specific rules of origin, which make it difficult to assess how strict they are. Proving cumulation may be very resource intensive, discouraging firms from using preferences. In addition, the provisions are different across RECs. Multilateralizing provisions on cumulation at the continental level will thus be a big challenge, especially if accompanied by multiple product-specific rules of origin, as is the case under the SADC regime.

The extensive evidence on the effects of rules of origin around the world shows that they go well beyond the role of preventing trade deflection and preventing superficial assembly operations. Rather, they are shaped by powerful partners and their firms.

## EXPECTED GAINS FROM THE CONTINENTAL FREE TRADE AGREEMENT

Phase I of the CFTA calls for eliminating tariffs and nontariff barriers in goods and services. Several studies have estimated the potential gains using simulation models. For this report, estimated

gains are based on an extended version of the Global Trade Analysis Project (GTAP) model using new data. Two new sets of estimates of barriers to trade are incorporated in the model: estimates of the time reduction in customs from applying the provisions of the TFA and estimates of the discriminatory barriers to trade in services reported in table 3.2.

### Estimates from customs improvements

Following the signing of the TFA in December 2013, the OECD produced a series of 11 trade facilitation indicators (identified from A to K) for monitoring the TFA targets. Data for these indicators are available for 43 African countries. Each indicator takes a value between 0 (no implementation) and 2 (full implementation). Some indicators are averages of subcomponents. Within each REC, some countries have remarkably higher scores on some indicators than other REC members. The largest disparities are for the information availability indicator (A) and for the governance and impartiality indicator (K). Taken together, these indicators suggest substantial room for improvement in customs management within and across RECs.

As an illustration of orders of magnitude of potential gains, table 3.6 reports estimates of reductions in time at customs in ad valorem tariff equivalents from an improvement in trade facilitation indicator values. The estimates are from a model that predicts observed time in customs as a function of basic structural variables (GDP, Logistics Performance Index, and Infrastructure Quality Index); policy variables (World Governance Indicators); and the trade facilitation variables captured by the trade facilitation indicator (row L).<sup>86</sup> The model shows, after controlling for the structural and policy variables, that a higher trade facilitation indicator score reduces the probability of a longer time in customs (not reported here).<sup>87</sup>

Model simulation 1 focuses on improvements within Africa, and simulation 2 focuses on improvements relative to the rest of the world. The overall differences in reductions in costs reflect disparities in trade facilitation indicator values and in time in customs for imports, while differences between the two simulations reflect the predicted



**TABLE 3.6** Simulated reduction in trade costs for imports from implementing the Trade Facilitation Agreement (average across African RECs and other country groups)

Regional economic community (number of countries)	Mean time in customs (days)	Mean of OECD Trade Facilitation Index value	Reduction in trade costs from reducing time in customs (ad valorem equivalents, %)	
			Simulation 1	Simulation 2
African Union members (43)	7	0.77	9.5	10.8
Central African Economic and Monetary Community (5)	11	0.63	19.5	23.1
Common Market for Eastern and Southern Africa (16)	7	0.77	5.1	7.9
Community of Sahel-Saharan States (19)	5	0.72	7.6	8.5
East African Community (5)	8	0.85	7.9	9.2
Economic Community of Central African States (9)	9	0.65	15.8	17.9
Economic Community of West African States (12)	5	0.66	8.6	8.7
Intergovernmental Authority on Development (5)	7	0.79	5.6	8.1
Southern African Development Community (15)	8	0.81	7.7	8.0
West African Economic and Monetary Union (7)	4	0.65	3.6	3.9
Landlocked countries (15)	6	0.63	5.0	9.1
Least developed countries (26)	6	0.63	7.7	8.1

Source: de Melo and Sorgho forthcoming; Hummels and Schaur 2013.

Note: See de Melo and Sorgho (forthcoming) for estimates and choice of simulations. The ad valorem tariff equivalents are computed as the average estimated reduced time in customs across group members multiplied by 1.3 percent. The estimated reduction in transport costs from a day's reduction in transport is taken from Hummels and Schaur (2013). Reduction in trade costs are computed for the following simulations:

*Simulation 1:* Each African landlocked country takes the average value of the top two landlocked countries in Africa, and each African nonlandlocked country takes the average value of the nonlandlocked countries in Africa.

*Simulation 2:* Each African landlocked country takes the average value of the top two landlocked countries in the developing world, and each African nonlandlocked country takes the average value of the nonlandlocked countries in the developing world.

Scenario 1 would bring a 0.1 percent increase in net real income for the continent, a gain of \$2.8 billion

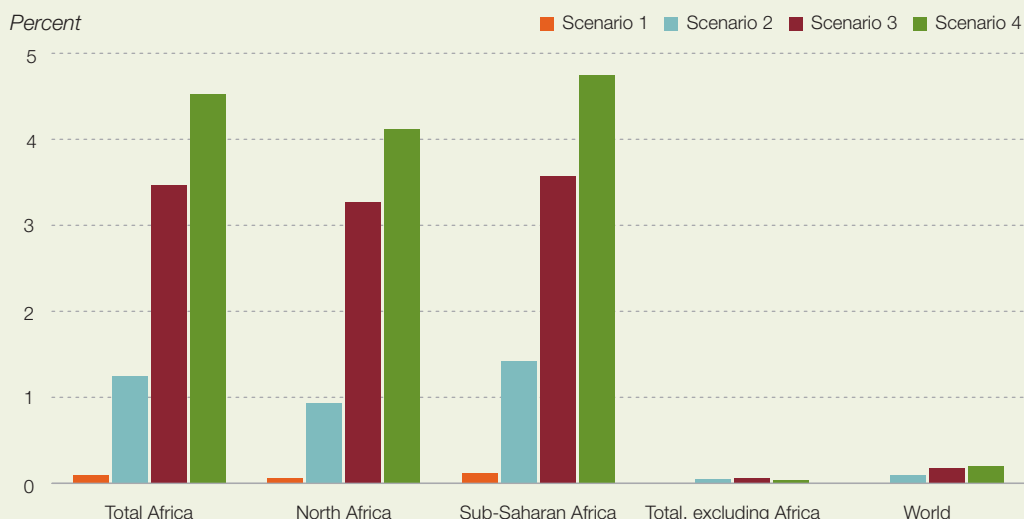
extra gain from an improvement in customs management beyond Africa's current best performers. These orders-of-magnitude estimates may be on the high side since time in customs reported by firms is less than the time recorded in Doing Business data from the World Bank, and the sample is small.<sup>88</sup> But with the development of supply chain trade, the gain for exports from reduced time in customs should also be taken into account, as discussed below.

#### *Simulated impacts on real income*

At the continental level, scenario 1 (removal of tariffs on intra-African trade, the focus of current negotiations for phase I of CFTA) would bring a 0.1 percent increase in net real income<sup>89</sup> for the continent (figure 3.12), a gain of \$2.8 billion (box 3.12).<sup>90</sup> However, rules of origin will still be needed since countries will not have a common external tariff, so the actual gains will be much smaller unless the adopted rules of origin are simple.

Scenario 2 increases the total real income gains 13-fold, for a 1.25 percent increase in net real income, or \$37 billion. Scenario 3 yields an additional gain, for an estimated aggregate real income gain of 3.5 percent, or some \$100 billion

**FIGURE 3.12** Percentage change in real income across four trade integration scenarios for Africa and the world



Source: African Development Bank forthcoming.

Note: Scenario 1 is the removal of bilateral tariffs across all African countries. Scenario 2 is scenario 1+ removal of ad valorem tariff equivalents of nontariff barriers on a most favored nation (MFN) basis. Scenario 3 is scenario 2 + Trade Facilitation Agreement on an MFN basis. Scenario 4 is scenario 3 + 50 percent reduction in tariffs and nontariff barriers in other developing countries on an MFN basis.

Extending the CFTA to removing the ad valorem tariff equivalents of nontariff barriers on goods and services on an MFN basis in scenario 2 increases the total real income gains 13-fold, for a 1.25 percent increase in net real income, or \$37 billion.

Scenario 3 adds implementation of the TFA, also on an MFN basis, yielding an additional gain, for an estimated aggregate real income gain of 3.5 percent, or some \$100 billion. This large gain is probably an upper bound, considering that the mean estimate of transport cost reductions,<sup>91</sup> which assumes that one extra day in customs is equivalent to a 1.3 percent extra tariff at destination, is taken from maritime trade flows to the United States.

Scenario 4 adds an increase in market access in other developing countries to the domestic reform agenda. This would increase the gains from implementing the TFA to 4.5 percent of the continent's GDP over the reference scenario, or an additional \$31 billion, bringing the total gain to \$134 billion.

The rest of the world is only mildly affected in these scenarios with very small changes in most scenarios and a roughly 0.2 percent gain in scenarios 3 and 4 (full removal of tariffs and ad valorem tariff equivalents in Africa and full implementation of the TFA). Scenario 5 (which adds a 0.2 percentage point increase in tariffs on African imports from non-African sources) has a small, net positive gain for the continent. Importantly, it raises an estimated \$850 million in revenues for funding trade facilitation measures.

These headline estimates hide significant heterogeneity across subregions (figure 3.13). While the five subregions do not correspond to the RECs, they are representative of the geographic context of some policy discussions in Africa. In percentage terms, Central Africa gains the most,<sup>92</sup> at upward of 7 percent, under the most optimistic scenario 3—much higher than the gain of just over 5 percent in West Africa, 4 percent in North and East Africa, and under 3 percent in Southern Africa.<sup>93</sup> As order-of-magnitude estimates, the ranking of gains is plausible and likely reflects the

### BOX 3.12 Estimating efficiency and revenue gains in five scenarios

The results reported here concentrate on the longer run effects under full implementation of the CFTA using a version of the GTAP model adapted for capturing the expected long-run effects of the CFTA and full implementation of the TFA (see table A3.1 in the online annex for country and sector aggregations). The model is disaggregated into the following regions: Africa, China, the United States, Western Europe, rest of East Asia, and rest of the world. Results are reported for North Africa (4 countries) and Sub-Saharan Africa (28).<sup>1</sup>

Five scenarios were simulated. Scenarios 1–3 apply only to the 32 African countries and regions<sup>2</sup> in the model; scenarios 4 and 5 include other countries.

The scenarios are mostly cumulative. Scenario 1 models the removal of all tariffs on a bilateral basis across African countries, while scenario 2 adds the removal of the ad valorem tariff equivalents of all nontariff barriers in Africa. Scenario 2 is probably an upper-bound estimate because the ad valorem equivalents of nontariff barriers probably include some nontariff measures whose effects are nondistortionary (such as some technical barriers to trade and some sanitary and phytosanitary measures). This simulation might correspond to an upper bound of the expected gains from phase I of the CFTA since any regulatory harmonization that might be carried out at the regional level is not considered here.

Scenario 3 captures the expected benefits from an improvement in customs management through application of the TFA based on the estimates reported in simulation 2 in table 3.6. As is common, improvement is captured as a percentage reduction in the iceberg cost parameter on the import demand system. For example, if the TFA ad valorem tariff equivalent measure is 20 percent, this implies that initial exports of 100 units translate into only 80 units arriving at their destination as the cost is subtracted from the volume. Full implementation of the TFA leads to equality between units exported and imported. Since improvements at customs relate to trade with all partners, improvements in customs are carried out on a multilateral basis.<sup>3</sup>

These long-run scenarios assume that no change takes place elsewhere. This is highly unlikely since the TFA will be implemented in other developing countries as well. Scenario 4 assumes that other developing countries also carry out reforms, in this case a 50 percent reduction in import tariffs and in the ad valorem tariff equivalents of nontariff measures.<sup>4</sup>

Finally, scenario 5 explores orders of magnitude for financing CFTA activities by leveraging an extra 0.2 percentage point tariff on imports from high-income countries (not shown in figures or tables).

#### Notes

1. There are four different compositions of the “rest-of-the region,” one for each of the four African subregions, resulting in 32 African “countries.” Table A3.2 in the annex (available online) also reports the aggregates for the other regions.

2. The current version of the GTAP database divides the economies in Africa into 26 individual countries, with all other countries, which lack input-output tables, grouped into six composite regions.

3. Three sectors are excluded from the TFA improvement: mining, fossil fuels, and refined petroleum products. The exclusion had relatively minor impacts on the results, as these products are not heavily imported in Africa.

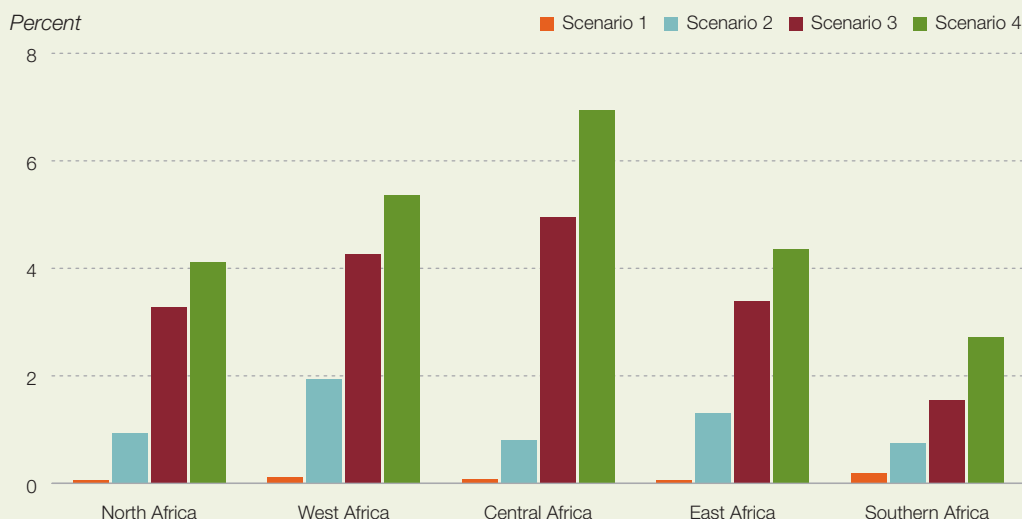
4. For the purposes of this scenario, we have defined other developing countries to include China (CHN), rest of East Asia (XEA), and rest of the world (ROW). Note that the aggregate regions (XEA and ROW) contain some high-income countries. For numerical reasons, reductions in the ad valorem estimates were limited to a maximum of 50 percentage points. This cap on reductions affects only a small number of trade flows. Thus, if the initial ad valorem tariff equivalent is 51 percent, under full reduction the final ad valorem equivalent would be 1 percent and not 0 percent. Similarly, if the initial ad valorem equivalent is 102 percent, the final ad valorem tariff equivalent would be 52 percent, not 51 percent under a 50 percent reduction scenario.

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An increase in market access in other developing countries would increase the gains from implementing the TFA to 4.5 percent of the continent's GDP, bringing the total gain to \$134 billion

Scenario 3 provides the largest boost to the African economies—particularly for Central Africa

**FIGURE 3.13** Percentage change in real income across four trade integration scenarios, by African subregion



Source: African Development Bank forthcoming.

Note: Scenario 1 is the removal of bilateral tariffs across all African countries. Scenario 2 is scenario 1 + removal of ad valorem tariff equivalents of nontariff barriers on a most favored nation (MFN) basis. Scenario 3 is scenario 2 + Trade Facilitation Agreement on an MFN basis. Scenario 4 is scenario 3 + 50 percent reduction in tariffs and nontariff barriers in other developing countries on an MFN basis.

extent of regional integration across the continent. Barriers to trade, policy-imposed or not, are generally considered to be highest in Central Africa and lowest in Southern Africa, which reflects the inclusion of South Africa. Also, as shown earlier, East Africa is the most integrated in terms of market access, and the region has made considerable progress in soft infrastructure, notably in transport infrastructure.

To the extent that the scenarios are truly additive, the TFA scenario 3 provides the largest boost to the African economies—particularly for Central Africa (additional 4 percent), with North, West, and East Africa next (about 2 percent), and Southern Africa last (0.8 percent; see figure 3.13). The removal of trade distortions in scenario 2 brings relatively large gains for West Africa (nearly an additional 2 percent), but less for the other regions, particularly Southern Africa (0.5 percent). The market-access scenario (4) brings large gains for Central Africa (additional 2 percent), but mostly around 1 percent for the other regions. In summary, there is no clear ranking of the various

reform channels—though the TFA scenario dominates the gains, with the exception of Southern Africa, which benefits more from the market-access scenario.

### Simulated impacts on trade

In scenario 1, where only bilateral tariffs are removed, intraregional trade increases by 14.6 percent (table 3.7), which corresponds to an elasticity of trade to tariffs of around 3. Because the share of intraregional trade in total trade is small, intraregional trade relative to total trade increases only from 12 percent to 13.6 percent. There is modest trade diversion—Africa exports somewhat less to the rest of the world (–4.3 billion), and the rest of the world exports a bit less to Africa, with reductions of about 0.8 percent.

As would be expected from the high ad valorem tariff equivalents of nontariff barriers in Africa, their removal on imports into Africa leads to a large boost in intra-African trade of around 107 percent in scenario 2. This increase in intra-African trade is accompanied by a large 44 percent increase in

**TABLE 3.7** Changes in trade value and volume across four trade integration scenarios relative to reference solution

Scenario and exporting region	Importing region					
	Value change (\$ billion)			Volume change (%)		
	Africa	Rest of world	World	Africa	Rest of world	World
<b>Scenario 1</b>						
Africa	10.1	−4.3	5.8	14.6	−0.8	1.0
Rest of world	−4.3	2.6	−1.7	−0.8	0.0	0.0
World	5.8	−1.7	4.1	0.9	0.0	0.0
<b>Scenario 2</b>						
Africa	74.3	181.8	256.1	107.2	35.7	44.3
Rest of world	139.7	−108.7	31.1	24.8	−0.7	0.2
World	214.1	73.1	287.1	33.8	0.5	1.7
<b>Scenario 3</b>						
Africa	92.0	203.6	295.6	132.7	40.0	51.1
Rest of world	200.8	−122.5	78.4	35.6	−0.8	0.5
World	292.8	81.1	374.0	46.2	0.5	2.2
<b>Scenario 4</b>						
Africa	76.3	252.4	328.6	110.0	49.6	56.8
Rest of world	267.8	−140.9	126.9	47.5	−0.9	0.8
World	344.0	111.5	455.5	54.3	0.7	2.7

Source: African Development Bank forthcoming.

Note: The reference solution is the calibrated initial equilibrium solution to observed trade flows in 2014. Scenario 1 is the removal of bilateral tariffs across all African countries. Scenario 2 is scenario 1 + removal of ad valorem tariff equivalents of nontariff barriers on a most favored nation (MFN) basis. Scenario 3 is scenario 2 + Trade Facilitation Agreement on an MFN basis. Scenario 4 is scenario 3 + 50 percent reduction in tariffs and nontariff barriers in other developing countries on an MFN basis.

exports to the rest of the world. These large gains reflect both the high ad valorem tariff equivalents and the (plausible) assumption that nontariff barriers would be removed on an MFN basis. Under this scenario, intra-African trade as a share of total African exports rises from 12 percent in the reference solution to 17.2 percent. Implementation of the TFA on an MFN basis in scenario 3 also adds a significant boost to trade. African trade grows by 51 percent—with a higher multiplier effect on intra-African trade than on trade with the rest of the world. The share of intra-African trade thus jumps to 18.5 percent.

Scenario 4, which sees an increase in market access in other developing countries, also raises

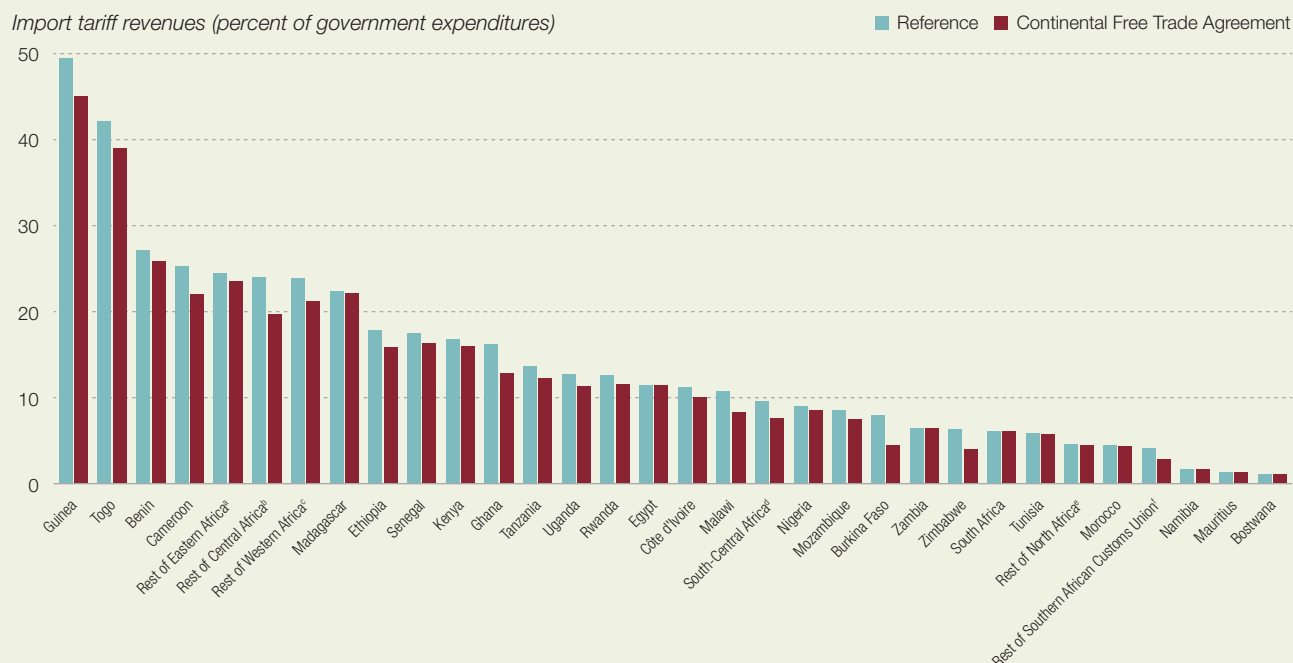
total African exports, by 57 percent. But there is a modest rotation away from intra-African trade toward exporting to the rest of the world relative to the reference scenarios.

### Simulated impacts on government revenue

The impact of trade integration on government revenues was simulated for scenarios 1, 3, and 5. In the aggregate, the effect on government revenues of the removal of intra-African bilateral tariffs at the country level (scenario 1)<sup>94</sup> is small, but for countries where tariff revenues represent a larger share of government revenue, the impact is larger (figure 3.14). A few African economies

Scenario 4, which sees an increase in market access in other developing countries, also raises total African exports, by 57 percent

**FIGURE 3.14** Tariff revenues before and after eliminating bilateral tariffs on intra-African trade



Source: African Development Bank forthcoming.

a. Includes Burundi, Comoros, Djibouti, Eritrea, Kenya, Mayotte, Réunion, Rwanda, Seychelles, Somalia, and Sudan.

b. Includes Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea, Gabon, and São Tomé and Príncipe.

c. Includes Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Saint Helena, Sierra Leone, and Togo.

d. Includes Angola and Democratic Republic of Congo.

e. Includes Algeria and Libya.

f. Includes Lesotho, Namibia, and eSwatini.

rely heavily on tariff revenues to finance current expenditures, according to the GTAP database. At the high end are Guinea (49 percent of current expenditures), Togo (42 percent), and Benin (27 percent), with eight countries having a share over 20 percent. The greatest percentage losses of tariff revenue as a percentage of current expenditures are in Guinea (4.4 percent), Togo (3.5 percent), and Benin (2.0 percent). The largest revenue losses are in Burkina Faso (44 percent), Zimbabwe (36 percent), Malawi (22 percent), and Ghana (21 percent).

The fiscal impacts of scenario 5, which increases the tariff on African imports from

high-income countries by 0.2 percentage point, is relatively small—an increase of \$850 million for the continent over scenario 3. A somewhat more intriguing—though still plausible—prediction is that removing the ad valorem tariff equivalents for full implementation of the TFA (scenario 3, the most aggressive form of the CFTA) would boost tariff revenues by nearly \$15 billion over scenario 1 (the least aggressive). Removal of the ad valorem tariff equivalents on an MFN basis leads to a significant increase in imports, which increases tariff revenues from non-African imports, an effect rarely mentioned in policy discussions.



## DOS AND DON'TS FOR INTEGRATION POLICY MAKERS

All African countries would fare better with well-designed integration than without it. What, then, are the policy responses to maximize the benefits of regional integration and to mitigate the potential risks?

*Here, first, are some things integration policymakers should not do.*

- Do not worry overly about ceding national sovereignty to supranational authority because that facilitates harmonizing regulatory policies, building trust, and checking the political pressure to erect nontariff barriers.
- Do not neglect the soft infrastructure (logistics and the like) that's essential to reap the gains from investments in hard infrastructure (roads, rails, bridges, ports).
- Do not believe that integration will necessarily concentrate even more economic activity in big countries because trade facilitation has spread economic activity all along the corridors.
- Do not underestimate how poor households are hit most by high-tariff sensitive lists for, say, rice and sugar, as the common external tariffs do in ECOWAS and (less) in the East African Community.
- Do not impose sector-specific or product-specific rules of origin. Word in policy circles, however, has it that African trade negotiators already have identified 800 products for specific treatment.

*Now turn to the dos for trade.*

- Monitor progress in reducing bilateral tariffs and nontariff barriers, as the East African Community does with Common Market Scorecard tracking compliance in the free movement of capital, services, and goods.
- Eliminate all of today's applied bilateral tariffs in Africa and keep rules of origin simple, flexible, and transparent. That could increase intra-Africa trade by up to 15 percent, for a gain of \$2.8 billion, small but welcome in these times of rising protectionist stances in the global

economy and the China–United States and Britain–mainland Europe divides.

- Remove all nontariff barriers on goods and services trade on a most favored nation basis, since they apply overwhelmingly to all partners for trade across Africa. When added to eliminating tariffs, this would increase trade and boost the cumulative income gains to \$37 billion—and the continent's tariff revenues by up to \$15 billion, which is more than small change.
- Implement in addition the WTO's Trade Facilitation Agreement to reduce the time it takes to cross borders and the transaction costs tied to nontariff measures. When added to the removal of tariffs and nontariff barriers, that could yield a cumulative income gain of 3.5 percent of the continent's GDP, bringing the gains to just over \$100 billion.
- Consider the effect of other developing countries reducing by half their tariffs and nontariff barriers on a most favored nation basis. That could bring Africa's gains to 4.5 percent of its GDP, for an additional \$31 billion, bringing the total gains to \$134 billion.
- Also consider a 0.2 percent tariff on imports from high-income countries. That could bring in \$850 million a year to finance trade facilitation projects.

*Then, put much more emphasis on regional public goods, a no-brainer because every country benefits, but especially the low-income countries.*

- Synchronize financial governance frameworks across the region and tighten prudential frameworks for supervising financial flows, while removing any remaining ill-founded legal restrictions to cross-border financial flows and transactions.
- Pool power to tap the enormous potential of cross-border trade in electricity. And as the Nord Power Pool in northern Europe shows, start with a small number of countries, rely on external finance to increase capacity, combine generation with transmission, and have enough transmission capacity to stabilize supply and promote competition.

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Do eliminate all of today's applied bilateral tariffs in Africa and keep rules of origin simple, flexible, and transparent

Do open your borders to free movements of people—say, by ratifying and implementing the African Union Passport

- Open your skies to competition, as with Mozambique, which recently opened to foreign carriers. The African Union's Single African Air Transport Market, launched in January 2019, has so far been signed by 22 countries with 75 percent of intra-African air transport. Morocco's open skies policy shows how lowering airfares and opening new routes can increase the seats offered by half (compared with 10 percent in Tunisia) and boost the share of low-cost airlines from 3 percent in 2006 to 36 percent in 2010 (from only 7 percent to 10 percent in Tunisia).
- Open your borders to free movements of people—say, by ratifying and implementing the African Union Passport, launched in 2016 and expected to be fully rolled out by 2020.

*Here are some more specific items for the integration agendas for Africa's diverse economies.*

For landlocked economies—Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Ethiopia, Lesotho, Malawi, Mali, Niger, Rwanda, South Sudan, eSwatini, Uganda, Zambia, and Zimbabwe.

- Advance efforts to delegate regional public goods.
- Continue to develop national multimodal rail, road, air, and pipeline networks.
- Strengthen regional transport corridors. Under the Northern Corridor Transit and Transport Agreement, long-distance transport prices in 2011–15, despite large increases in traffic, came down 70 percent from Mombasa to Kampala and 30 percent from Mombasa to Kigali. By contrast, they rose along the Central Corridor by almost 80 percent from Dar to Kampala and by 36 percent from Dar to Kigali. The main difference was the better improvement of logistics in the Northern Corridor.
- Revamp the transport regulatory frameworks. Landlocked countries in Africa, many of them low income, tend to engage more in intra-Africa trade than coastal or middle income countries. But an estimated 77 percent of their export value consists of transport costs, a high barrier to regional and international trade.

- Push for improving the conventions and instruments that facilitate transit trade (beyond the stalled multilateral negotiations).

For coastal economies—Algeria, Angola, Benin, Cabo Verde, Cameroon, Comoros, Congo, Democratic Republic of Congo, Côte d'Ivoire, Djibouti, Egypt, Equatorial Guinea, Eritrea, Gabon, Gambia, Ghana, Guinea-Bissau, Kenya, Liberia, Libya, Madagascar, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Nigeria, São Tomé and Príncipe, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Tanzania, Togo, and Tunisia.

- Expand port facilities, including storage and customs administration, and increase the efficiency of handling vessel traffic and loading and unloading containers. The cost of African port facilities is estimated to be 40 percent above the global norm, and they have long container dwell times, delays in vessel traffic clearance, lengthy documentation processing, and low containers per crane hour (except South Africa). Ultimately, over 70 percent of delays in cargo delivery come from extra time in ports.
- Increase the speed and reliability of rail and road networks by reducing congestion and delays at checkpoints, and diversions of trucks and rolling stock for maintenance.
- Push for improving conventions and instruments beyond the stalled multilateral negotiations to facilitate transit trade.

For larger economies—Egypt, Morocco, Nigeria, and South Africa.

- Lead the move toward a customs union by accepting greater delegation of decision-making to a supranational REC, resisting internal pressure to protect domestic producers, and limiting competition.

For resource-rich economies—Botswana, Democratic Republic of Congo, Ghana, Guinea, Mozambique, Namibia, Niger, South Africa, Tanzania, and Zambia.

- Apply the core principles of the National Resource Charter.
- Cooperate to harmonize taxation of oil, gas, and minerals to avoid races to the bottom and the associated overexploitation.

## NOTES

1. AU 2015.
2. UNECA, AU, and African Development Bank 2018.
3. This expression, introduced by Horn, Mavroidis, and Sapir (2010), is commonly used in evaluations of regional trade agreements.
4. WTO 2011.
5. Frazer and Steenberg (2017) discusses the suspension of US African Growth and Opportunity Act preferences to Rwanda for banning imports of used clothing. This measure is likely to harm poor households most.
6. Rodrik (2018) shows that new technologies—which may be transmitted to developing countries through their participation in global value chains—hurt developing countries since they put upward pressure on high-skill labor, with little possibility to substitute with low-skill labor whose wages are subject to downward pressure. It then becomes harder for low-income countries to offset their technological disadvantage with their low-skill labor-cost advantage.
7. UNECA, AU, and African Development Bank 2018, table 2.1.
8. UNCTAD 2012.
9. WTO 2011.
10. African Development Bank forthcoming.
11. The observation that intra-African bilateral trade is less than gravity model predictions has led Naudé (2009) to describe this situation as the manifestation of a proximity gap.
12. African Development Bank forthcoming.
13. For a large sample of manufactures from 83 countries, Nunn and Treffer (2013, table 4) show that indicators of contract intensity are quantitatively as important as the traditional indicators of comparative advantage (product markets, labor markets, and financial markets) are as important determinants of comparative advantage as the traditional indicators (technology and factor endowments).
14. Brühlhart (2009) reports the following intra-industry trade shares (internal, external) as a share of trade: EU-15 (46.6, 24.5); CEMAC (1.2, 0.1); WAEMU (0.9, 0.4); EAC (0.3, 0.4); SACU (0.3, 9.0).
15. Regolo (2017) explores these patterns of bilateral trade for a sample of 116 countries over the period 2000–10. She shows that export diversification is accompanied by the regionalization of trade, at least in the medium term.
16. It is assumed that the data represent an equilibrium in which bilateral trade and income are jointly determined with bilateral trade costs. Bilateral trade costs may vary across partners, and the elasticity of trade flows to trade costs is common to all partners. See Novy (2013) for the foundations and Arvis et al. (2016) for an application similar to this one.
17. Initial and terminal year trade costs are 273 and 230 for African least developed countries, 283 and 263 for African landlocked countries, and 208 and 198 for non-African least developed countries.
18. Egger and Shingal 2017.
19. The database covers 279 regional trade agreements notified to the WTO between 1985 and 2015. See Hoffman, Osnago, and Ruta 2017. Table A2.1 in the annex online gives the coverage for category of provisions for each African REC.
20. In their comparison of WTO-X areas in EU and US free trade agreements, Horn, Mayroidis, and Sapir (2010) note that 75 percent of 310 provisions in EU agreements are nonenforceable, while 85 percent of 82 provisions in US agreements are enforceable.
21. Schiff and Winters 2003.
22. The three measures of depth are all provisions; core provisions (WTO+ provisions plus competition and the movement of capital); and percentage of provisions covered. See de Melo, Nouar, and Solleder (2019; table 5). Drawing on this database, Laget et al. (2018) also produce evidence that vertical foreign direct investment is positively correlated with the depth of legal commitments in regional trade agreements.
23. See African Development Bank (forthcoming) for details and estimates at the REC level. See African Development Bank (forthcoming) for details and estimates at the REC level.
24. See Duggan, Rahardja, and Varela (2013) for Indonesia and Bas and Berthou (2012) and Arnold et al. (2012) for India.
25. Beverelli, Fiorini, and Hoekman 2017.
26. World Bank 2017.
27. World Bank 2019.
28. Abel 2018.
29. Arizala et al. 2018.
30. UNECA 2016a; see also <https://www.integrate-africa.org>.
31. Adepoju 2002.
32. UNECA, AMDC, and AU 2016; UNCTAD 2018. The status of the Free Movement of Persons protocol in

- CEN-SAD remains unclear (UNECA, AMDC, and AU 2016). However, it is worth noting that many CEN-SAD countries also belong to ECOWAS.
33. Adepoju, Boulton, and Levin 2010.
  34. AU 2014.
  35. Friebe, Gallego, and Mendola 2013.
  36. Biavaschi et al. 2018.
  37. The difference-in-difference analysis permits comparing the variation in bilateral migration stock between the group of countries that have ratified/implemented a protocol and those that did not before and after a free movement of persons protocol was adopted. For more details regarding the data and methodology, see Mbaye and Wahba (forthcoming).
  38. <https://au.int/en/ti/cfta/about>.
  39. UNECA 2017.
  40. African Development Bank 2018a.
  41. UNECA and AU 2008.
  42. Ekpo and Chuku 2017.
  43. Subsidiarity indicates that decisionmaking jurisdiction should coincide with a public good's spillovers (multilateral institutions for transnational public goods; regional institutions for regional public goods such as infrastructure, lakes, rivers, and waterways; and national institutions for national public goods).
  44. Governance (implementing shared standards and policy regimes) is the intermediate public good necessary to generate the desired regional public goods. Regional public goods across the RECs include knowledge (education and scientific research); construction and operation of cross-border infrastructure; environment; and health, peace, and security.
  45. As a reminder of the difficulty of delegating national authority, the European Union embarked on an ambitious program to create a seamless "single market" for energy in 1988. It is still far from being realized (see box 3.2).
  46. UNECA, AU, and African Development Bank (2018, ch. 2) briefly covers cooperation in mining, health, and security. Newfarmer (2017) discusses the importance of cooperation beyond integration in goods markets. He argues that collective action on infrastructure and coordination of macroeconomic and regulatory policies have large returns to low-cost investments and that "these elements of regional cooperation may well have a larger return to the time invested of policymakers than focusing on tariff policy."
  47. Alesina, Easterly, and Matuszeski 2011.
  48. See Kessides, Noll, and Benjamin (2010) for further discussion and a discussion of the West African Telecommunications Regulatory Association.
  49. In 2012, exports of electricity were around 3 percent of global production, compared with 17 percent for coal, 31 percent for gas, and 52 percent for oil (IEA 2014).
  50. UNECA, AU, and African Development Bank 2018, p. 22.
  51. UNECA, AU, and African Development Bank 2018, figure 2.8.
  52. Gwilliam 2011.
  53. Collier and Venables 2009.
  54. Armenter and Koren (2014) develop such a model and give supporting evidence from the development of agglomerations around bridges in the United States. Also see the evidence on the Golden Quadrilateral highway rehabilitation project in India in box 3.5.
  55. In a pioneering study, Limão and Venables (2001) estimated that a 10 percent reduction in trade costs raised trade by 30 percent and that hard infrastructure shortcomings accounted for nearly half of the transport cost penalty borne by intra-Sub-Saharan trade. They estimated that 1,000 km of overland travel added \$1,380 to container freight costs compared with sea travel adding only \$190. Building on this work and on World Bank estimates of the cost of road improvement and rehabilitation (\$127,000 per km for the median project), Buys, Deichmann, and Wheeler (2010) use gravity coefficients to estimate the extra trade from improved road infrastructure. After taking into account cost effects of local variations, they estimate a one-year payback, with \$254 billion of extra trade generated over the project's estimated lifetime at a cost of \$32 billion.
  56. For example, Jedwab and Storeygard (2017) have produced and assembled new data on railways and roads that cover 43 African countries over 1960–2015.
  57. There were almost no roads or railroads at the end of the 19th century. About one-third of colonial budgets were devoted to the construction of railroads. Roads and railroads were not connecting cities, but they were directed to the interior to extract cash crops and minerals (Papaioannou and Michalopoulos 2018). Thus, connections across cities were still minimal at independence.

58. Calderón and Servén 2010.
59. Jedwab and Storeygard 2017.
60. Based on follow-up work by Jedwab and Storeygard (2018) for 39 African countries combining data on railways and roads with georeferenced data and estimates of trade-cost elasticities to distance.
61. Casaburi, Glennerster, and Suri 2013.
62. Ghani, Goswami, and Kerr 2016.
63. Raballand, Macchi, and Petracco 2010.
64. Sieber 1999.
65. Raballand et al. 2011.
66. In a survey of South African firms for a sample of 1,300 shipments to Durban and Maputo, Sequeira and Djankov (2014) show that the probability of a bribe and the amounts were much higher in Maputo, where documentation is processed in person rather than online. Sequeira (2016) estimates a sharp reduction in the probability and amounts of bribes paid following the 2008 tariff reduction of 5 percentage points between South Africa and Mozambique. Thus, the reduction in bribes paid to avoid paying high tariffs may, in part at least, explain the low response of traded quantities to trade liberalization in contexts of corruption and the low import elasticities to trade costs estimated in the literature, which do not take into account bribes.
67. Teravaninthorn and Raballand (2009) were the first to show systematically that logistics markets such as bilateral agreements and queuing systems rather than road conditions and road controls contributed most to vehicle operating costs. They showed that operating costs of trucking fleets were similar to those in Europe but that transport prices (the prices paid by users) were much higher. Balistreri et al. (2018) give supporting microsimulation evidence for SADC.
68. UNECA, AU, and African Development Bank 2018, ch. 8.
69. UNECA, AU, and African Development Bank 2018.
70. Of course, in today's globalized world, there is no such thing as a "small country market," as we have learned from Singapore's success. Every country's market is the world market. Regional integration helps largely on the supply/production side, where it can achieve economies of scale and attract investors. But on the demand side, no one would invest thinking only about a country's domestic market. They would locate production there mainly to export to regional and world's markets.
71. If the TFA is fully implemented, the WTO predicts an increase of access to foreign markets of 39 percent for developing countries and 60 percent for least developed countries, with potential gains of up to \$50 trillion annually for African exports (WTO 2015).
72. An expression coined by Baldwin (2006).
73. Del Prete, Giovannetti, and Marvasi 2017.
74. WEF 2013.
75. WEF 2013.
76. Most (44 of 47) WTO African countries have ratified, and 14 of 15 landlocked countries are signatories. Check the status: <http://www.tfafacility.org/ratifications>.
77. In a broader view, as reaffirmed in October 2013 by the AU governments, priorities through the TFA "include enhancing infrastructure and boosting productive and trade capacities, in addition to reducing transaction costs, barriers, incentivising the undertaking of reforms and improvements to the customs regulatory systems as well as boosting intra-African trade" (ICTSD 2017).
78. World Bank 2019.
79. Applying the mean estimate of Hummels and Schaur (2013) to the benchmark average estimates for the African Union in table 3.6.
80. These estimates are illustrative since part of the time spent in customs is likely to be higher for exports because comparative advantage is likely to be in agricultural products that require additional sanitary and phytosanitary-related controls at customs.
81. UNECA, AU, and African Development Bank 2018, p. 88.
82. Erasmus, Flatters, and Kirk 2006.
83. There are three categories of product-specific rules of origin. Changes in tariff classification impose the restriction that when a final good is produced using intermediates imported from outside the bloc, it should not belong to the same category as those intermediates. Regional value content takes several forms, including a minimum share of originating intermediates or a maximum share of nonoriginating intermediates. Technical requirements can take as many forms as imagination allows. Very often technical requirements are tailor-made to benefit narrow interests.
84. Product-specific rules of origin are numerous and hard to interpret. They are not available across the RECs, nor are data on the uptake of preferences, often referred to as preference utilization rates.

Preference utilization rates are available on a systematic basis only for Australia, Canada, the European Union, and the United States. High preference utilization rates usually indicate that preferences fulfill the objective of providing market access, while low ones are suggestive of restrictive rules of origin.

85. Keck and Lendle 2012.
86. The distribution of these indicator values and the model used to estimate the results in table 3.6 are described in a background paper.
87. In results not reported, estimates of time in customs are always greater for imports than exports. De Melo and Sorgho (forthcoming) report other simulations.
88. Other estimates of the gains from reducing time in customs are reported in de Melo and Wagner (2016). Controlling for many intervening factors, for the universe of exports of Uruguayan firms over 2002–11, Volpe Martincus, Carballo, and Grazianon (2015) estimate that a 10 percent reduction in median time spent in customs is associated, on average, with a 1.8 percent increase in the growth of firm-level exports.
89. Measured as equivalent variation, summed over private, public, and investment expenditures.
90. All dollar amounts are in 2014 prices and nominal exchange rates.
91. Hummels and Schaur 2013.
92. Note that Central Africa is a “composite” region that is based on less reliable data—though calibrated to the observed national accounts and UN-based trade statistics.
93. The aggregate numbers—particularly in the case of the first two scenarios focused on the standard trade distortions (tariffs and nontariff barriers)—mask the fact that some countries could witness losses in real income as the efficiency gains in removing the trade distortions can be overwhelmed by losses in the terms of trade that are typical in Armington-based trade models.
94. The government closure rule keeps real government expenditures constant. So, the fall in government real revenues under scenario 1 is an estimate of the increase in household taxes needed to keep government expenditures at their base level.

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