CHAPTER 4

REPOSITIONING AFRICA IN GLOBAL VALUE CHAINS AND FACILITATING TRADE IN INTERMEDIATES AND SERVICES
Global value chains (GVCs) are an important feature in today’s global economy. African countries show high participation in them, though at very low rungs of the ladder: that is, participation does not guarantee structural transformation. Africa needs to focus on improving its backward integration—the share of value added embedded in its country’s exports—expanding GVC linkages to other areas of the economy. Trade-integrated regions are more attractive to lead firms in GVCs, and hence intra-regional trade in processed goods via regional value chains (RVCs) is the first opportunity for African firms to seize.

Although intermediate products account for the bulk of Africa’s merchandise trade and represent its most dynamic component, Africa accounts for only 2–3 per cent of the global trade in intermediates, and its exports of intermediates remain dominated by mining products and resource-based manufactures. Despite its small size, intra-African trade in intermediates is far more diversified than the corresponding trade with the rest of the world. Yet, the scope for incipient emergence of RVCs, particularly in manufacturing, is largely untapped due to an array of structural and policy constraints. That Africa sources 88 per cent of its imported inputs from outside the region bears witness to its RVCs’ shallowness.

The service sector plays a key role in the competitiveness of manufacturing firms, represents a key source of value added that could help to diversify the economy, and affects the chances of countries adding value and climbing GVCs. Yet the strong growth of some service subsectors has not always translated into better services for local firms: for example, in many African countries, banks lend to large foreign mining projects but hold back credit from local SMEs. Services can also be an avenue for economic transformation, particularly for small countries and island states, as not all African countries can develop through manufacturing. Establishing services hubs and RVCs can help African countries exploit each other’s capabilities and boost competitiveness.

GVCS AND INDUSTRIALIZATION

Over the last few decades, transnational corporations have fragmented their production processes, allowing them to more efficiently exploit different countries’ comparative advantages along (regional, subsequently global) value chains, forming a global division of labour. They have retained the most profitable links, while outsourcing or offshoring others through regional and international production networks.

Global chains have further spurred international trade, particularly trade in intermediate goods, which now accounts for about half of global trade (OECD and WTO, 2013). Their rising share has raised the sensitivity of international trade to changes in gross domestic product (GDP) over time (i.e., an increase of global trade elasticity to global real GDP) (Freund, 2009). The boom of global trade in intermediates has also widened the spread between the pattern of international trade and the international process of value addition, because products assembled in a given country with intermediates imported from abroad embody only limited domestic value addition. The service sector now plays a fundamental role in adding value at each link along the supply chain, while foreign direct investment (FDI) helps drive international trade expansion.

Such an evolution in international trade brings about new opportunities, as well as challenges, to spur industrialization in Africa. On the positive side, the splintering of production processes allows firms to exploit more effectively various countries’ comparative advantages, outsourcing and offshoring activities along the value chain,
without the need for each country to develop a whole vertically integrated sector. At a time when real wages have climbed steeply in several key manufacturing powerhouses (notably China), this could turn out to be a blessing for Africa, endowed as it is with abundant and relatively cheap labour. The average monthly wage of a low-skilled Ethiopian factory worker, for instance, is about 25 per cent that of a comparable Chinese worker. Similar cost wedges create an incentive for Chinese firms to relocate some manufacturing activities in Ethiopia, even with productivity differentials, as confirmed by the growing investments by Chinese manufacturing firms in the country (Wonacott, 2014).

Deeper integration into the global market could allow African producers to reach more efficient production scale and could translate into cheaper access to production inputs, with ensuing competitiveness gains for downstream activities. Participation in GVCs also increases firms’ exposure to new technologies, tacit knowledge, and technical or managerial capabilities, fostering productivity gains, allowing firms to upgrade their activities and climb up the value chain. This process, however, is far from automatic.

On the negative side, there is a risk that the emerging global division of labour will lock in Africa’s specialization in primary commodities, without its gaining much from the last decade’s growth, which was characterized by a growing concentration of exports in primary products; that was spurred by FDI inflows predominantly directed towards extractive industries, which exported hard commodities but added little value (UNCTAD, 2013b). That is one of the most prevalent traits of Africa’s forward integration into GVCs.

Similarly, while greater competition benefits consumers, it can hurt producers. One example is provided by the difficulties of Africa’s textile and apparel industry, notably in countries such as Lesotho and Senegal, vis-à-vis its Asian competitors (Greenaway, 2009). (Here, the adverse effects on the industry-serving domestic markets was compounded when the Multifibre Arrangement expired in 2005, increasing competition for developed country markets.) From a social-welfare perspective, greater competition can lead to more efficient allocation of resources worldwide, but in the short and medium terms, it imposes heavy adjustment costs on import-competing sectors, possibly derailing efforts to promote economic diversification.

A few successes apart, where rapid economic growth and booming trade have supported incipient industrialization, the continent has garnered few gains from a booming decade of economic growth and trade for its structural transformation. Although access to imported intermediate products, particularly for manufacturing, has grown, it has failed to reverse the continent’s premature de-industrialization. Exports of resource-based intermediate goods have acquired over the last decade an even larger weight and remain the predominant form through which African countries enter global supply chains through forward linkages, as the region as a whole has moved towards an increasing concentration of its export bundle in a narrow range of mainly primary products (Ofa et al., 2012). In the last three years, for instance, African exports’ concentration index has exceeded the value of 0.4, which is more than three times the corresponding index for Latin America and Asia. In the same vein, in 2010–2012, Africa’s exports—mainly primary commodities—accounted for 82 per cent of Africa’s total exports, up from an already high 76 per cent only 10 years before. Enhanced domestic value addition remains largely elusive, especially in value chains characterized by high standards and captive governance structures (box 4.1).

Africa needs to focus on improving its backward integration, expanding GVC linkages to other areas of the economy.
BOX 4.1: HOLDING THE CHAIN

A crucial aspect in value chains is that developed country–led firms were outsourcing labour-intensive production stages to countries with low labour costs. These lead firms still play an important role by controlling and governing their value chains. The literature differentiates between “buyer-driven” and “producer-driven” value chains.

In industries whose production network is highly decentralized, as in labour-intensive consumer goods industries (agriculture, garments, footwear etc.), the value chain is buyer-driven. While barriers to entry are relatively low, producer’s opportunities to make profits are highly restricted through buyers in branded national markets. This means that these value chains are largely driven by the design, marketing and brand by the leading firms. Producer-driven chains are a common characteristic of capital- and technology-intensive industries such as automobiles and aircrafts, which have high barriers to entry.

Through further development of governance concepts to measure the complexity of the information between actors in the chain, Gereffi et al. (2005) identified five governance structures: markets, modular, relational, captive, and hierarchy. Most of the value chains in which African countries are participating in are characterized by a captive governance structure, where small suppliers depend on few large buyers, which allows the lead firm to control the value chain up to a high degree.

These asymmetries and the self-determination of product standards by the lead firm require closer cooperation of the government with the private sector to regulate the business behaviour in given chains. Gereffi et al. (2005) argued that improved standards, information technology and the capabilities of suppliers can shift the governance structure from captive and hierarchal towards relational, modular and market governance, which offers more opportunities for joining, and upgrading in, a value chain.

BOX 4.2: HOW TO MEASURE “PARTICIPATION” IN GVCS

Participation in value chains is quantified by three major indicators: backward integration, forward integration and the total participation rate, which is the sum of the other two. Backward integration refers to the share of imported value added that is embedded in a country’s exports and entails the country’s position within the value chain. Forward integration describes the exported domestic value added that is further exported by third countries. In other words, a country that has a high forward integration rate exports a high amount of value added, which is often the case for exports of raw materials. This relationship indicates that a high share of forward integration in total exports is due to the inability to process goods within the country and therefore, often negatively associated with a country’s development.

Using the UNCTAD EORA Database, GVC participation rates are calculated from the Value Added in Exports Matrix, which is obtained by the product of the diagonal matrix of direct value added by sector and country, the Leontief inverse and the diagonal matrix of total exports by country and sector. The backward integration perspective refers to the share of foreign value added in a country’s exports. The rate is calculated from the non-diagonal column sum divided by total exports in value added. The forward integration perspective is the exported domestic value added that is further exported by third countries, and the rate is obtained by the non-diagonal row sum. The diagonal of this matrix is the domestic value added that is embedded in total value-added exports (UNCTAD, 2013c).
STRENGTHENING PARTICIPATION IN VALUE CHAINS

Developing countries integrate into global trade mainly through GVCs, but joining them requires heavy human, financial and policy investments. And most developing countries with high participation (box 4.2) are at the lowest rung of GVCs, mainly due to technical constraints and control of the production chain by the lead firm.

AFRICAN COUNTRIES SHOW HIGH PARTICIPATION IN GVCS, THOUGH AT LOW RUNGS

Africa is still an insignificant player in global trade in value added: in 2011, it was only 2.2 per cent, although this was up from 1.4 per cent in 1995. Despite Europe’s and North America’s decreasing shares in total value added, these two regions and East Asia accounted for 79 per cent of global trade in value added.

Yet, Africa is a little more integrated than this number suggests, as it participates in GVCs mainly at their lower stages (and its share of services may be higher than current data suggest, too—box 4.7 below). The bulk of participation still comes from a high degree of forward integration driven by exports of raw materials.

On a sectoral level, the manufacturing of transport equipment shows the highest level of integration with GVCs (figure 4.1). This is driven by large...

FIGURE 4.1: GVC PARTICIPATION BY SECTOR, BACKWARD AND FORWARD INTEGRATION, 2011

Source: Calculations based on UNCTAD EORA Database.
international car companies in Morocco and South Africa (AfDB, OECD and UNDP, 2014). Toyota is South Africa’s largest vehicle producer (UNCTAD, 2010).

Still, the Economic Report on Africa 2013 argued that the continent is not using its full potential for joining GVCs. For instance, Cameroon, Cote d’Ivoire, Ghana and Nigeria are leading exporters of cocoa beans but add very little value. Malaysia, Brazil and Mexico have achieved backward and forward integration in this sector, as a result of industrial policies and domestic capabilities. For instance, Brazil supported the soyabean as well as cocoa production by input subsidies, a generous credit policy and modernization of farming practices. In addition, it set export taxes and quotas to encourage exports in value added (ECA and AUC, 2013). An expansion in these labour-intensive industries also has generated new jobs that brought a social upgrade for poorer households rather than just an economic upgrade (Barrientos et al., 2011).

One way to move up from the bottom rungs is to become better embedded in RVCs, which offer a platform for learning and making economies of scale.

**REGIONAL CHAINS ARE A MUCH-NEEDED STEP TOWARDS GLOBAL CHAINS**

Continent-wide RVCs are easier to organize and offer a better platform for economies of scale than global chains. Their administrative burden for rules of origin and traceability of products is also reduced, making them more attractive to the leading firms in value chains (Cattaneo, 2013).

In Africa, however, foreign value added that comes from within Africa as a share of total foreign value added is only 9.4 per cent, which is very low among other regions around the world. Intra-regional

---

**FIGURE 4.2: COUNTRY PARTICIPATION IN RVCS, BACKWARD AND FORWARD INTEGRATION, 2011**

Source: Calculations based on UNCTAD EORA Database.
foreign value added in Asia, for example, is 39 per cent. Furthermore, the share of imported value added from Africa in exports to Africa (regional backward integration) is only 1.8 per cent, against 18 per cent in Europe and 7 per cent in Asia. Backward integration is generally higher than forward integration in Africa (figure 4.2); total participation in RVCs is low and highly variable.

While Algeria, Angola, Egypt, Nigeria, and South Africa are the drivers of regional trade in value added in absolute terms, these countries import, proportionally, very little value added from other African countries. In Egypt, for example, only 0.8 per cent of its value-added exports to Africa are imported from Africa, also shown in a low share of African total trade of intermediates sourced and sold within Africa compared with other African countries. Its forward integration is even lower at 0.3 per cent, which means that all the value added is processed within Egypt and then exported as final goods to the region.

Conversely, Swaziland, Zimbabwe, Namibia, Botswana and Zambia contribute little trade in value added in absolute terms, but the share of backward integration in their total exports to the region is high (see figure 4.2). So while producers in, say, Botswana find it hard to compete with the more developed production base of SADC neighbours, their large markets provide export opportunities, which will only be grabbed when productive capacity, particularly human, is upgraded, taking the country further up the value chain. Relying on regional integration given its small domestic market, Botswana is a prime example of a country whose growth and industrialization need to be export driven via a regional strategy, letting it find its niche among regional producers.

**FIGURE 4.3: PARTICIPATION IN RVCS, BACKWARD INTEGRATION, 2011**

[Bar chart showing regional backward integration in % of total exports and foreign value added from within the region embedded in exports to the region in '000 USD.]
Within Africa, Southern Africa—followed by East Africa—is the most backward-integrated (figure 4.3), although their regional production networks are still poor, as indicated by their low shares of imported value added from the region in total exports to the region. Negotiations for the Tripartite Free Trade Area (Tripartite FTA) have to not only harmonize trade policies among member states but also establish industrial linkages.

In terms of sectors, manufacturing—especially that of transport equipment—is a key driver of intra-African backward integration (figure 4.4). Petroleum, chemical and non-metallic mineral products make up the bulk of regional trade in value added, with one of the highest shares of imported value added from African countries in total exports across sectors. This is a strong justification for developing a subregional petrochemical cluster, as in the Intergovernmental Authority on Development (IGAD) region.

Trade in value added in food and beverages and in textiles and wearing apparel also shows relatively high backward integration, although the absolute amounts are low. Agriculture is also untapped for value-added trade, but its RVC offers a much higher potential for inclusive growth than the countries’ participation in GVCs. And, despite its large share of imported intermediates sourced from Africa, mining and quarrying’s share of foreign value added from Africa is still very low; but regional mining has seen some movement in the Africa Mining Vision on harmonizing policies, laws and regulations nationally and in the regional economic communities (RECs) of SADC, ECOWAS, West African Economic and Monetary Union (Union Economique et Monétaire Ouest Africaine) (WAEMU/UEMOA) and EAC (Ramdoo, 2014), as has the leather sector in the Common Market for Eastern and Southern Africa (COMESA) (box 4.3).

**FIGURE 4.4: CONTINENTAL VALUE CHAINS BY SECTOR IN 2011**

![Graph](image-url)

Source: Calculations based on UNCTAD EORA Database.
BOX 4.3: TAKING STOCK OF COMESA’S LEATHER VALUE CHAIN

During the 17th Summit of the COMESA Council of Ministers in February 2014 in Kinshasa, the Democratic Republic of Congo, ministers underscored the importance of commodity-based industrialization and applauded the development of industrial clusters and value addition for products from the region. (COMESA has 19 African member countries with a population of about 450 million and a GDP of over $500 billion). In partnership with the International Trade Centre, COMESA developed a leather strategy to increase value-added products rather than exporting raw materials.

Approved in June 2014 in Lilongwe, Malawi, the strategy fits within the COMESA Medium Term Strategic Plan and the Comprehensive African Agricultural Development Program (CAADP). It covers from pre- to post-slaughter production of high-quality hides and skins as well as finished products like foot wear, bags and leather garments, among others. The leather strategy serves to address key issues in quality of leather products such as streamlining marketing systems, access to affordable finance for all value chain actors, strengthening support institutions and creating a viable policy environment for the leather sector within the region.

The value chain runs from collection of hides and skins, to transformation into leather, to tanning and then to manufacture of leather products. The skins or hides and finished leather products are marketed and sold by either retailing SMEs or factories.

Bodies like the COMESA Leather and Leather Products Institute (LLPI) in Ethiopia, export promotion bureaus, and regulatory bodies such as national bureaus of standards and animal health services have offered capacity building, trade promotion and quality assurance in the leather sector. Customs authorities enforce trade policies to regulate cross-border trade of skins or hides and leather products. Banks (offering affordable credit to value chain actors) and transport companies (which manage logistics such as transport and storage) play their part too. The LLPI mobilizes stakeholders using the “triple helix” approach—the public and private sectors as well as academia and research bodies—for interventions along the links of the value chain.

COMESA’s leather exports to the world increased by 50 per cent from $282 million in 2008 to $587 million in 2013, with the value-added leather rising from $29.9 million in 2009 to $49.7 million in 2013, pointing to COMESA’s input.

Source: COMESA Secretariat: information provided by Rachael Nsubuga and Benedict Musengele (2014).

The chance to join a value chain and benefit from it depends heavily on the chain’s structure, on a firm’s access to imports and services, and on its production capabilities. Agricultural value chains put into sharp relief the fact that local and regional chains provide (some) economies of scale and are far less knowledge-intensive than global chains.

THE DEVELOPMENT AND PROMOTION OF LOCAL AND REGIONAL AGRO-FOOD CHAINS ARE VERY PROMISING AND LUCRATIVE AGRO-BUSINESS VENTURES

The agro-food sector is highly concentrated worldwide and remotely controlled (Food and WaterWatch, 2010) through continued cross-consolidation by large foreign-owned global food giants such as Nestle, Coca-Cola, Cargill, Unilever, Archer-Daniels Midland Company, Dole Food Company and Danone, to name a few (table 4.1). In this sector, the most profitable value chains segments are not open for penetration for every newcomer. The emerging African agro-food marketplace is no exception. As can be noted from Forbes’ list of the world’s biggest public companies (Forbes, 2014), global value chains are dominated by foreign-owned companies with unparalleled strength in terms of accumulated assets and value generation. A closer review of the wealthiest global companies reveals only one food company that globally ranks 11th, 45th, 63rd and 196th in terms of market value, profit, sales and assets: Nestle. A further look at the list of the top 100 food and beverage companies confirms the rise of several food companies, such as Nestle, Cargill, Cola and even cooperatives-based operators such as Fonterra in the world agro-food
processing industry. This underscores the strategic role of agriculture, value chains and agro-industrial development, out of which massive wealth and jobs can be created through specialization, diversification and smart investments in strategic commodity value chains and emerging markets. In African context, these large and diversified global companies have been very successful in taking advantage of lax domestic legislation to increase their grips over several identified lucrative regional value chains segments across Africa. Good cases in point are the continued penetration through strategic alliance arrangements, increasing cross-control of shareholdings or agriculture-related operations of several once locally state-owned, Africa-based or -grown food companies such as SIFCA (http://www.groupesifca.com) and OLAM (http://www.olamgroup.com) by food giants such as CARGIL, Barry Callebaut, Wilmar International, Danone and Unilever, to name a few.

Despite progress made in recent years in trade

### TABLE 4.1: LIST OF THE TOP 20 GLOBAL FOOD AND BEVERAGE COMPANIES IN THE WORLD, VALUE IN BILLIONS (B)

<table>
<thead>
<tr>
<th>Rank food processing industries</th>
<th>Rank all industries</th>
<th>Company</th>
<th>Country</th>
<th>Sales ($B)</th>
<th>Profits ($B)</th>
<th>Assets ($B)</th>
<th>Market Value ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>36</td>
<td>Nestle</td>
<td>Switzerland</td>
<td>$99.40</td>
<td>$10.80</td>
<td>$135.40</td>
<td>$239.60</td>
</tr>
<tr>
<td>2</td>
<td>110</td>
<td>Unilever</td>
<td>Netherlands</td>
<td>$66.10</td>
<td>$6.40</td>
<td>$62.70</td>
<td>$124.50</td>
</tr>
<tr>
<td>3</td>
<td>148</td>
<td>Mondelēz International</td>
<td>United States</td>
<td>$35.30</td>
<td>$3.90</td>
<td>$72.60</td>
<td>$59.20</td>
</tr>
<tr>
<td>4</td>
<td>242</td>
<td>Danone</td>
<td>France</td>
<td>$28.30</td>
<td>$1.90</td>
<td>$42.60</td>
<td>$41.80</td>
</tr>
<tr>
<td>5</td>
<td>243</td>
<td>Archer Daniels Midland</td>
<td>United States</td>
<td>$89.70</td>
<td>$1.30</td>
<td>$43.80</td>
<td>$28.50</td>
</tr>
<tr>
<td>6</td>
<td>316</td>
<td>Wilmar International</td>
<td>Singapore</td>
<td>$44.10</td>
<td>$1.30</td>
<td>$46.60</td>
<td>$17.70</td>
</tr>
<tr>
<td>7</td>
<td>347</td>
<td>Kraft Foods Group</td>
<td>United States</td>
<td>$18.30</td>
<td>$2.70</td>
<td>$23.10</td>
<td>$33.50</td>
</tr>
<tr>
<td>8</td>
<td>379</td>
<td>General Mills</td>
<td>United States</td>
<td>$18</td>
<td>$1.80</td>
<td>$22.90</td>
<td>$31.80</td>
</tr>
<tr>
<td>9</td>
<td>465</td>
<td>Associated British Foods</td>
<td>United Kingdom</td>
<td>$20.80</td>
<td>$0.90</td>
<td>$16.80</td>
<td>$36.70</td>
</tr>
<tr>
<td>10</td>
<td>508</td>
<td>Kellogg</td>
<td>United States</td>
<td>$14.80</td>
<td>$1.80</td>
<td>$15.50</td>
<td>$22.50</td>
</tr>
<tr>
<td>11</td>
<td>593</td>
<td>ConAgraFoods</td>
<td>United States</td>
<td>$17.90</td>
<td>$0.80</td>
<td>$20.40</td>
<td>$13</td>
</tr>
<tr>
<td>12</td>
<td>611</td>
<td>TysonFoods</td>
<td>United States</td>
<td>$34.80</td>
<td>$0.90</td>
<td>$11.80</td>
<td>$14.80</td>
</tr>
<tr>
<td>13</td>
<td>637</td>
<td>JBS</td>
<td>Brazil</td>
<td>$43</td>
<td>$0.40</td>
<td>$29.10</td>
<td>$9.60</td>
</tr>
<tr>
<td>14</td>
<td>751</td>
<td>BRF-BrasilFoods</td>
<td>Brazil</td>
<td>$14.10</td>
<td>$0.50</td>
<td>$13.70</td>
<td>$17.50</td>
</tr>
<tr>
<td>15</td>
<td>759</td>
<td>Bunge</td>
<td>United States</td>
<td>$61.40</td>
<td>$0.20</td>
<td>$26.80</td>
<td>$11.70</td>
</tr>
<tr>
<td>16</td>
<td>902</td>
<td>Hershey</td>
<td>United States</td>
<td>$7.10</td>
<td>$0.80</td>
<td>$5.40</td>
<td>$23.30</td>
</tr>
<tr>
<td>17</td>
<td>956</td>
<td>Uni-President</td>
<td>Taiwan</td>
<td>$14.50</td>
<td>$0.50</td>
<td>$12.40</td>
<td>$8.80</td>
</tr>
<tr>
<td>18</td>
<td>1027</td>
<td>GrupoBimbo</td>
<td>Mexico</td>
<td>$13.80</td>
<td>$0.30</td>
<td>$10.30</td>
<td>$12.80</td>
</tr>
<tr>
<td>19</td>
<td>1039</td>
<td>Tingyi Holding</td>
<td>China</td>
<td>$10.90</td>
<td>$0.40</td>
<td>$8.40</td>
<td>$16.20</td>
</tr>
<tr>
<td>20</td>
<td>1054</td>
<td>Henan Shuanghui Investment</td>
<td>China</td>
<td>$7.30</td>
<td>$0.60</td>
<td>$3.30</td>
<td>$14</td>
</tr>
</tbody>
</table>

liberalization fronts including tariff levels in intra-African agricultural trade, high-entry barriers still impede small farmers from participating in regional food trade. This is due to observed trends in consolidation of most profitable agro-food segments or firms fuelled by rising agro-business growth opportunities, mostly captured, as can be seen, by transnational firms (table 4.1) operating in several lucrative regional food, fibre and beverage value chains within and outside Africa (AUC, 2014).

Access to regional markets and most importantly access to critical agro-inputs and services such as technology, logistics and capital are lacking and unevenly skewed at the expense of small farmers, so as to suggest a need for an affirmative agenda to effectively level the African agro-business playing field. Beyond the companies controlling the products market as listed in table 4.1, it is worth mentioning that the key inputs markets (fertilizers, seeds, tractors etc.) are also controlled by global food companies such as John Deere and Monsanto, to mention a few, making it difficult for small holders to access agro-inputs at affordable prices. A case in point is Nigeria, where, despite the fact that agriculture accounts for about 23 per cent of GDP (now estimated at $ 510 billion, 2013), only 1.4 per cent of loans from the banking sector is allocated to the sector. GDP growth has been in the order of 7 per cent each year in the past 10 years. But the largest economy of Africa has missed much of its potential to become a natural granary of Africa because of insufficient support provided to its small producers, whose productivity is among the lowest in the world due to lack of access to modern inputs and also the lucrative value chains segments captured across the country by several established global food giants.

Indeed, African governments have failed to successfully intervene in global and regional value chains, despite having on paper all it takes to transform African countries collectively into a net world exporter in food, fibre, beverages and critical agro-inputs in the context of an increasingly food-insecure world. A good case in point is the status of the maize value chains in Benin, where an ongoing ECA study on food value chains shows that moving up the value chain is highly profitable for small family farms but missed due to insufficient transformative interventions, including branding and local content compliance in the sector to help small farmers move up (table 4.2).

The findings also suggest that maize processing in an improved maize pounder are highly financially profitable and that Benin has a comparative advantage in processing maize in this way. These prospects are hampered by several constraints that must be addressed in order to see efficiency improve in Benin maize value chains: poor access to inputs and labour, irregularity of supply, use of nonstandard weights and measures, lack of proper storage, limited availability of market information and insufficient access to finance according to the ECA study. In the meantime, the gains in most lucrative food value chains segments are captured and controlled by the established global food giants due to many of the bottlenecks that small producers faced, making it difficult for them to enter these chains without a clear affirmative transformative agenda for the poor.

A review of the evidence from the field also suggests that the profitability of maize production highly differs across regions and production systems. As in Benin, small scale producers across Africa should pay attention to industrial rural clustering and specialization as they consolidate their input and output operations across markets while moving up along food value chains segment in order to successfully penetrate and capture a fair share of the wealth created in local and regional value chains. To make this happen and to better assist small-scale value chains operators, African governments should scale up public spending on agriculture infrastructure and technologies and intensify efforts to encourage local and regional value chains’ development and agro-industries’ clustering. Finally, governments should intervene to encourage re-skilling and re-tooling of the most vulnerable value chains actors while strongly engaging the global as well as local private sector transformational agents. This will effectively contribute to the re-branding of products of African
origin in global food markets, to help Africa capture a greater share of the value generated out of its products and the hard toil of its small producers. With the rise of several locally home-grown African brands across Africa (Meyer, 2011), there is urgent need to see African governments intervene to prevent emerging success stories of the indigenous food sector be “financially cannibalized and owned” across Africa by the most financially endowed firms in the food and retail industry.

The most recent case in point is the world’s biggest yoghurt business—Danone—which with 40 per cent stake of Brookside Dairy Limited, East Africa’s largest milk company, is set to expand its reach in Africa. This acquisition gives Danone access to over 140,000 milk farms across the East African region, where it will collect and processes 750,000 litres of milk per day. It is perhaps worth mentioning that Brookside enjoys the position as a market leader with an annual revenue of $176 million in 2013. Beyond the acquisition of Kenya’s Brookside Dairy, in early November 2014, Danone has also set plans to raise its stake in Moroccan dairy company Centrale Laitiere by 20 percentage points to more than 90 per cent at cost of 278 million euros ($339 million). Centrale Laitiere holds a 60 per cent share of the Moroccan market, boasting a network of 38 distribution centres and some 75,000 sales locations, and around 500 million euros in annual sales. In 2013, Danone bought a 49 per cent interest in frozen dairy products company Fan Milk in West Africa. This company had a broad customer base in six West African countries, including Nigeria and Ghana, while Brookside is strong in such eastern nations as Kenya, Uganda and Tanzania. By enhancing efforts with three companies in the northern, western and eastern regions of Africa,

### TABLE 4.2: PRODUCTION COST AND PROFITABILITY ALONG THE MAIZE VALUE CHAIN SEGMENTS IN BENIN IN 2013–2104

<table>
<thead>
<tr>
<th>Variables</th>
<th>Farm-Gate Product ($/ha)</th>
<th>Collector/Assembler ($/Kg)</th>
<th>Wholesaler ($/Kg)</th>
<th>Retailer ($/Kg)</th>
<th>Processed Raw Material (Gari) ($/Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield (tons/ha)</td>
<td>1350.18</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Unit price ($/Kg)</td>
<td>0.326</td>
<td>0.279</td>
<td>0.342</td>
<td>0.316</td>
<td>0.413</td>
</tr>
<tr>
<td>Gross Revenue</td>
<td>441.418</td>
<td>0.279</td>
<td>0.342</td>
<td>0.316</td>
<td>0.413</td>
</tr>
<tr>
<td>Production Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crop Purchase</td>
<td>0.249</td>
<td></td>
<td>0.275</td>
<td>0.278</td>
<td>0.27</td>
</tr>
<tr>
<td>Other Variable Costs</td>
<td>179.875</td>
<td>0.027</td>
<td>0.025</td>
<td>0.019</td>
<td>0.115</td>
</tr>
<tr>
<td>Investment Costs (equipment amortization)</td>
<td>48.636</td>
<td>0.002</td>
<td>0.003</td>
<td>0.003</td>
<td>0.008</td>
</tr>
<tr>
<td>Total Costs</td>
<td>228.512</td>
<td>0.279</td>
<td>0.303</td>
<td>0.301</td>
<td>0.394</td>
</tr>
<tr>
<td>Gross Margin</td>
<td>261.543</td>
<td>0.002</td>
<td>0.042</td>
<td>0.018</td>
<td>0.028</td>
</tr>
<tr>
<td>Net Profit</td>
<td>212.906</td>
<td>−0.0003</td>
<td>0.038</td>
<td>0.014</td>
<td>0.019</td>
</tr>
<tr>
<td>Rate of return</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross margin/Total Variable Costs</td>
<td>1.454</td>
<td>0.007</td>
<td>0.140</td>
<td>0.061</td>
<td>0.072</td>
</tr>
<tr>
<td>Net Profit/Total Costs</td>
<td>0.932</td>
<td>−0.001</td>
<td>0.128</td>
<td>0.047</td>
<td>0.049</td>
</tr>
</tbody>
</table>

Source: ECA’s upcoming baseline studies on regional value chains integration 2013–2104. 
Note: $1 = 517.17 Fcfa. 
Gari: is a granular flour made from fermented, gelatinized fresh cassava tubers.
Danone—like many established value chain operators including traditional as well as newly arriving food giants operating across Africa—hopes to increase its presence and profit-making grip on the continent. With the ongoing observed growth strategies adopted by almost all the most admired and wealthiest firms in the food industry and beyond, transnational foreign-owned firms in the longer run are not far from taking full control of almost all profit-making opportunities at the expense of the dominant and weak African smallholder agriculture, totally crowding out along the way the emergence of indigenous-owned food giants or branded agro-businesses.

In sum, Africa’s small-scale farmers are not yet well integrated horizontally and vertically along the global strategic commodities and food value chains, indicating the need for a clear regulatory policy framework that is conducive for the emergence of locally owned and branded food industries and products operating hand in hand in a mutually reinforcing manner with foreign-owned global food giants. For this to happen, African governments and agro-business captains must intervene now through public-private partnerships, investing together in a smart manner to establish rural industrial clusters under a sustained commodity-based industrialization strategy to bring about small farmers’ shareholdings across Africa. The rural community and farmer-owned industrial cluster model is an imperative and a welcome move to make local and regional value chains development a mutually rewarding endeavour for all participants, including the weakest. There is still room for great optimism considering the success story of the young Senegal-based food company—Patisen (http://www.patisen.com)—which with its brand ADJA defeated the 150-year-old world food leader, Nestle, in the MAGGI Cube domestic market value chain segment (http://www.jeuneafrique.com/Article/ARTJAJA2613ip094.xml/) despite the limited resources it has at hand, compared to known muscles of the the global food industry leader.

The cotton value chain is less dominated by a few leading firms. Therefore, the poor performance of African countries in exports in cotton fabrics is due to a low rate of technological innovation and poor access to inputs, including financial services, as well as a negative image of African cotton on the global market (ITC, 2013a). Successful upgrading had been realized in Zimbabwe by market liberalization in combination with a management system of quality improvements and control. In contrast, liberalization in Tanzania in the 1990s resulted in a large number of domestic market entrants, fostering price competition and downgrading processes due to lack of organization in the sector (Ponte, 2009).

Trade in value added in services is still largely untapped, and services are being incorporated into RECs’ trade agreements (and see later this chapter). Low backward integration in financial intermediation, for example, is a major constraint, and linkages need to be tightened. The SADC—whose share of services in regional value-added trade within Southern and East Africa is around 8 per cent and 6 per cent, or much higher than in other African regions—is drafting a Protocol on Trade in Services, covering, among others, finance, tourism and construction. (Policy suggestions for RVCs in services are discussed below.)

**INTRA-AFRICAN TRADE IN INTERMEDIATES OFFERS BROADER SCOPE FOR REGIONAL CHAINS TO EMERGE**

Poorly diversified and similar production structures across Africa constrain viable production networks. The limited size of the continental market—intra-African exports of intermediates averaged $43 billion in 2010–2012, a small share of the $313 billion to the rest of the world—represents additional constraints, especially in light of the fragmented nature of such a market.

However, over the last decade, intra-African intermediate exports have displayed a stronger dynamism than its intermediate exports to the rest
of the world, partly because intra-African trade—more diversified—offers broader scope for trading manufacturing intermediates: in 2010–2012, Africa absorbed 20 per cent of its intermediate exports in manufacturing, against 10 per cent in agriculture and only 6 per cent in mining and quarrying.

A complementary way to appreciate the radically different patterns of intermediates’ ties to value chains at regional and global levels comes from figure 4.5, which juxtaposes the composition (and corresponding values) of intra-African exports of intermediates with those to the rest of the world. Half of Africa’s intermediate exports to the rest of the world were accounted for by mining and quarrying, and manufacturing intermediates represented more than two thirds of intra-African exports of intermediates with those to the rest of the world. The intra-African market displays a few signs of dynamism and of incipient emergence of RVCs through trade in manufacturing intermediates. Countries such as Egypt, Ghana, Kenya, Nigeria, South Africa, Tanzania and Zambia have recorded gains in their exports of manufacturing inputs within Africa, building to some extent forward linkages with manufacturing firms within the continent. If regional integration records decisive progress, intra-African trade could be a springboard to wider economic diversification and industrialization.

**COUNTRIES HAVE SHOWN THEIR DETERMINATION TO JOIN VALUE CHAINS**

The best performing countries in terms of GVCs’ participation in 2011 and its growth rate since 1995 are Zimbabwe (71 per cent of total exports, 2011) and Tanzania (67 per cent) (figure 4.6). As seen, Zimbabwe is highly integrated into its RVCs.

### FIGURE 4.5: AFRICA’S EXPORTS OF INTERMEDIATES BY MAIN SECTOR AND DESTINATION

<table>
<thead>
<tr>
<th>2000-2002</th>
<th>To the rest of the world</th>
<th>Within Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Hunting, Forestry and Fishing</td>
<td>$4,964</td>
<td>$4,964</td>
</tr>
<tr>
<td>Other Activities</td>
<td>$7</td>
<td>$7</td>
</tr>
<tr>
<td>Mining and Quarrying</td>
<td>$41,984</td>
<td>$41,984</td>
</tr>
<tr>
<td>Total Manufacturing</td>
<td>$173,407</td>
<td>$173,407</td>
</tr>
<tr>
<td>Other Activities</td>
<td>$173,407</td>
<td>$173,407</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2010-2012</th>
<th>To the rest of the world</th>
<th>Within Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Hunting, Forestry and Fishing</td>
<td>$28,888</td>
<td>$28,888</td>
</tr>
<tr>
<td>Other Activities</td>
<td>$115</td>
<td>$115</td>
</tr>
<tr>
<td>Mining and Quarrying</td>
<td>$5,404</td>
<td>$5,404</td>
</tr>
<tr>
<td>Total Manufacturing</td>
<td>$115,416</td>
<td>$115,416</td>
</tr>
<tr>
<td>Other Activities</td>
<td>$115,416</td>
<td>$115,416</td>
</tr>
</tbody>
</table>

Source: Calculations based on OECD Bilateral Trade Database by Industry and End-Use Category (ISIC Rev. 3).
due to infant-industry protection from outside the region and regional integration efforts. Similar to Zimbabwe, Swaziland is highly integrated into GVCs. Especially for small landlocked countries, greater regional market access allows larger participation in value chains and offers opportunities to increase their production capacity. While most countries experienced a moderate, mostly positive change in GVCs' participation, Tanzania's integration has risen dramatically from 24 per cent of total exports in 1995, which was one of the lowest at this time. However, Tanzania managed to upgrade on a broad sectoral level and achieved the largest increase in backward integration.

While Tanzania experienced decreasing manufacturing value added during the SAP era, the Sustainable Industrial Development Policy, implemented in 1997, boosted growth in manufacturing value added. However, the share of trade in services has stayed quite low, with travel being the biggest service sub-sector. The challenge for Tanzania is to develop key services for industrialization and structural transformation such as communication and financial services. In terms of trade policy, the country is a member of the well-integrated COMESA and EAC. Tanzania has made significant progress in improving its competitiveness and its business environment. Two major previous concerns, the inefficiency of the Dar es Salaam Port and excessive roadblocks, have been addressed (Tanzania country case study). Furthermore, the Department of Research and Development under the Ministry of Trade and Industry, through technical support and capacity building, helps industries to reduce production costs and meet international product standards. The emphasis on value addition of exports inevitably entails that Tanzania's trade policy advocates for promotion of industrial policies, with regional integration at the heart of both policies.
Although roughly 90 per cent of the African countries increased backward integration to GVCs between 1995 and 2011, there still remain many constraints in moving up the value chain. Take, for example, Mozambique, whose mining sector is highly integrated through the Mozal mega-project but poorly linked to other areas of the economy. Only 13 firms accounted for three quarters of the country’s exports in 2013. In the four main exporting industries—aluminium, electricity, ores and gas—a single firm in each produced over half that sector’s total exports (Sutton, 2014). Local SMEs often struggle to meet the quality standards to supply the mining sector with the required quality of inputs. Although the national quality control body (INOC) sets quality standards, these are not binding on most industries.

Manufacturing of transport equipment plays an important role in Morocco, whose government has recently been playing a more proactive role in accelerating growth in promising sectors. Among others, the “National Pact for Industrial Emergence” targeted the automotive and the aeronautic industry, aiming at creating a stable industrial base and moving up in the value chains. Morocco has attracted the Canadian aeronautics and train-building company Bombardier and the French car constructor Renault, increasing the country’s participation in backward integration. However, the reliance on one key player in each sector is a concern. The network of SMEs is very poor, and this reduces the spillovers of increasing participation in GVCs to other areas of the economy and reduces opportunities for inclusive growth.

Southern Africa, as seen (figure 4.3), is the region most integrated into GVCs. North Africa and West Africa participate little in GVCs, and showed the lowest increase in backward integration between 1995 and 2011. This backs up the argument that trade-integrated regions are more attractive to leading firms, and that participation in RVCs should be a priority. Moreover, most African countries are in value chains controlled by their leading firms (see box 4.1).

Apart from this governance structure, structural factors such as the size of the market, as well as geographical location, impede GVC entry, though national policies removing barriers to trade can go a long way to improve the odds of joining (or upgrading in) a GVC.

Roughly 90 per cent of the African countries increased backward integration to GVCs between 1995 and 2011, there still remain many constraints in moving up the value chain
THE PERSISTENCE OF BARRIERS TO TRADE

African economies’ growing participation in regional and global supply chains has not jolted them into structural transformation, as most of them are stuck in the low end of the supply chain, with exports embodying little value addition. As seen above, the terms of integration of African producers into the regional and global market are shaped by a wide array of elements, ranging from factor endowments to skill and technology acquisition, as well as trade and industrial policy frameworks. Their overlapping effects determine the ease with which certain activities can successfully be located in a given country, and producers can join and then ascend a GVC.

Splintering production processes have actually increased the relevance of establishing a conducive policy framework, in so far as countries compete more fiercely to attract the localization of shorter production phases. Thus harnessing trade for industrialization requires a careful assessment of impediments weighing on African producers’ competitiveness, particularly for manufactured goods, which require longer value chains.

At a conceptual level, it is helpful to group barriers to trade into two broad categories: structural supply-side constraints, stemming from long-standing features of the economy, and trade policy constraints, which are more directly linked to the prevailing trade policy framework.¹

KEY SUPPLY-SIDE CONSTRAINTS

SIMILAR STRUCTURES OF PRODUCTION ACROSS AFRICAN ECONOMIES

This fetters intra-regional trade, especially because low levels of industrialization typically constrain the scope for intra-industry trade. This is shown by the merchandise trade complementarity index (table 4.3) which assesses how the structure of a country’s exports matches that of its imports from a potential partner.² After Oceania, Africa is one of the regions with the lowest index, reflecting a poor match between the relative composition of exports and imports at 3-digit SITC, Rev. 3 level (Annex 4.1).

<table>
<thead>
<tr>
<th>Importer-exporter</th>
<th>Developing Africa</th>
<th>Developing America</th>
<th>Developing Asia</th>
<th>Developing Oceania</th>
<th>Transition economies</th>
<th>Developed economies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing Africa</td>
<td>0.35</td>
<td>0.31</td>
<td>0.46</td>
<td>0.27</td>
<td>0.34</td>
<td>0.44</td>
</tr>
<tr>
<td>Developing America</td>
<td>0.58</td>
<td>0.58</td>
<td>0.63</td>
<td>0.47</td>
<td>0.59</td>
<td>0.67</td>
</tr>
<tr>
<td>Developing Asia</td>
<td>0.58</td>
<td>0.65</td>
<td>0.77</td>
<td>0.47</td>
<td>0.58</td>
<td>0.73</td>
</tr>
<tr>
<td>Developing Oceania</td>
<td>0.24</td>
<td>0.19</td>
<td>0.31</td>
<td>0.20</td>
<td>0.20</td>
<td>0.30</td>
</tr>
<tr>
<td>Transition economies</td>
<td>0.44</td>
<td>0.39</td>
<td>0.46</td>
<td>0.39</td>
<td>0.35</td>
<td>0.45</td>
</tr>
<tr>
<td>Developed economies</td>
<td>0.72</td>
<td>0.78</td>
<td>0.69</td>
<td>0.58</td>
<td>0.77</td>
<td>0.81</td>
</tr>
</tbody>
</table>


Note: Because the index is calculated at regional level for all pairs of importer-exporter, the values in red on the diagonal should be interpreted as complementarities of intra-regional trade patterns.
Red tape and cumbersome regulatory frameworks stifle the emergence—and often the formalization—of firms, contributing to the so-called “missing middle”, or the few medium-sized enterprises in the typical African productive structure. Although countries like Burkina Faso, Mali and Rwanda have adopted reforms to improve the business environment and trim administrative requirements, more needs to be done.

**POOR INFRASTRUCTURE AND LOGISTICS**

This deficiency weighs heavily on transport costs and therefore on a country’s competitiveness. Moreover, by affecting the pass-through of world market prices, it dampens the supply response, notably for rural small-holder farmers whose link to the market is often via intermediaries. The infrastructure deficit may be lowering the continent’s per capita economic growth by 2 percentage points a year, taking down firms’ productivity by as much as 40 per cent (Foster and Briceño-Garmendia, 2010; Ramachandran, Gelb and Shah, 2009).

The observation is that gains in this area can yield high returns (for example, Hoekman et al., 2011; Portugal-Peretz et al., 2012). Improving road quality in the ECOWAS region to the level of South Africa would boost intra-ECOWAS trade by more than 5 per cent (from 2012’s level) (Akpan, 2014).

Market failures in basic infrastructure, ranging from large fixed costs to spillover effects, are well known. Alongside the high potential returns from investments in these “social overheads”, they make a strong case for using public investment to crowd in private resources. While expansionary fiscal policies should not undermine macroeconomic management, they appear to be particularly promising for some development corridors, as in the Maputo development corridor and the Central Corridor (Bowland and Otto, 2012; Lisinge and Soteri, 2014).

**PAUCITY OF SKILLS AND HIGH-QUALITY INPUTS**

Their presence is a key determinant of investment by transnational corporations (UNCTAD, 2013b). In a survey of 140 African firms, the lack of adequately skilled labour was cited as one of the most binding constraints to African producers joining GVCs (ECA, 2013). These findings were corroborated by sectoral case studies on the cocoa value chain in West Africa (where local know-how was a barrier to moving up to processing and higher value-added activities), on the coffee value chain in Ethiopia and on the copper sector in Zambia (ECA and AUC, 2013). In a buyer-driven value chain such as textiles and apparel, where compliance with product specifications and lead times are critical, similar challenges are documented in Lesotho (Staritz and Morris, 2013).

The above examples point to the importance of not only strengthening the education system with particular attention to vocational training and high-level education (chapter 6), but also matching school curricula with the needs of the labour market and business community. This point is confirmed also by the success stories of the aluminium and diamond sectors in Mozambique (box 4.6) and Botswana, where skill upgrading plays a fundamental role in enabling local producers to link to global supply chains, and enhance local value addition. Connecting and climbing up GVCs also require producers, even in relatively less standard-intensive markets such as those in Africa, to pay greater attention to quality of inputs.

**RESTRICTED ACCESS TO FINANCE**

To take 2013 as an example, domestic credit to the private sector by banks reached barely 29 per cent of GDP in Central, Eastern, Southern and West Africa, 35 per cent in Middle East and North Africa, but 45 per cent in Latin America and the Caribbean and 124 per cent in East Asia and the Pacific. Such shallow financial intermediation is particularly binding on SMEs which, unlike multinationals, cannot easily tap international financial markets. Yet many banks
in the region hoard excess liquidity, as recognized at the 2013 International Finance Forum.

Given the region’s low investment ratio (22 per cent of GDP), enhancing access to finance is crucial for mobilizing domestic resources and supporting productive capacities. Finance is an area in which Africa could leap-frog outdated technologies and exploit the potential of the fast-rising penetration of ICT as epitomized by the success of M-pesa in Kenya. That example also points to the fundamental importance of creating an adequate institutional and regulatory framework to attract private actors (M-pesa is commonly cited as having best practices), while also ensuring prudential supervision across the financial sector.

TRADE POLICY CONSTRAINTS

LITTLE EVIDENCE OF CONSISTENCY BETWEEN TRADE AND INDUSTRIAL POLICIES

High levels of protection, originally justified with the “infant industry” argument (chapter 3), have often become entrenched, offering few productivity gains but with rent seeking replacing the hunt for dynamic comparative advantage. Nigeria, for example, has adopted a swathe of incentives to industrialize, yet its system lacks focus and is poorly administered, ushering in opaque discretionary and arbitrary practices (Nigeria country case study). The success of industrial policies in East Asia has often been ascribed to the fact that protective industrial policies designed to kick start structural change were sooner or later followed by more subtle export-oriented policies aimed at sustaining productivity growth, competitiveness and innovation (chapter 3). African policy space, though not as broad, still offers flexibility, and African countries need to preserve and make full use of it through special and differential treatment provisions, including those on local content, export taxes, government procurement and intellectual property rights.

HIGH LEVELS OF PROTECTION ON IMPORTED INPUTS

These often reflect successive rounds of reforms, stifling downstream activities and hampering domestic value addition. In LDCs, the trade-weighted applied tariff on industrial products was 18 per cent for intermediates and 12 per cent for finished products (Ofa et al., 2012). More broadly, tariff peaks and tariff escalation are present in North-South and South-South trade, hindering transformation and domestic value addition, especially in agricultural (ITC, 2010). The distortions from tariff peaks and tariff escalation appear a particular hindrance to the emergence of international supply chains. This burden calls for wide-ranging tariff reforms that ensure strategic consistency between the trade and industrial policy frameworks, pursuing trade liberalization not as an objective per se, but rather as a means to promote and strengthen a country’s competitiveness, in light of its comparative advantages.

HIGHER INTRA- THAN EXTRA-AFRICAN TARIFFS—ESPECIALLY TO COUNTRIES IN ANOTHER REC—THAN TO THE REST OF THE WORLD

While this skewed profile may be partly the result of preferential schemes for LDCs, such as AGOA and EBA (Ofa et al., 2012; ECA, 2013), it contributes to the shallowness of regional supply chains, particularly in manufactures where the continental market is particularly fragmented. This pattern questions the very sequencing of Africa’s trade liberalization. Since the regional market tends to be more diversified and less standards intensive, it would be better to first facilitate intra-African trade to reach a more efficient scale of production, using the continental market as a springboard to compete globally. Yet progress of different RECs has been uneven in reducing tariffs among their members, and protection among the RECs remains heavy, as seen. This makes the case clearer for fast-tracking the Continental Free Trade Area (chapter 5).
NON-TARIFF BARRIERS (NTBS)

These come in a wide array of regulatory measures other than duties (table 4.4), and may have a bigger trade-distorting effect than tariffs because of the generalized progress in tariff reduction at multi- and bilateral levels (Arvis et al., 2013). And as just seen with tariffs, even if RECs have eased (unevenly) their non-tariff trade frictions, these remain particularly high—bizarrely, often higher than for the rest of the world (Valensisi et al., 2014).

The impact of NTBs on aggregate is hard to overestimate, even though individual impacts are hard to match with specific NTBs. Data from the NTB observatory in the SADC suggest that the most frequent NTB complaints in the region relate to custom procedures followed by rules of origin, transport, sanitary and phytosanitary issues (Chikura, 2013). To take an example, in 2009 a South African supermarket chain, Shoprite, paid ZAR 40 million to comply with SADC rules of origin, against tariff preferences worth little more than double that (ZAR 93 million). It spent ZAR 136,000 a week on import permits for Zambia, and different VAT and sales tax systems on intra-SACU trade cost it around 2 per cent of the sales (Charalambides, 2013).

Lack of harmonization of related provisions also cost; some RECs adopt a product-specific approach, while others apply value-added rules (ECA, AUC and AfDB, 2013). This increases the related administrative burden for all producers, especially SMEs (given their lower trade volumes)—

**TABLE 4.4: CLASSIFICATION OF NON-TARIFF BARRIERS**

<table>
<thead>
<tr>
<th>Technical measures</th>
<th>Non-technical measures</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Sanitary and Phytosanitary Measures</td>
<td>B Technical Barriers to Trade (TBT)</td>
<td></td>
</tr>
<tr>
<td>C Pre-Shipment Inspection and Other Formalities</td>
<td>D Contingent Trade-Protective Measures</td>
<td></td>
</tr>
<tr>
<td>E Non-Automatic Licensing, Quotas, Prohibitions and Quantity-Control Measures Other than for Sanitary and Phytosanitary or TBT Reasons</td>
<td>F Price-Control Measures, including Additional Taxes and Charges</td>
<td></td>
</tr>
<tr>
<td>G Finance Measures</td>
<td>H Measures Affecting Competition</td>
<td></td>
</tr>
<tr>
<td>I Trade-Related Investment Measures</td>
<td>J Distribution Restrictions</td>
<td></td>
</tr>
<tr>
<td>K Restrictions on Post-Sales Services</td>
<td>L Subsidies (Excluding Export Subsidies Under P7)</td>
<td></td>
</tr>
<tr>
<td>M Government Procurement Restrictions</td>
<td>N Intellectual Property</td>
<td></td>
</tr>
<tr>
<td>O Rules of Origin</td>
<td>P Export-Related Measures</td>
<td></td>
</tr>
</tbody>
</table>

Source: UNCTAD, 2013a.
another reason for fast-tracking the Continental (and Tripartite) Free Trade Area.

Beyond the regional arena, African countries would likely benefit from the adoption by their trade partners of less stringent preferential rules of origin, in line with the voluntary guidelines adopted at the Ninth WTO Ministerial Conference in Bali, Indonesia, in December 2013, as part of the LDC package. During their bilateral negotiations, African countries should urge their trade partners to incorporate rules of origin arrangements in line with these guidelines.

Similarly, stringent standards and sanitary and phytosanitary measures, due to Africa’s lack of quality-assurance and easily accessible standard-setting and -monitoring bodies, increase costs for African producers, particularly in developed-country markets. Given these bodies’ large fixed setting-up costs, the case for a coordinated regional action—including strengthening the African Organization for Standardization—is self-evident.

Among NTBs, trade facilitation stands out. Disproportionately high trade-related costs in Africa are well documented. For GVCs, the constraints of costly and time-consuming customs procedures assume even greater relevance, since goods are likely to be exported and imported several times along the value chain, often to exacting schedules. (Again, they hit SMEs disproportionately). Early evidence from corridor-management institutions, for example, suggests that the payoffs for cutting red tape may be quite high (Lisinge and Soteri, 2014).

All the above constraints pose a serious challenge to the emergence of regional supply chains in Africa, and more generally to the continent’s favourable integration into the global market. Chapter 5 discusses in more detail how the trade policy constraints can be addressed.
AFRICA’S TRADE IN INTERMEDIATE PRODUCTS

Intermediate goods are non-finished goods, traded to be further processed before final use, and thus are production inputs for downstream activities. In so far as intermediate goods embody value added imported into—or exported from—a given economy for further processing, imports of intermediate products can hence be taken as a proxy for backward linkages of the importing country to a value chain abroad, their exports as a proxy for forward linkage to the value chain.

IMPORTED INTERMEDIATES HAVE SURGED BUT WITHOUT BOOSTING AFRICA’S COMPETITIVENESS

In Africa, as in the world at large, intermediate products account for the bulk of international trade. Over the last decade, they accounted for a stable share of 60 per cent of Africa’s merchandise imports (capital goods roughly 15 per cent and consumption goods 14 per cent), growing threefold to average $272 billion over 2010–2012 (figure 4.7). Its pace at country level appears strongly correlated with real GDP growth.

Intermediate imports were dominated by a handful of players—South Africa, Egypt, Morocco, Algeria, Nigeria and Tunisia—which account for nearly 75 per cent of the total and which source the lowest proportion of their intermediates imports from Africa (figure 4.8). The continent imports 88 per cent of its intermediates from the rest of the world, owing to manufacturing weakness and lack of linkages to the domestic or regional economy. These issues also emerge in smaller African countries. As Cruz et al. (2014:2) note for Mozambique, “Most

FIGURE 4.7: AFRICA’S MERCHANDISE TRADE BY END-USE

Source: Calculations based on OECD Bilateral Trade Database by Industry and End-Use Category (ISIC Rev. 3).
manufacturers source intermediates and raw materials from abroad, and the industrial sector generally has a relatively low degree of sectoral linkages. This comes in combination with the fact that very few manufacturing firms have entered foreign markets and only about 10 per cent of the manufacturing enterprises have foreign ownership. This points to a missed opportunity for the continent, whereby regional supply chains connecting neighbouring countries are very shallow, and leading countries fail to establish backward linkages with smaller and less industrialized neighbours. As analysed later, this situation can be traced to a wide array of constraints limiting intra-African trade, ranging from structural conditions such as infrastructure gaps, to trade policy–related issues such as inappropriate tariff structures and poor trade facilitation.

In terms of sectors, manufacturing is the main driver behind African countries’ growing demand for imported intermediates (see figure 4.8). Chemical, rubber, plastic and fuel products, and to a lower extent metals, machinery and equipment, food beverages and tobacco, represent the bulk of manufacturing imported intermediates (figure 4.9). Growing imported manufacturing inputs have, however, brought only few gains for Africa’s manufacturing sector, often failing to offset its long-standing competitiveness gaps. For example, over 2000–2010, manufacturing value added more than doubled for the continent as a whole, with an increase of roughly 50 per cent in constant prices, but declined as a share of total value added.

Intermediate imports for mining and quarrying, as well as for agriculture, played a more limited role and were concentrated in a handful of large importers, notably Egypt, Morocco and Nigeria. The small size of Africa’s trade in agricultural intermediates and the geographical pattern of such trade reflects the persistent structural weaknesses of a crucial sector, which still contributes substantially to GDP and employs about 60 per cent of the labour force. With the exception of South Africa and the
North African region, agriculture is characterized by severe under-capitalization and by the dualism between subsistence or quasi-subistence farming (employing a limited range of inputs and serving almost exclusively the domestic market) and commercial cash-crop farming (mainly integrated in the global market through the supply of raw material).

For this reason, while the North African economies, which modernized agriculture to a degree, are the main African importers of agricultural intermediates, West African countries (notably cocoa and cotton producers), and to a lesser extent some East and Southern African economies (such as Ethiopia, Malawi and Uganda) export the bulk of agricultural intermediates, in most cases with little domestic processing and value addition: the Economic Report on Africa 2013 documented that more than 75 per cent of the cocoa exported from Cameroon, Côte d’Ivoire, Ghana and Nigeria was exported in the form of cocoa beans, embodying far less value added than cocoa paste, cocoa butter or of course chocolate.

The extent to which the regional market supplies imported intermediates varies widely across economic sectors. If the evidence points, for instance, to some backward linkages in mining and quarrying—where 25 per cent of imported intermediates are sourced within Africa—in other sectors such as textiles or even agriculture the scope to establish regional supply chains is still largely untapped, with less than 10 per cent of intermediates imported from the region (see figure 4.9). Particularly striking, especially if compared to the East Asian experience, is the limited contribution of intra-African trade in supplying intermediate inputs for light manufacturing industries, which is the first rung of the product ladder.
Intermediate goods account for the largest share of Africa's merchandise imports, but their weight in the export basket is even larger (see figure 4.7). Growing from an average of $84 billion in 2000–2002 to $356 billion 10 years later, intermediates have constituted the most dynamic component of Africa's exports in the last decade, expanding their share of total exports from 75 per cent to 83 per cent. Regional figures are partly driven by fuel and mineral exporters such as Algeria, Nigeria, Sudan and Zambia, where over 95 per cent of exports, in the 2010–2012 period, was composed of intermediates (and even in the median African country intermediates accounted for around 75 per cent of merchandise exports).

Despite the sharp increase in the value of Africa's intermediate exports in the decade to 2011, the region still accounted for only 2 per cent of the corresponding worldwide figure, versus 35 per cent for Asia and 4 per cent for Latin America (WTO and IDE-JETRO, 2011).

Whether by country of origin or sectoral composition, Africa's exports of intermediates tend to be even more concentrated than its imports, with resource-rich countries such as Algeria, Nigeria and South Africa playing key roles (figure 4.10). Africa's dependency on primary commodity exports is rising: the proportion of mining and quarrying in total intermediate exports has increased over the last decade (typically at the expense of agricultural intermediates) in about two-thirds of the 39 countries for which data are available. Therefore, half of the continent's exports of intermediates are mining and quarrying products. In other words, extractive industries remain the main channel through which African economies are connected to downstream GVCs, but they have weak linkages to the regional market, which accounts for only 6 per cent of mining intermediates exported (OECD, 2014a).

**FIGURE 4.10: EXPORTS OF INTERMEDIATE GOODS BY COUNTRY AND MAIN SECTOR, 2010–2012**

Source: Calculations based on OECD Bilateral Trade Database by Industry and End-Use Category (ISIC Rev. 3).
Moreover, even in extractive sectors where they have a clear comparative advantage, most African economies remain mired in the low end of value chains, supplying raw materials and other intermediates that embody very limited domestic value addition (ECA and AUC, 2013). In turn, failure to foster the establishment of forward linkages with the domestic economies reinforces the enclave nature of many extractive industries, leading to missed opportunities. The experience of Nigeria is emblematic: in 2012, it exported $89 billion of crude oil but only $5.6 billion of the refined sort, all the while importing $5.5 billion in refined oil. The experiences of other African countries suggest, however, that an appropriate policy framework could go a long way in fostering value addition in downstream activities, even in extractive industries. For instance, Botswana has managed to foster the emergence of a viable diamond-cutting and -polishing cluster employing several thousand workers by supporting the accumulation of sector-specific skills (ECA and AUC, 2013; Botswana case study). Similarly, Mozambican SMEs have entered the aluminium value chain centred on the Mozal smelter (box 4.4).
Among manufacturing intermediates, even though their weight in overall exports is limited by international standards, Africa’s exports have grown fourfold over the last 10–15 years, reaching an average value of $145 billion in 2010–2012. It is sobering to note, however, that this value is mainly explained by resource-based products such as metals and chemicals, plastics and fuels (figure 4.11). Conversely, other manufacturing activities—whether light (textile, wood, food and beverages) or heavy (transport and machinery equipment)—play a minor role in the overall composition of Africa’s intermediate exports.

This evidence, along with Africa’s heightened reliance on imported inputs from the rest of the world, shows the patent long-standing weaknesses of the manufacturing sector (chapter 2). The paucity of exports of manufacturing intermediates concurs with the evidence of persistently limited weight of intra-industry trade in the region, and points to the low level of integration into international production networks, regional and global. In a context where most African countries continue to have poorly diversified (and often similar) structures of production, premature de-industrialization exacerbates the situation by curtailing even further the scope for intra-industry trade. This is in striking contrast with the experience of East and South Asia, where the orderly sequence of industrial upgrading has given way to a dense regional network of production, characterized by a strong reliance on intra-regional trade in intermediates. 11

Four products in light manufacturing—food, textiles, paper and wood—play virtually no role...
in overall intermediate exports. Typically the first rung on the manufacturing product ladder, they contributed only $15 billion of the $356 billion total intermediate exports (average 2010–2012). Over the last decade their imports grew far faster than their exports, especially food and wood products.

The lack of competitiveness of African manufacturing and the extent to which the scope for domestic value addition is left untapped are epitomized by the region’s trade in cotton, a key export product for countries such as Benin, Burkina Faso and Mali, among others. With $3.9 billion of exports in 2012, Africa accounted for roughly 16 per cent of global cotton exports, but only about one tenth of this ($0.4 billion) was cotton fabric (or around 1 per cent of worldwide exports). At the same time, the region was importing $0.4 billion of cotton and $4 billion of cotton fabrics. In other words, the region was trading raw cotton for cotton fabrics, missing a huge opportunity to add value domestically and industrialize (figure 4.12).

FIGURE 4.12: AFRICA’S TRADE IN COTTON AND COTTON FABRICS

Source: Calculations based on UNCTADstat, accessed on 10 November 2014 (SITC Rev. 3 codes in brackets).
SERVICES IN AFRICA’S STRUCTURAL TRANSFORMATION

Services are an important component of any economy. They are key inputs to most other businesses, make a direct contribution to GDP and job creation, are a magnet for FDI, and are important for adding value along GVCs.

SERVICES PROVIDE ESSENTIAL INPUTS TO MOST OTHER BUSINESSES

Infrastructure services such as energy, telecommunications and transport are essential for firms to be competitive; financial services are the oil of transactions and provide access to credit for investment; construction services are prerequisites for business development; and legal and accountancy services are vital in a thriving business environment. Some service sectors such as health care, education, water and sanitation are central to social development and a healthy, well-trained workforce. Inexpensive and good-quality services can enhance competitiveness in agriculture, mining and manufacturing. According to the OECD (2013), as much as 30 per cent of value added of manufacturing’s exports is from services inputs.

The boom in telecommunication services in Africa over the past decade is an example of how services development can spur growth in other sectors. The ICT boom in Africa, particularly mobile phones, has raised the continent’s economic growth by, for example, promoting financial inclusion through mobile financial services and connecting farmers to markets (Andrianaivo et al., 2011). Kenya is ranked number one in the world for mobile money services and now boasts the highest share of population with access to financial services in Central, Eastern, Southern and West Africa, at more than 70 per cent (AfDB, OECD and UNDP, 2014). As SMEs in many African countries cite lack of access to finance as a major obstacle to business development, the provision of financial services on the continent is particularly important for African business.

THE SERVICES SECTOR CAN ATTRACT MUCH NEEDED FOREIGN INVESTMENTS AND PRIVATE EQUITY FINANCE INTO AFRICA

In 2012, 40 per cent of FDIs flowing to Africa went into services, up from 24 per cent in 2011 (UNCTAD, 2013b). Hotels and restaurants were one of the most promising sectors for attracting FDI in Africa over 2013–2015. Private equity in Africa is particularly attracted by the services sector. In 2012, the four most popular sectors for private equity in Africa were business services; information technology; industrial products; and telecoms, media and communications. Dominant activities attracting services FDI in Morocco, for example, were business services; finance; hotels and restaurants; and transport, storage and communications. This shows how a well-designed tourism sector (like Morocco’s) can be a magnet for investment. In 2012 tourism was Morocco’s top foreign exchange earner, the second biggest contributor to GDP, and the second-biggest creator of jobs.

SERVICES HAVE THE POTENTIAL TO BE AN ENGINE OF JOB CREATION

Given the weakness of the manufacturing base over the past decade, the movement of workers in Africa has been out of agriculture and into services (World Bank 2014). Services employed on average 47 per cent of the workforce in the 12 African countries with data over 2009–2013, with peaks such as 65 per cent in Mauritius and 63 per cent in South Africa. This shows that services are labour intensive and could play a significant role in Africa’s
growth not only by supporting local industries but by creating a large number of jobs. However, despite the proven capacity of the services sector to create jobs for Africa’s youth, many of these jobs are in the informal sector. Also, data on the nature of these jobs are scarce and it is difficult to say whether they are concentrated around high- or low-productive services. It is possible that many of these jobs are of low quality in terms of security, wage and other conditions. African governments will need to use appropriate policies to ensure that the employment growth generated by services goes beyond the informal sector, for example by increasing incentives for business to enter the formal economy, and to prioritise the growth of high-productivity services such as ICT and business support.

**ACROSS AFRICA, GROWTH IN SERVICES IS STRONGLY CORRELATED WITH GROWTH IN GDP AND GROWTH IN MANUFACTURING VALUE ADDED**

Evidence from economic development worldwide shows that the growth of the services sector tends to go hand in hand with GDP growth, with services accounting for higher shares of economic activities in richer economies. This is supported by data for African countries, which shows a strong correlation between growth in services value added and growth in GDP for African countries over 2000–2012. Only the correlation between growth in agricultural value added and GDP growth is stronger than the one for services (table 4.5). Of course, correlation is not causation, and the relationship can run both ways: as GDP increases, the demand for services such as banking, insurance, business services, tourism etc. also rises. No matter the sense of the correlation, the fact that services value added and GDP growth tend to move together indicates a strong relationship between the two.

Across Africa, value added in services grew more than that in manufacturing, industry or agriculture over 2000–2012. The correlation between growth in value added in services and that in manufacturing is strong, at 0.85, pointing to the synergies between the two sectors. The fact that value added in services and that in manufacturing move quite closely together suggests that services are necessary to support the development of manufacturing.

**SERVICES ARE INCREASINGLY IMPORTANT IN AFRICAN ECONOMIES**

Structural transformation usually coincides with a growing role of industry and services in the economy (alongside a reduced role for agriculture). In 2013, the services sector was the main contributor to GDP in 35 out of 54 African countries.18 Africa’s growth in services over 2000–2012 was higher than the world average and faster than that of several other regions (figure 4.13). Services may also be undercounted (box 4.5).

**TABLE 4.5: SELECTED GROWTH CORRELATIONS, 2000–2012**

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Growth in value added of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Services</td>
</tr>
<tr>
<td>GDP growth</td>
<td>0.86</td>
</tr>
<tr>
<td>Growth in GDP per capita</td>
<td>0.87</td>
</tr>
<tr>
<td>Growth in services value added</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Calculations based on World Development Indicators.
FIGURE 4.13: AVERAGE ANNUAL GROWTH IN SERVICES BY REGION, 2000–2012

Source: Calculations based on World Development Indicators.

BOX 4.5: SERVICES MAY BE UNDERCOUNTED

Services make up roughly half of trade in value added for African countries. Among them, financial services are the largest contributor, followed by transport. Compared with the G7 countries (with 73 per cent of trade in value added), the share of services is still low and needs to be increased.

More and more evidence shows that the role of services in international trade is greatly underestimated in statistics. The trade in value-added data recently developed by the OECD suggests that the value of trade in services, when taken from a value-added perspective, may be approaching half of world trade exports (45 per cent). The important link between services and participation in value chains has been acknowledged by the term “servitization”, which means that the primary and secondary sector provide services such as marketing, warehousing and rental of equipment (OECD, WTO and World Bank, 2014). GVCs for services are still less important than for the manufacturing sectors, but they have been at an increasing scale. Hence they need to be emphasized by policy makers given their potential for moving into higher value chains.

The emergence of services and the increased fragmentation of GVCs (into “tasks”) have the potential to substantially rebalance the “old economy” distribution of comparative advantages based on natural endowments of developing countries. By creating a competitive advantage in a service task, countries can overcome traditional obstacles such as being a small market, being landlocked and being remote, thanks to ICT. Also, the fragmentation of production in GVCs and ICT development open up opportunities for SMEs to participate in the global economy by reducing the threshold and capital necessary to enter markets for intermediate goods and services (tasks). Kenya and Uganda are already well-known success stories in business and ICT service exports (OECD, 2014a).
In 2012, all African countries for which data are available exported services. Africa’s exports of services increased from $11.5 billion in 1980 to $32.7 billion in 2002 and $89.5 billion in 2012. In 2013 the biggest single item in Africa’s exports of services was travel (40 per cent), followed by transport (25 per cent) (figure 4.14). Other business services, one of the fastest growing sectors of world trade today—which includes for example professional, technical and IT-enabled business-to-business (B2B) outsourcing services—were also a relatively large share of Africa’s services exports in 2013 (6.3 per cent). This is an important category as it provides support to most other businesses.

The large sizes of travel and transport in African exports of services reflect the importance of tourism. Directly and indirectly, tourism accounts for 10 per cent of GDP in Central, Eastern, Southern and West Africa and employs millions. The industry turnover is worth about $170 billion a year. In 2013 more than 36 million people visited Africa, a figure that had been growing by 6 per cent over the past year (The Economist, 2014).

Increases in tourism receipts over the continent were largely made possible by improved aviation services. Air passengers to Africa doubled over 2000–2010, reaching 62.6 million. Algeria, Egypt, Ethiopia, Morocco, Nigeria and South Africa have particularly strong aviation sectors, with airlines from these countries having carried between 17 million (South Africa) and 4 million (Algeria) passengers in 2012. Egypt, Ethiopia, Kenya and South Africa carried the largest amounts of freight in 2012. Despite these successes, African aviation could perform much better if constraints such as lack of liberalization, which is contributing to increasing prices (average air fares in Africa rose 24 per cent between 2012 and 2013) were removed (The Economist, 2013). Flying across Africa remains much more expensive than flying across other world regions. In many African countries, government’s participation in the aviation sector does not encourage private investments (The Economist, 2013). Regional actions to open up aviation, such as the Yamassoukro decision, that aims to gradually

**FIGURE 4.14: AFRICA’S EXPORTS OF SERVICES BY CATEGORY, 2013.**

![Graph showing the distribution of services exports by category in 2013.

Source: ECA calculations based on International Trade Centre data.]
EOA 2015: Industrializing Through Trade

**Liberalize and regulate intra-African air transport services, can help to unleash the potential of aviation on the continent.**

**Box 4.6: Even though booming, Mozambique’s finance sector targets mainly large mining projects, leaving local firms credit constrained**

Mozambique’s fastest growing sectors in 2013 were mining, propelled by a boost in coal exports, and finance, fuelled by credit expansion and increased income, mostly in urban areas. According to the Banco de Moçambique, that aggregate outstanding credit issued by Mozambican banks grew by 33 per cent year-on-year in the 12 months ending in October 2013, to reach $4.8 billion or 31.6 per cent of GDP. Over the same period, deposits grew by 17.6 per cent to reach $6 billion (39.4 per cent of GDP). The country’s middle class is swelling, albeit from a low base, and so is demand for corporate, investment and retail banking.

However, growth over the past few years has not led to more or cheaper lending to local firms. Major banks are, rather, largely positioning themselves to service corporate and investment opportunities from the large resource projects and major firms. This is evident in the divergence between the prime lending rate—the rate at which banks lend to their most creditworthy customers (i.e., large corporates)—and the average two-year lending rate. The World Bank’s 2013-14 Global Competitiveness Report, which ranked Mozambique 137 out of 148 countries, found access to finance to be the most significant constraint on businesses. Interest rates remain high, at around 8.25 per cent but reaching peaks of 20 per cent and over for small debtors. Restrictions on the use of land as collateral (land is owned by the state) further limit access to finance.

**Some African services subsectors have seen a particularly strong growth, though not always being translated into better services for local firms**

Between 2000 and 2012, some categories of services exports saw strong growth in Africa. African exports of computer and information services grew at an average of 20 per cent year-on-year, followed by financial and insurance services (growing at an average of 12 per cent each). The strong growth of these subsectors, however, has not always benefited local SMEs. In many cases, categories such as banking, insurance and business services have overwhelmingly targeted large projects in the mining sector or large foreign investors (box 4.6).

**The services sector is an avenue for economic transformation, as not all countries have a competitive edge in manufacturing**

In 2013, services provided the largest contribution to GDP in the majority of African countries. Seychelles, Djibouti and Mauritius topped the list of African countries with the highest share of services in GDP in 2013 (table 4.6).

Services offer an option for economic transformation for countries, such as small island states (e.g., Seychelles, Mauritius, Cabo Verde) or small landlocked states (e.g., Botswana or Lesotho, where services value added was respectively 62 per cent and 60 per cent of GDP), for which manufacturing might not be the best development option. India’s growth pattern suggests that a shift into high-productivity services, bypassing manufacturing, represents another path to sustainable growth (Ghani et al., 2011). Modern services, such as software development, call centres and outsourced business processes, represent high value-added activities that can be important drivers of growth for innovative and technology-savvy countries.
They use skilled workers, exploit economies of scale and can be exported. Cabo Verde, for example, aims to become an international platform for high value-added services such as banking, tourism, ICT and business processing and maritime services, exploiting its high literacy rate, social, political and macroeconomic stability and low corruption (Rocha, 2010).

African countries with a relatively high share of services in GDP tend to be resource poor: the correlation between the World Bank’s natural resources rents index\textsuperscript{25} and the share of services in GDP is strong and negative, at \(-0.73\).\textsuperscript{26} This suggests that resource-rich countries tend to expand their industries (such as mining and oil) more than their services.

Some countries, such as Kenya and Rwanda, are already well positioned to become services hubs in their regions and have adopted modern competition laws. Kenya is capitalizing on its technological advancement, strong private sector, well-developed financial markets and ICT infrastructure to expand its services exports, which have already been a key driver for the economy over the past few years. In 2012, it had a large trade surplus in services of \$2.4 billion,\textsuperscript{27} thanks to increased foreign exchange receipts from tourism, transport, communication and financial services.

\begin{table}[h!]
\centering
\caption{Top Ten African Countries by Services as Percentage of GDP, 2013}
\begin{tabular}{|l|c|}
\hline
Countries & Services as \% of GDP in 2013 \\
\hline
Seychelles & 81.1 \\
Djibouti & 77.0 \\
Mauritius & 71.5 \\
Cabo Verde & 70.3 \\
South Africa & 69.1 \\
Botswana & 61.8 \\
Senegal & 60.1 \\
Eritrea & 60.0 \\
Lesotho & 60.0 \\
Gambia & 60.0 \\
\hline
\end{tabular}
\end{table}

Source: ECA analysis based on ASYB database.
BOX 4.7: SERVICES AS AN ALTERNATIVE TO MANUFACTURING-LED DEVELOPMENT IN RWANDA

Developing a manufacturing industry is particularly challenging for Rwanda, given the landlocked nature of the country, NTBs that impede trade among EAC partners, and weaknesses in transport infrastructure. The government is therefore targeting service subsectors, including ICT, tourism and finance. Many services are, by nature, unimpeded by high transport costs. The government is trying to catalyse the emergence of a service-based hub in Rwanda, to serve regional markets.

So far there have been some encouraging developments. Service exports in Rwanda have grown from $59 million in 2000 to $395 million in 2011.30 Services accounted for more than 50 per cent of the growth of the economy between 2007 and 2013. In contrast, despite still being the largest sector, agriculture contributed barely more than one fifth to total growth. Under the government’s Vision 2020, services are expected to take a lead in overall contribution to GDP, rising from the current 38 per cent to 42 per cent in 2020, overtaking agriculture as the leading sector by 2015. Improved services can also increase productivity in agriculture, for example in tea, coffee and cocoa—large components of exports.

Wholesale and retail trade, education, finance and insurance, and transport, storage and communications have all been growing at more than 10 per cent per year since 2007. The ICT subsector too has been growing rapidly: over 2000–2011, it received $552.7 million in investment, most of them after 2007. Tourism has been the main foreign exchange earner since 2007. Exports of travel and tourism were equivalent to 63 per cent of total services exports and 29 per cent of merchandise and services exports in 2011. By 2013, Rwanda received 1,137,000 visitors, generating $294 million for the economy, up from $62 million in 2000.31 Tourism receipts are expected to grow at a compound annual rate of 25 per cent until 2017.32 While “gorilla” tourism has been one of the main marketing points, the government is also diversifying tourism products. Moreover, thanks to modern infrastructure and telecommunications, Rwanda is becoming increasingly attractive for conference tourism, hosting in 2014 the African Development Bank meetings in May and the World Export Development Forum in September (among other events).

In 2012, FDI stocks were estimated at $329.1 million in ICT, $124.1 million in finance and $125.1 million in insurance, against just $90.8 million in manufacturing.33 The development of a competitive aviation sector is also part of the government’s strategy to develop services. Rwanda had so far scarce air connectivity, and the air market in and out of the country was not a profitable option for private investors. The government is investing heavily in RwandAir, aiming to expand its annual turnover from $46 million today to more than $350 million by 2018, by increasing its destinations and fleet and improving its certifications and standards.

The boom in telecommunication services in Africa over the past decade is an example of how services development can spur growth in other sectors.
Kenya has firms exporting high-value offshore services such as product development, research and development business ventures, insurance, accounting and business process outsourcing. Exports in ICT services already account for more than 10 per cent of total service exports and close to 20 per cent of FDI inflows (Rubadiri, 2012). Such growth benefits not only Kenya but also other countries in the region that can source high-quality services from Kenya.

Botswana is developing its financial sector, aiming to become a financial hub in the subregion. In 2003 Botswana created the International Financial Services Centre, where companies can be accredited to conduct cross-border business while enjoying tax exemptions. Currently around 50 companies—including big names such as ABN Amro, Banc ABC, African Alliance International and Vantage Mezzanine Fund—are working within the Centre’s framework. Thanks in part to the centre, Botswana attracted $630.7 million of FDI in its finance sector in 2012 (88 per cent of total FDI in its services sector) (International Trade Forum, 2010). The volume of financial services exported from Botswana grew from $417,000 in 2009 to $5.1 million in 2012.

Botswana was able to position itself as a services hub thanks to its advantageous geographic location (landlocked but at the centre of the 15-member SADC community), high regulatory standards, absence of foreign exchange controls and competitive business infrastructure. Such practices are particularly relevant for landlocked countries, which, through services, can turn geographical centrality into an advantage (box 4.7).

Between 2000 and 2012, African exports of computer and information services grew at an average of 20 per cent year on year, followed by financial and insurance services (growing at an average of 12 per cent each), but this has not always benefited local SMEs.
CONCLUSIONS

African countries show high participation rates in GVCs, but at a low level, and the potential to tighten integration owing to the abundance of natural resources and low labour costs remains huge. The growing importance of ICT enables African countries to enter several value chains without developing the whole production process. Usually, services are poorly captured in traditional trade statistics, but they play a key role in increasing countries’ participation in GVCs.

Successful policies need to include sectoral initiatives that develop product standards and good product quality, improve physical infrastructure (telecommunication, roads, ports etc.) to connect with global players, establish a national production networks, and reduce NTBs and increase tariff liberalization to reduce costs of trading.

Similarly, given the poor linkage between successful sectors and other areas, policies need to focus on establishing production networks within an economy.

The similarity in structures of production across African economies calls for renewed efforts to spur structural transformation and development of Africa’s productive capacities, including dynamic industrial policies’ broad array of measures that improve the business environment and enhance coordination among firms. Likewise, governments could endeavour to redress coordination failures and favour the emergence of viable clusters, especially in manufacturing, although an overarching approach is needed to ensure that fiscal incentives to attract local and foreign investment are justified by the scope for promoting backward and forward linkages.

On the financial front, African countries have increased their budget for infrastructure provision, including through regional frameworks such as the Programme for Infrastructure Development in Africa (PIDA), so that Africa finances nearly half its infrastructure projects: $42.2 billion out of a total of $89.2 billion in 2012 (ECA, 2014a). Yet the financial needs remain daunting. An annual investment of $7.5 billion is required over 2012–2020 to deliver projects in the PIDA Priority Action Plan, and $360 billion for PIDA’s long-term view over 2012–2040. Innovative financial mechanisms should therefore be considered (chapter 1).

A promising approach for African countries would be to start developing and strengthening RVCs by developing regional clusters. Intra-African trade, in view of its more diversified composition, represents a promising avenue to support industrialization and foster the emergence of interconnected regional supply chains, notably in manufacturing.

It is imperative for African countries to identify—working with the private sector and other stakeholders—their own strategic priorities, coordinate with regional partners the sequencing of trade facilitation measures, and assess related financial and technical assistance needs. In doing this, African countries should make full use of the flexibilities available under Section II of the Trade Facilitation Agreement, to sequence the different measures in such a way that the commitments undertaken at the multilateral level are fully supportive of regional integration (chapter 5).

Trade and industrial policies matter more than ever in shaping the outcome of the emerging global division of labour. In light of this, it is imperative for African countries to adopt a consistent trade and industrial policy framework, connecting RVCs and GVCs more closely. How these policies may be able to do this is the subject of the next chapter. For services in particular, a few suggestions may be highlighted.
African countries need to create services RVCs for business to benefit from expertise in the region. This requires trade in services to be opened up, particularly within the continent, and the various areas of the sector to be regulated to ensure fair competition. For example, Africa currently imports a large share of construction services from outside the continent, a rate that could be cut if it standardized regulations, streamlined border processes and removed duties on transit services.

Some policy actions Africa-wide would support such developments, including:

- Letting skilled workers move freely across the region through better immigration and employment laws. Services need people and ideas to move around quickly, so as to source the best talent.
- Ensuring that trade policies do not overprotect local services. Businesses in one country should be able to benefit from the availability of good support services in other countries in the region, without limiting their choices to what’s available in their own countries. At the same time, services firms should have access to procurement opportunities at subregional or continental levels.
- Adopting continent-wide investment regimes, improving technical interoperability, and mutually recognizing qualifications. These influence countries’ capacities to access outsourcing.
- Building hubs of excellence in services. Software and high-tech parks, for example, can help service firms bypass the infrastructure and regulatory bottlenecks that the rest of the economy struggles with. Investors generally respond positively to the heightened transparency and predictability of the parks’ regulatory environment (ITC, 2013b).
- Accelerating pro-competition regulation of telecoms, transport, banking and insurance.
- Including services in the Continental Free Trade Agreement planned for 2017.


## APPENDIX 4.1 CORRESPONDENCE BETWEEN OECD AND BILATERAL TRADE DATABASE BY END-USE CATEGORY AND OTHER TRADE CLASSIFICATION

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate goods</td>
<td>111, 121, 21, 22, 31, 32*, 42</td>
<td>(01–19, 21–45, 47–56, 58–60, 63, 65–76, 78–85, 87, 89–96)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital goods</td>
<td>41, 521</td>
<td>(01, 71, 73, 76, 82–91, 93–96)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packed medicines</td>
<td>63*</td>
<td>3004xx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal computers</td>
<td>61*</td>
<td>8471xx</td>
<td>8471xx, 852841, 852851</td>
<td></td>
</tr>
<tr>
<td>Passenger cars</td>
<td>51</td>
<td>87032x, 87033x, 87039x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal phones (fixed and mobile)</td>
<td>41*, 62*</td>
<td>852520</td>
<td>852520</td>
<td>851712</td>
</tr>
<tr>
<td>Precious goods</td>
<td>21*, 22*, 61*, 7*</td>
<td>7101xx, 7102xx, 7103xx, 710820, 970400, 970500, 970600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>7*</td>
<td>Commodities not elsewhere specified</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Parts.

Source: Adapted from OECD, 2014b.
A similar distinction is evident in the conceptualization of Aid for Trade, whose measurement includes four “proxies”, namely trade-related infrastructures, productive capacities, trade policy and regulations and adjustment costs.

The index of trade complementarity (TC) between countries k and j is defined as TCij = 1 – \( \sum \left( \frac{|Mik – Xij|}{2} \right) \), where Xij is the share of good i in the global exports of country j and Mik is the share of good i in all imports of country k. The index ranges between 0 and 1, with zero indicating that there is no correspondence between country j’s export structure and country k’s import structure and one indicating a perfect match in the export-import pattern. As such, the index provides useful information on scope for intraregional trade, given that it shows how well the structures of a country’s imports and exports match.

The corresponding global survey was conducted by OECD and WTO and covered firms in five economic sectors: agro-food, ICT, textiles and apparel, tourism and transport—logistics.

Data drawn from World Development Indicators database, accessed 25 November 2014.

The guidelines for preferential rules of origin for LDCs, adopted at the Ninth WTO Ministerial in Bali, are a set of voluntary measures aiming at relaxing some provisions on the use of foreign inputs and facilitating cumulation across LDCs.

One example should suffice: in 2012 the cost of exporting a standard container from Africa was $1,875, significantly higher than the world average of $1,470 (World Bank, Doing Business).

For a more precise correspondence between end-use categories and trade statistics classifications, see annex 4.1.

Mixed-end use products, whose share in total imports hovered around 9 per cent, refer to consumer-oriented final goods such as personal computers, phones, passenger cars, packed medicines and precious goods, which could be used by households and firms.

Unless otherwise stated, all data on trade by end use in this section are from the OECD Bilateral Trade Database by Industry and End-Use Category (ISIC Rev. 3), consulted 4 November 2014. This database combines trade data from OECD’s International Trade by Commodities Statistics and UNSD’s COMTRADE, with information from Input-Output tables to identify the correspondence of HS classifications to Broad End-use Categories. Two main caveats apply to its use: data are available only for 39 African countries, representing roughly 77 per cent of the continent’s exports and 89 per cent of its imports; and, as with other bilateral trade data, mirror import and export flows may not often match, due to statistical errors, different criteria, varying evaluation methods for imports and exports, and re-exports (OECD, 2014b).

The share of capital and mixed-use products in Africa’s export basket is negligible.

The “flying geese” paradigm is a model, originally proposed by Kaname Akamatsu in the 1930s, to describe the evolution of the international division of labour in East Asia. WTO and IDE-JETRO (2011) notes that in all major Asian economies except India, intra-regional trade accounts for over half of total trade in intermediate products.

We apply the definition of services adopted by the United Nations International Trade Centre (ITC), i.e., services comprise transport; travel; communication services; construction services; insurance services; financial services; computer and information services; royalties and license fees; other business services; personal, cultural and recreational services; government services and personal remittances.


ITC data.

Note that not all of the 12 countries have data available for the same year.

World Development Indicators.

ECA analysis of ASYB database.

ITC data.

WTO definition: Travel includes goods and services acquired by personal travellers, for health, education or other purposes, and by business travellers. Unlike other services, travel is not a specific type of service, but an assortment of goods and services consumed by travellers. The most common goods and services covered are lodging, food and beverages, entertainment and transport (in the economy visited) and gifts and souvenirs.

WTO definition: Transport services cover sea, air and other, including land, internal waterway, space and pipeline transport services that are performed by residents of one economy for those of another, and that involve the carriage of passengers, the movement of goods (freight), rentals (charters) of carriers with crew, and related supporting and auxiliary services.

ECA calculation based on African development indicators.

ECA calculation based on African development indicators.

Calculations based on World Development Indicators database (2014).

The World Bank’s total natural resources rents indicator shows the sum of rents from all kinds of natural resources including oil, natural gas, coal, mineral and forest rents as a share of GDP. Rents are defined as the difference between the value of production at world prices and their total production costs.

ECA analysis of World Bank and ASYB data.

United Nations Comtrade data.


