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Foreword



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This report has been commissioned by the World Economic Forum Regional Action Group for Africa in preparation for the Davos Agenda 2021, as part of the Great Reset initiative.

The COVID-19 crisis, and the political, economic and social disruption it has caused, is fundamentally changing the traditional context for decision-making. The inconsistencies, inadequacies and contradictions of multiple systems – from health and finance to energy and education – are more exposed than ever amid the global context of concern for lives, livelihoods and the planet. Leaders find themselves at a historic crossroads, managing short-term pressures against mediumand long-term uncertainties.¹

Within the context of operationalizing the African Continental Free Trade Area (AfCFTA) Agreement, as well as continuing to live with the COVID-19 outbreak, the members of the Regional Action Group for Africa identified five pathways as priorities for driving economic recovery and building resilience: new financing models for rapid recovery; unlocking manufacturing to mitigate global supply-chain risks; leveraging integration and

regional value chains; revitalizing infrastructure and connectivity; and scaling digital transformation and inclusive innovation.²

This document is one in a series of reports investigating these pathways, and explores two priorities: first, unlocking manufacturing to mitigate global supply-chain risks; and second, leveraging integration and regional value chains. It also undertakes a review of the status quo of intra-African trade and current African efforts towards liberalizing trade in the continent, and seeks to identify avenues to be explored in order to deepen intra-African trade and unlock production capacity to meet local and global demands in strategic sectors, focusing on the automotive industry.

The report reviews the impact of the COVID-19 pandemic on Africa's supply chains to highlight both the disruptions induced by the pandemic and the opportunities that it presents.

This will contribute towards the existing body of knowledge that guides sovereign and corporate entities in reprioritizing their approaches towards operational efficiency post-pandemic.

Executive summary

The COVID-19 pandemic continues to dramatically affect economies globally, and those in the Global South even more so. Already a minor player in global trade terms, African economies are in danger of even further marginalization as a result of the economic damage that is being inflicted on their developing economies.

If you want to go fast, go alone. If you want to go far, go together.

African proverb

It is opportune that the African Union launched the African Continental Free Trade Area (AfCFTA) on 1 January 2021 – perhaps the most ambitious free trade project since the World Trade Organization itself. It is envisioned that, by reducing barriers to trade, the economic prospects of a continent of over 1.3 billion people with a combined gross domestic product (GDP) of \$2.5 trillion – almost identical to India's – will be boosted. It has been calculated that if Africa were to increase its share of global trade from 2 to 3%,3 this one percentage point increase would generate approximately \$70 billion of additional income per annum for the continent.4

The continent can do little to counter the global forces inclining towards deglobalization, but it can itself embrace a self-supportive regionalism through enhanced intra-African trade. Almost countercyclically, actively promoting trade liberalization to encourage new areas of growth would be a pragmatic response to the reduction in global trade, not to mention promoting Africa as an enhanced destination for investment from multinationals.

As a contributor to the World Economic Forum's Regional Action Group for Africa, Deloitte, with inputs from members, has prepared this in-depth piece of research seeking to provide policy advice and impetus towards accelerating the expansion of regional value chains in Africa's nascent manufacturing economies. Special focus is placed on the automotive sector as it presents an excellent case study for how constructive collaboration between global multinationals and African governments is beginning to show tangible results in spurring new manufacturing nodes around which component value chains can be created.

An expanding manufacturing sector has been the backbone of economic take-off everywhere since the industrial revolution. The success of many Asian economies, including China, is in sharp contrast to the lack of progress seen in Africa, where manufacturing has failed to play a similar socially uplifting role. However, there is potential for forward-looking African countries to replicate previous experiences in Asia and emerge as new manufacturing nodes.

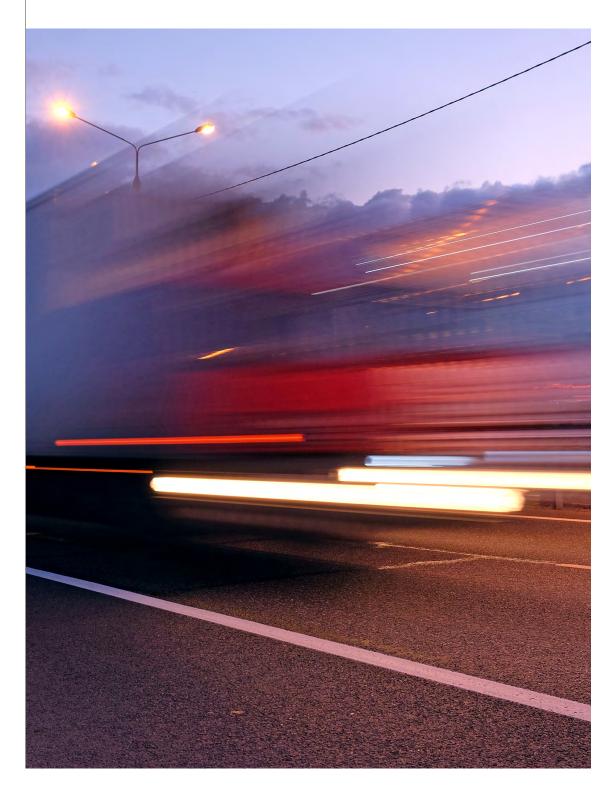
With proactive and concerted action, there is now a new window of opportunity for Africa to ramp up its manufacturing sector. There is no sector that creates jobs, deepens local value chains, encourages the growth of a service economy and embeds intellectual property quite like manufacturing.

But building an industrial-driven economy does not come about through a simple policy switch. It is a complex process, requiring infrastructural foundations to be overlaid with pragmatic probusiness policies. Industrial policy needs to be aligned with the new policy imperative and spirit of free trade that is sweeping the continent.



1 Impact of COVID-19 on supply chains

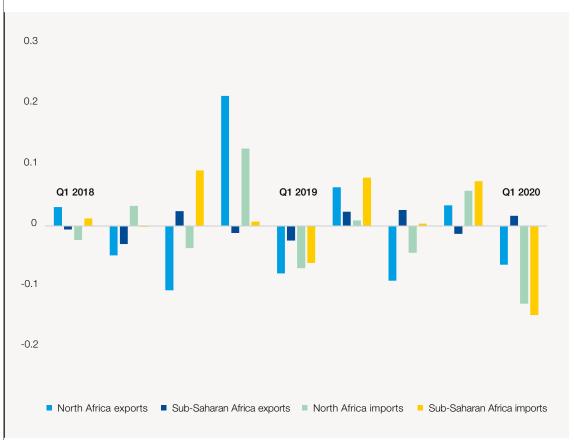
The advent of the COVID-19 pandemic has disrupted supply chains in various ways.



COVID-19 has halted production as well as significantly reducing trade among countries. Despite the challenges faced, many countries have showed how, by supporting increased local production capabilities and collaboration, some supply-chain challenges could be overcome. This may be an indication that increases in local production can be achieved at a faster rate; this would also help to strengthen supply-chain resilience.

Figure 1 below shows that imports to Africa declined significantly in the first quarter of 2020 as the pandemic started to take effect among some of the continent's trade partners. Imports to sub-Saharan Africa declined by 15% while North Africa imports declined by 13%.

FIGURE 1 | Quarterly growth of imports and exports (%)



Source: UNCTAD (2020)

Effects on supply chains

The COVID-19 pandemic has become a global healthcare and economic crisis. The implementation of lockdowns by many states in a bid to slow the rate of infection and keep citizens safe has affected supply chains. This effect has been amplified by the globalization of supply chains along with offshore clusters of specialized suppliers. As a result, disruptions originating in one location can have significant global ramifications.⁵

First, many countries went into some form of lockdown. This required some raw materials operations and manufacturing facilities to close because staff worked in close proximity to one another. This immediately resulted in shortages of raw materials and intermediate goods in many industries. For example, China, one of the largest players in global value chains, saw a 13% drop in

industrial production in January and February 2020 combined, compared to the previous year. Exports also fell by 17% in January and February 2020 compared to 2019.

Second, many countries shut their borders, which significantly reduced their trade with other states as it disrupted international transport networks.

Last, and more specific to COVID-19, many countries restricted the exports of medical supplies and devices such as personal protective equipment (PPE) and ventilators. Many countries relied on imports of these products and had little or no incountry manufacturing capacity for these items. Furthermore, due to the large demand shock, many countries producing these items simply could not keep up with demand.⁷

Consequences of shutdowns

The measures discussed may have a number of consequences in the future.

Reshoring

In some quarters, calls have increased to strengthen the resilience of supply chains by reshoring or moving to national supply chains, thus reducing the interdependence on global value chains. Despite the appeal of reshoring, the process presents its own challenges. Reshoring is likely to affect many developing countries that rely on global value chains for their industrialization efforts and as a means of receiving the investment, market

access and knowledge associated with global value chains. Additionally, global value chains have still proven that they can be a solution as opposed to a bottleneck in production. For example, South Korea became one of the main exporters of COVID-19 test kits by drawing on its global supply-chain experience. Reshoring may also limit firms' ability to diversify suppliers, which can be a disadvantage should a crisis affect a specific production location.

Local manufacturing to counter disruptions

Despite disruption to supply chains, in some countries the pandemic has also led to innovation and new production methods that have ameliorated the effects of the pandemic on supply chains for certain products.

In Ghana and Senegal, low-cost COVID-19 tests were developed and produced. This not only addressed the challenges of meeting demand for test kits but also provided a cost-effective

solution, with some test kits costing as little as \$1. In Kenya, the challenge of PPE shortages was addressed through converting idle factories into manufacturing facilities for PPE.¹⁰ In South Africa, the National Ventilator Project (NVP), a collaborative effort between the public and private sectors, saw the design and large-scale local manufacture of ventilators at a cost significantly lower than prevailing market prices.¹¹

Supply chains in the future

Despite the setbacks suffered due to the pandemic, firms and states can work to improve their supply-chain capabilities in order to recover and promote efficiency. Some of the lessons learned from the pandemic can be implemented in future to the benefit of economies and citizens.

Localization of production of key products

Despite the cost advantages of sourcing in low-cost locations, the pandemic has highlighted some risks associated with this strategy. While global supply chains were hamstrung by travel restrictions, domestic producers were not so profoundly affected.

Local and regional supply chains have advantages, especially for key products such as medication and PPE. These products are always in demand locally (although not in the same volume as has recently been seen) and shortages can have dire consequences.

The Ghanaian pharmaceutical industry provides an example of developments that were necessitated

by the pandemic but which will have long-term positive impacts beyond dealing with COVID-19. In response to the pandemic, Ghanaian pharmaceutical companies developed low-cost COVID-19 tests. In addition, the healthcare industry turned to technology to address supply-chain constraints, including the increased use of drone technology to deliver medicine and also limit physical interactions. These developments have also attracted increased investment in the pharmaceutical industry and healthcare overall as players see greater possibilities and opportunities beyond the COVID-19 response.¹²

Sustaining port efficiencies gained during the pandemic

The pandemic made it necessary for port and customs operations to become more efficient to ensure the timely supply of essential goods. This experience has shown the extent to which this aspect of supply chains can be improved. This is especially important on the African continent, where

port and customs inefficiencies have often been flagged as a challenge. However, these efficiencies will need to be maintained for all products as travel restrictions are lifted and trade returns to some sort of normalcy. Such efficiencies can also lower the cost of importing and exporting products.

Public- and private-sector collaboration

From local production of essential products to improving port and customs efficiencies, the response to the COVID-19 pandemic has illustrated the ability of countries to create meaningful impact

through collaborative efforts. The lessons learned from these collaborations should be applied to improving production capabilities in other industries so that economic and trade benefits can be realized.

Leveraging technology

Technology and connectivity are key enablers for economic growth and innovation as well as for providing services to citizens. However, these have often been a stumbling block on the continent.

The huge impact of technology and connectivity was illustrated through the African Medical Supplies Platform (AMSP). The platform was a collaboration between the African Union (AU) and various international governments, foundations and corporations. The AMSP portal is an online marketplace that provides immediate access to an African and global base of verified manufacturers and procurement strategic partners and enables AU member states to purchase certified medical equipment such as diagnostic kits, PPE and clinical management devices with increased costeffectiveness and transparency. It ensures that access to affordable essential medicines in Africa is accelerated and expanded to meet pressing patient needs across the continent while it continues battling this pandemic. Its unique interface allows

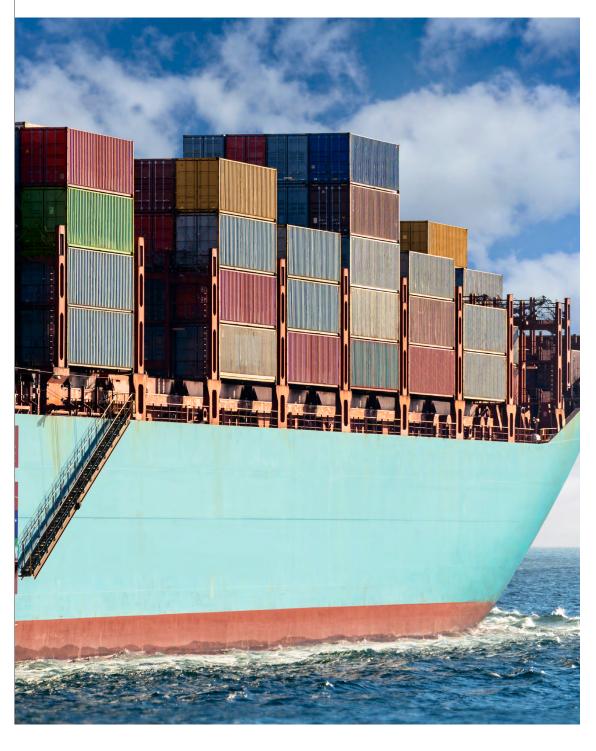
for volume aggregation, quota management and payment facilitation as well as logistics and transportation to ensure equitable and efficient access to critical supplies for African governments.¹³

Technology has also been leveraged in food security during the pandemic, with these innovations likely to affect food value chains well into the future. In Uganda, informal traders have used the Market Garden app to sell their produce under lockdown regulations when marketplaces were closed. In Kenya, start-ups in agriculture have partnered with the World Bank to develop innovations in the delivery of inputs, soil testing, crop insurance, credit, extension advice and market linkages, to enable farmers to deal with temporary COVIDrelated constraints. While these innovations were developed specifically in response to the pandemic, they have the capacity to change the agricultural landscape by creating access to customers and markets and enabling market linkages that were not previously present.14



2 Intra-African trade: the status quo

For the past five years, intra-African trade has hovered at around 15%, reflecting a pressing need to increase economic integration on the continent.



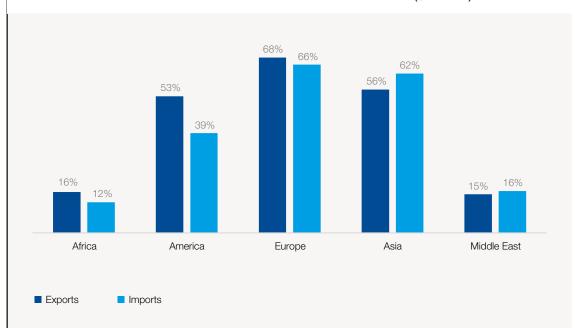
The current insufficient and inert interlinkages between African economies have exacerbated the impact of the COVID-19 pandemic on the continent's supply chains. However, if successfully implemented, current efforts by the AU to stimulate trade as well as deepen and create new regional value chains could result in competitive value chains and resilient supply chains in Africa.

Intra-African trade dynamics

Intra-African trade is still largely marginal compared to intra-continental trade in North and South America, Europe and Asia, but almost equal to intra-transcontinental trade in the Middle East, as shown in Figure 2.

FIGURE 2

Intra-continental trade as a % of total trade with the world: 2019 (\$ million)



Source: Prepared by Deloitte using ITC calculations based on United Nations Comtrade statistics, 2020 (www.trademap.org/ Index.aspx)

> In 2019, intra-African trade totalled \$137.6 million, approximately 4.7% less than in 2018. Only 16% of total African exports and 12% of total African imports were to and from African countries in 2019. This highlights the limited production capability in Africa to meet the needs of the continent, 15 given that both Africa and the Middle East predominantly export primary and unprocessed goods. Figure 2 suggests that continents which rely mainly on

exports of such commodities tend to have a low intra-continental trade. To ensure an enabling environment in which economic integration can be deepened in Africa, the heads of regions and governments of countries on the continent must make a deliberate effort to strengthen and align industrial policies in order to improve Africa's manufacturing capability and ultimately turn out more diversified African exports.

FIGURE 3 Intra-African exports and imports: 2015-2019 (\$ million)

Intra-African imports as a % of African imports from world Intra-African exports as a % of African exports to world

Source: Prepared by Deloitte using ITC calculations based on United Nations Comtrade statistics, 2020 (www.trademap.org/ Index.aspx)

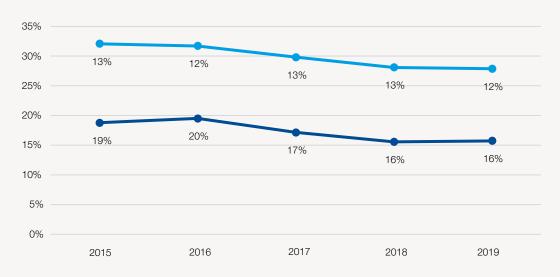


Figure 3 shows that intra-African trade declined over the period 2016–2018, before stabilizing from 2018–2019. Despite that, intra-African trade has been hovering at around 15% of total trade from 2015–2019. This indicates that intra-African trade has been stable for the past five years, implying that Africa's efforts to override its reliance on foreign markets have not realized in that period. To a large extent, this is because of the low levels of industrialization in Africa and the continent's dependency on raw materials.16

Table 1 lists the top 10 African exporters for products imported by African countries and the top 10 African destinations for products exported by African countries in 2019 by value. The intra-African exporting powerhouses are South Africa, Nigeria, Egypt and Ivory Coast, with these countries respectively accounting for approximately 35%, 16%, 7% and 4% of aggregated Africa exports to African markets in 2019.

TABLE 1

Top 10 intra-African exporting and importing markets: 2019 (\$ million)

Top 10 supplying markets in Africa for the product imported by Africa (main source markets)

Top 10 importing markets in Africa for the product exported by Africa (main destination markets)

Rank	Country	Value in \$	% share of Africa aggregation	% share of total exports to world	Country	Value in \$	% share of Africa aggregation	% share of total imports from world
1	South Africa	24,109,819	35%	27%	South Africa	10,219,646	15%	12%
2	Nigeria	10,959,661	16%	20%	Namibia	5,125,994	7%	66%
3	Egypt	4,767,434	7%	16%	Ghana	4,934,365	7%	29%
4	Ivory Coast	2,862,751	4%	23%	Botswana	4,516,851	7%	69%
5	Zimbabwe	2,644,221	4%	62%	Zambia	3,350,857	5%	46%
6	Namibia	2,368,389	3%	37%	Nigeria	3,084,951	5%	7%
7	Morocco	2,242,924	3%	8%	Mozambique	2,429,493	4%	32%
8	Kenya	2,185,757	3%	37%	Ivory Coast	2,425,327	4%	23%
9	Eswatini	1,845,678	3%	92%	Congo, Democratic Republic of the	2,370,054	3%	36%
10	Senegal	1,798,233	3%	43%	Zimbabwe	2,298,412	3%	48%

Source: Prepared by Deloitte using ITC calculations based on United Nations Comtrade statistics, 2020 (www.trademap.org/ Index.aspx)

Approximately 27% of Africa's total exports emanated from South Africa and amounted to \$24.1 million in 2019 (i.e. approximately 4% less than the value recorded the preceding year);17 20% of Nigeria's exports were to African markets and these amounted to \$11 million in 2019 (i.e. approximately 57% more than the preceding year). $^{\mbox{\tiny 18}}$

Equally important, intra-African key importing markets are South Africa, Namibia, Ghana and Botswana, respectively accounting for 15%, 7%, 7% and 7% of aggregated Africa imports from African-supplying markets. Approximately 12%

of South Africa's world imports emanated from African-supplying markets and these imports amounted to \$10.2 million in 2019, which is approximately 13% less than the preceding year.¹⁹ The key concerns are the declining trend of intra-African trade across these powerhouses and declining investment in local production capacity. It is noteworthy that South Africa, Nigeria and Namibia are the main suppliers of the top five exported products in the African continent. Table 2 also shows that relative to other Africa member countries, South Africa is the prime supplier of most machinery, vehicles and their parts in Africa.

BOX 1 | Morocco's automotive growth success

Four hubs have been built upon six ecosystems - the wiring ecosystem; metal and stamping ecosystem; battery ecosystem; vehicle interior and seat ecosystem; powertrain, engine and transmission ecosystem; truck and industrial vehicle body ecosystem - with each of them being driven in conjunction with large global OEMs.

The success of these hubs can be attributed to:

- 1. The implementation of the policies within the free zones that enabled companies exporting 85%+ of production exemption on corporate taxes and VAT as follows:
- Corporate income tax: full exemption for five years, and 15% tax rate for subsequent years
- Occupation and business tax: exemption for 15 years
- VAT: full exemption throughout company lifetime
- 2. Offshore banks active in Morocco's export free zones offering customized financial packages for local and foreign investors in the automotive industry, supporting both onshore and offshore projects^a
- 3. The supply-chain networks that were efficient at managing timely logistics to enhance shipment times and thereby productivity
- 4. The co-investment of key infrastructure requirements in the hub to enable production

- 5. The skills development programmes that focused on employees at different stages and aligned with the production capability requirements in the hubs
- 6. The strategic trade facilitation with potential export partners to enable offtake agreements to create economies of scale

Over and above this, success can be attributed to the leadership drive aimed at creating an industry anchored on the future of mobility, as echoed by industry minister Moulay Hafid Elalamy: "We are also anticipating the technologies of tomorrow. In the future, we will work more on connected vehicles and we will continue to build ecosystems in this direction." This creates confidence that investment made will yield returns that are geared towards the global transition of the industry to the Fourth Industrial Revolution.

- Government of Canada (2020). Moroccan Automotive Value Chain Profile and Opportunities: https://www.tradecommissioner.gc.ca/ morocco-maroc/market-reports-etudesde-marches/0005071.aspx?lang=eng (link as of 7/1/21).
- b. Morocco World News (2020). Morocco's Automotive Sector to Compete with China and India: Morocco's Automotive Sector to Compete with China, India (moroccoworldnews.com) (link as of 7/1/21).

TABLE 2 First- and second-largest suppliers of the top five exported products in Africa: 2019 (\$ million)

Top five intra-African exported products	First- and second-largest intra-African supplier of product	% share of total intra- African exports of product	
Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	– Nigeria – South Africa	- 33.8% - 15.5%	
Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	– Namibia – South Africa	- 22.7% - 9.4%	
Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	– South Africa – Tunisia	- 72.3% - 3%	
Ships, boats and floating structures	– Nigeria – Angol	- 18% - 4.2%	
Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	South AfricaMorocco	- 82.6% - 4.7%	

Source: Prepared by Deloitte using ITC calculations based on United Nations Comtrade statistics, 2020 (www.trademap.org/Index.aspx)

South Africa disproportionately dominates in two of the three categories that represent products requiring significant manufacturing capacity. The low percentage share of the top two suppliers of the two most exported product categories indicates that there is significant fragmentation of supply, with many countries able to supply these product categories. Nigeria is the prime supplier of most mineral fuels, ships and boats in Africa. Petroleum oils and oils obtained from bitumen are the main mineral fuels that are supplied by Nigeria to African markets, while vessels and other floating structures for breaking up (scrapping), together with light vessels and submersible drilling or production platforms, represent the main component in Nigeria's ship and boat exports to African markets. On another note, Namibia is the prime supplier of most natural or cultured pearls consumed in Africa. Despite Morocco being the second-largest supplier of vehicles and their parts in Africa, the country mainly exports these

vehicles and their parts to Middle East markets rather than African markets, thus it may not be featured as a key African vehicle and vehicle parts supplier to African markets. However, Morocco's automotive experience presents valuable lessons for automotive custodians in other African countries (see Box 1). As it stands, Morocco's automotive vehicle production revenue is \$10.5 billion, i.e. 25% of Morocco's total exports in 2019.

The country has been able to increase its local production, with 50 companies creating more than 148,000 direct jobs (in the 2014-2019 period) and producing in excess of 400,000 vehicles with a local integration rate of 60%.20 Morocco's proximity to the European – mainly France (31%), Spain (11%), Germany (9%) and Italy (9%) - Turkish (8%) and Middle Eastern (5%) markets has created the scale of production to grow with increased investment as it strengthens its capability to compete globally.

TABLE 3

First- and second-largest markets for the top five imported products in Africa: 2019 (\$ million)

Top five intra-African imported products	First- and second-largest intra-African markets for product	% share of total intra- African imports of product	
Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	– South Africa – Tunisia	- 28.9% - 11.0%	
Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	– Zambia – Mozambique	- 11.1% - 10.7%	
Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	– Namibia – Botswana	- 14.5% - 12.9%	
Plastics and articles thereof	– Zambia – Burkina Faso	- 8.2% - 6.7%	
Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	– Botswana – Namibia	- 10.1% - 10.1%	

Source: Prepared by Deloitte using ITC calculations based on United Nations Comtrade statistics, 2020 (www.trademap.org/ Index.aspx)

Table 3 presents the first- and second-largest markets for the top five imported products in Africa in 2019. South Africa, Zambia, Namibia and Botswana are the main markets for the top five imported products in Africa as shown in the table. South Africa is the prime market for mineral fuels, especially petroleum oils and oils obtained from bitumen; Zambia is the prime market for machinery and plastics. The main plastics imported by Zambia are in their primary form – the country's top two plastics imports from African suppliers are acrylic polymers and polymers of propylene in their primary form. The

primary nature of plastic imports by Zambia indicates the country's capacity to beneficiate primary plastics into final consumable plastic product.²¹

Namibia is the prime market for vehicles and vehicle parts from African countries in value terms. This is because Namibia's automotive imports from African automotive suppliers mainly consist of completely built motor vehicles for the transport of goods, and motor cars for the transport of people, which both turn out to be high in value. It is also important to note that Africa's automotive exports are mostly

split among southern African countries and although these countries consume varying levels of automotive imports, their proximity to the main automotive powerhouse in Africa (i.e. South Africa) has enabled them to be the key export destinations for automotive products produced in Africa. For example, while Namibia's 2019 automotive imports accounted for approximately 14.5% of total intra-African automotive imports, Botswana, Zimbabwe and Zambia automotive imports accounted for approximately 12.9%, 8.1% and 7.4% of total intra-African automotive imports respectively.²²

However, Namibia's automotive exports are likely to grow substantially thanks to a joint venture with Groupe Peugeot Société Anonyme (Groupe PSA) in Walvis Bay that will assemble up to 5,000 Opel and Peugeot cars in 2020.23 Despite some regulatory challenges that have caused delays, the Deputy Minister of Industrialisation and Trade, Verna Sinimbo, says the ministry is on the verge of resolving the bottlenecks.²⁴ Botswana is the prime market for electrical machinery and equipment, as shown in Table 3, and has made and continues to make several efforts to create an automotive sector.



Current African policy efforts towards continental trade integration

African integration was the basis for the establishment in 1963 of the Organization of African Unity (OAU), the predecessor of the African Union. Since then, the importance of the OAU has been shown in various continental integration programmes, including the setting up of the African Union (AU) in 2002 and, most recently, the 2012 Action Plan for Boosting Intra-African Trade (BIAT) coupled with the agreement establishing the African Continental Free Trade Area (AfCFTA), signed in 2018 by 54 African countries.²⁵

The BIAT action plan and the AfCFTA agreement jointly offer a comprehensive framework to generate economic growth and deepen industrialization and development across Africa and form part of broader initiatives under the AU's 2063 Agenda.²⁶ It should be noted that the two initiatives differ - while BIAT is continuous, with tangible milestones tracking progress towards doubling intra-African trade flows from 2012-2022, the AfCFTA is a time-limited initiative. The following opportunities are envisioned:

Boosting Intra-African Trade (BIAT) action plan at a glance

BIAT was established to respond to the main challenges preventing African regional and continental integration, with the aim of unlocking the benefits of trade for sustainable economic growth and development in Africa.²⁷ It is important to note that the BIAT action plan is not an independent new framework, but instead consolidates existing plans to respond to intra-African trade challenges effectively. This action plan was not designed to trump existing initiatives aimed at integrating Africa (e.g. the Action Plan for Accelerated Industrial Development for Africa [AIDA], the Programme for Infrastructure Development in Africa [PIDA] and the Minimum Integration Programme [MIP]) but serves to supplement them.²⁸ The BIAT action plan consists of seven major clusters, which are delineated in Table 4, together with activities under each cluster.29

TABLE 4 | BIAT action plan and its activities

Clusters	Activities
Trade facilitation	 Reducing barriers to regional and continental integration (e.g. roadblocks to customs and transit procedures) Harmonizing and simplifying customs and transit procedures and documentation Establishing one-stop border posts Integrating border management
Trade policy	 Mainstreaming intra-African trade in national strategies Increasing participation by private sector, women and informal sector Boosting intra-African trade in food products Undertaking commitments to liberalize trade-related services Committing to harmonize rules of origin and trade regimes Promoting "Buy in Africa" and "Made in Africa"
Productive capacity	 Implementing AIDA, ATII, APCI and 3ADI Establishing integrated trade information systems; encouraging investment/FDI Establishing regional centres of excellence
Trade-related infrastructure	 Implementing PIDA Mobilizing resources for multi-country projects Developing high-quality multi-country projects Creating an enabling environment for private-sector participation Developing innovative mechanisms (such as legal and financial) for multi-country projects
Trade finance	 Improving payment systems Creating an enabling environment for financial services to provide export credit and guarantees Speeding up establishment and strengthening regional and continental financial institutions (Afrexim, PTA Bank and ATI)
Trade information	Creating interconnected centres of trade information exchange
Factor market integration	 Operationalizing existing protocols and policies Facilitating movement of businesspeople Harmonizing rules on cross-border establishment Establishing agreements on mutual recognition of qualifications

Source: Adapted from African Union Commission (AUC) and Economic Commission for Africa (ECA), 2012



 African Continental Free Trade Area (AfCFTA) at a glance

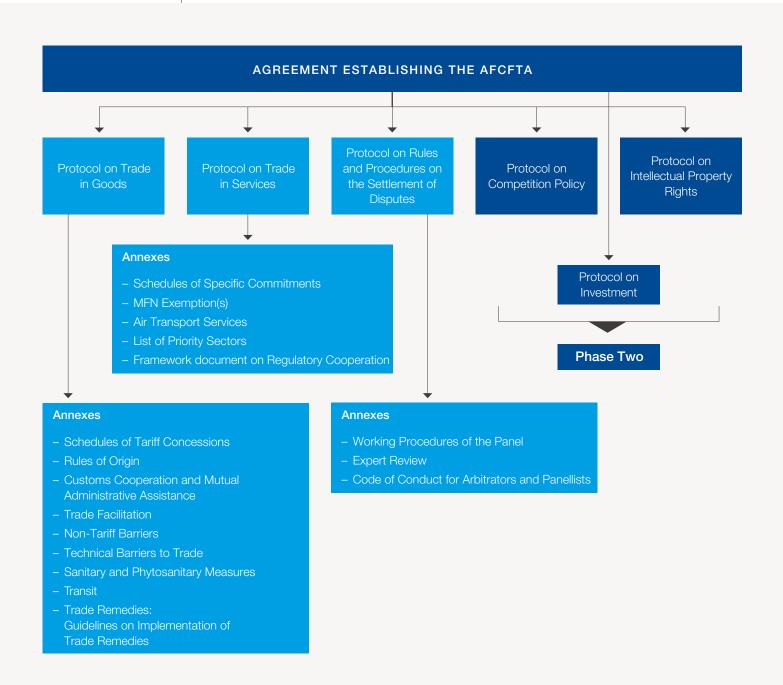
The AfCFTA agreement presents Africa with an opportunity to boost intra-continental trade and harmonize African trade arrangements across Regional Economic Communities (RECs) in order to improve governance.30 Considering the number of participating countries in AfCFTA and its aspirations, the recent agreement is indisputably the most ambitious effort to liberalize African trade since the General Agreement on Tariffs and Trade (GATT). Once completed, AfCFTA is expected to yield an African market of 54 sovereign nations, with a consumer base of 1.2 billion people and a

combined gross domestic product (GDP) of more than \$2 trillion.

It is also envisioned that the AfCFTA agreement will yield economic gains for the African continent, including \$16.1 billion welfare gains (i.e. even after accounting for tariff losses), a GDP growth of 1-3%, employment growth of 1.2%, intra-African trade growth of 33% and a 50% decline in Africa's trade deficit.31 Equally important, the 97% of tariff-free trade across African markets together with reduced trade barriers and the liberalization of services trade instigated by the AfCFTA agreement will potentially unlock lucrative benefits for investors and businesses operating in Africa.32

FIGURE 4

Structure of the AfCFTA agreement



Source: Tralac, 2019

The AfCFTA agreement consists of two main phases. The first phase includes the official set of rules that address trade in goods, trade in services and protocols on the settlement of disputes, together with their respective annexes, lists, schedules and guidelines that communicate the provisions of phase 1 procedures in depth.³³ The rules subsumed in phase 1 were adopted on 30 May 2019 and an operational aspect of the AfCFTA agreement was enacted on 7 July 2019 under the governance of the African Trade Observatory. Trading under the AfCFTA agreement was expected to commence on 1 July 2020, but

due to the COVID-19 pandemic, operationalization was postponed to 1 January 2021.34 The second main phase of the agreement involves negotiations that will address competition policy, investment and intellectual property rights. These negotiations are scheduled to be concluded by January 2021.35

The AfCFTA agreement is not the largest global mega-regional trade agreement that has made significant progress towards operationalization - that is the Regional Comprehensive Economic Partnership (RCEP) agreement signed by 15 Asia-Pacific countries (see Box 2).36

BOX 2 Regional Comprehensive Economic Partnership

On 15 November 2020, 15 Asia-Pacific countries signed the Regional Comprehensive Economic Partnership (RCEP) agreement after eight years of negotiations. The agreement includes 10 Association of Southeast Asian Nations (ASEAN) member countries and the region's top five trading partners (China, Japan, South Korea, Australia and New Zealand).^a Besides the strategic focus that addresses trade in goods and services, as well as investment, the RCEP agreement also incorporates a strategic focus on electronic commerce, intellectual property, competition, economic and technical cooperation, small and medium enterprises (SMEs) and government procurement.

Once RCEP is ratified and operationalized, it is envisioned to yield a market of 2.2 billion people (approximately 30% of the global population) and a combined GDP of \$26.2 trillion, and will account for approximately 28% of global trade.

CNBC (2020). New Regional Trade Deals to Help China "Sustain Its Advantages" in Global Supply Chain: https://www.cnbc.com/2020/11/23/chinaset-to-dominate-global-supply-chains-as-rceptrade-deal-is-signed.html (link as of 12/1/21).

AfCFTA and the RCEP agreements have a common aspiration of liberalizing trade and investment by progressively lowering tariffs and cutting red tape, but the two mega-regional trade agreements differ in their envisioned population, GDP and trade sizes and strategic focus. For example, it is envisioned that once implemented, the RCEP agreement will

yield a market approximately 45% greater than the AfCFTA agreement. In addition, compared to the strategic focus of the AfCFTA agreement (Figure 4), RCEP differs in three ways: the setting up of new rules on electronic commerce, small and medium enterprises (SMEs) and government procurement.³⁷

African intra-Regional Economic Community trade dynamics

Regional integration has been high on African countries' agendas since the 1960s, when 17 countries achieved independence and expressed a growing pan-African point of view. However, the establishment of African Economic Communities (AECs) in the continent took place only from 1991 as a result of the Lagos Plan of Action for the Economic Development of Africa and the Abuja Treaty, which were ratified by 51 heads of governments and states under the African Union and entered into force in 1994.38 The treaty established a roadmap towards African economic and monetary union by 2028, consisting of six steps:

1. Strengthening existing African RECs and establishing new RECs within a period not exceeding 34 years from 1991

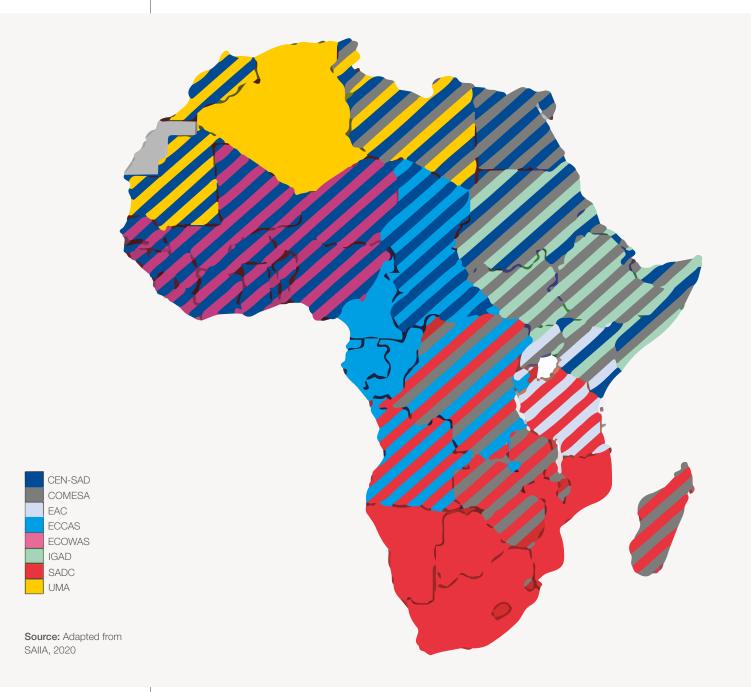
- 2. Ensuring consolidation within each REC and harmonization between the RECs by 2007
- 3. Establishing free trade areas (FTA) and custom unions (CU) in each REC by 2017
- 4. Coordinating and harmonizing tariffs and nontariff systems among RECs with a common vision of creating a continental CU
- 5. Creating an African custom market (CM) by
- 6. Establishing an AEC that includes an African monetary union and a Pan-African parliament.39

Various African RECs were established as the first step of the Abuja Treaty roadmap (Figure 5).40 In addition, a tripartite agreement was established between the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC) and the Southern African Development Community (SADC) in June 2015, as a further effort to accelerate economic integration

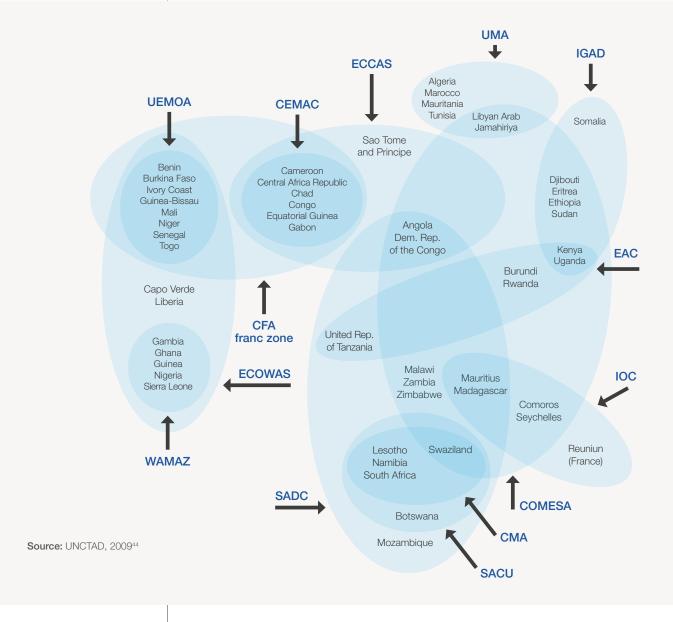
in Africa. It is important to realize that the AfCFTA agreement will not trump or dismantle African RECs that were established as a result of the Lagos Plan of Action and the Abuja Treaty, which conceived continental integration at a custom union level, but the AfCFTA agreement is a significant preparatory step towards the continental custom union as detailed by the Lagos Plan of Action and Abuja Treaty.41

FIGURE 5

Main African RECs



Moreover, it is important to note that some African countries are members of more than one REC as shown in Figure 5: Djibouti, Burundi, Uganda, Democratic Republic of the Congo, Eritrea, Sudan and Libya are each members of three RECs. Kenya is the only country in the region with four REC memberships (the Community of Sahel-Saharan States [CEN-SAD], COMESA, EAC and the Intergovernmental Authority on Development [IGAD]).42 Although this presents importers with a choice of arrangements under which to import goods, it may create trade challenges in the form of higher costs and increased red tape for exporters, especially for small, medium and micro-enterprises (SMMEs) looking to export, 43 consequently hampering exporting countries' efforts to diversify into new markets and ultimately diminishing potential scale benefits for exporters who fail to meet stricter product standards.



Furthermore, despite the establishment of Africa's RECs, challenges remain to the creation of regional intra-trade relations that unlock regional value chains. Some African RECs have failed to implement steps in the Abuja Treaty roadmap: Only three out of the eight RECs have made significant progress in developing a free trade area (FTA) and a custom union (CU).⁴⁵ In addition, elements including high transport costs together with high non-tariff barriers have contributed to the suboptimal performance of African RECs in moving towards regional integration.

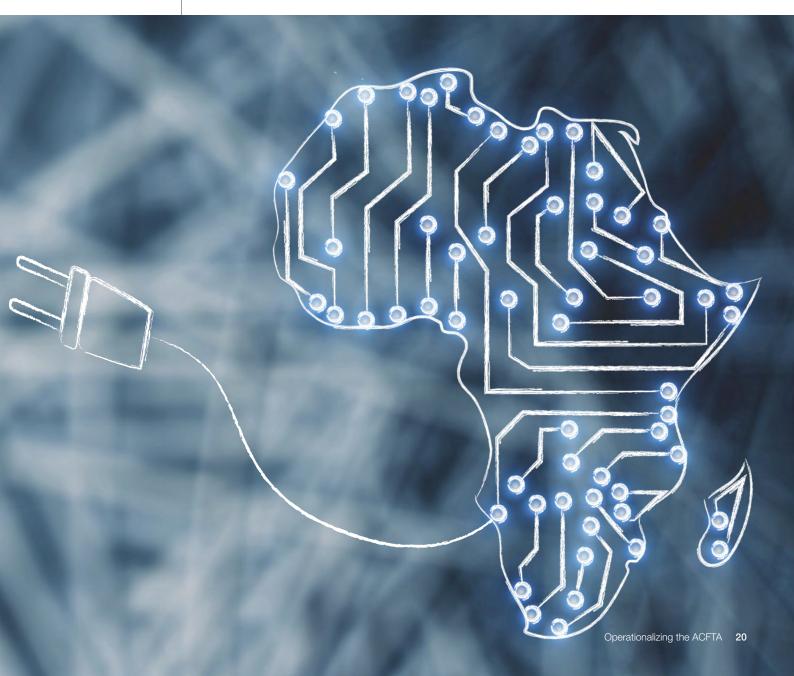
These challenges, among others, have weakened the African economic integration process – and African markets and suppliers remain inadequately integrated. The top four African RECs with the highest level of intra-regional trade are SADC, EAC, the Economic Community of West African States (ECOWAS) and COMESA. Despite these African RECs being the most integrated when compared to their counterparts, trade in all African RECs has been marginally stable at varying levels of integration with little or no growth for the past five years – as shown in Figure 7.

The SADC REC is the most integrated REC in Africa, with intra-SADC trade hovering at around 20% in 2015-2019. Nevertheless, intra-SADC trade totalled approximately \$64 million in 2019 about 11% less than 2018. Similar trends are also observed in intra-EAC trade, which constitutes the second-biggest contributor to intra-African total trade and amounted to approximately \$4.7 million in 2019, about 7% less than in 2018. This reflects a significant downswing in intra-African trade, since intra-SADC and intra-EAC trade respectively contribute the highest shares to total intra-African trade. 46 The ECOWAS is perhaps the most focused on the automotive sector: The ECOWAS automotive industry policy framework seeks to boost the automotive industry in the region by building the capacity of member states in vehicle assembly, production and marketing.⁴⁷ The African Development Bank is championing the effort with support from the Korea-Africa Economic Cooperation Fund (KOAFEC), highlighting the opportunity this presents to "Industrialize Africa" and "Integrate Africa".48

FIGURE 7 | Intra-regional trade in African RECs: 2015–2019 (\$ million)



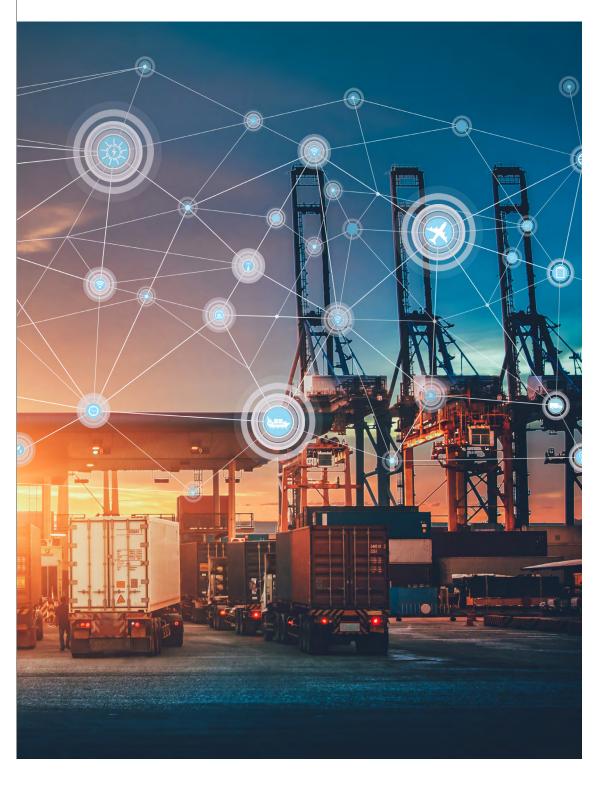
Source: Deloitte calculation based on UNCTAD statistics, 2020 (www.unctadstat.unctad.org)





3 Challenges to intra-African Trade

Intra-African trade growth has been constrained, affecting the creation of regional value chains.



The low levels of intra-African trade discussed above indicate the opportunities available for fostering greater regional integration. The intra-trade levels are also indicative of the extent to which regional value chains (RVCs) exist on the continent. By addressing intra-African trade challenges, countries can open up increased opportunities to construct RVCs in a

variety of products. In short, boosting intra-regional trade supports the creation of RVCs.⁴⁹

The challenges discussed below, although not exhaustive, offer some insights into the constraints on intra-regional trade and, by implication, on the development of RVCs.

Extent of participation in value chains

Activities in African countries tend to be concentrated at the highest and the lowest stages of value chains. Most of the exports by value are in raw and unprocessed goods.

There are several implications. First, the value-add that occurs on the continent is limited, as very few intermediate steps in the value chain are undertaken

regionally for the largest proportion of exported goods by value.

Second, this creates great vulnerabilities as economies are exposed to volatility in commodity prices that might not exist for more processed products produced from these commodities.

Production capabilities

Production capabilities may have multiple effects on intra-regional trade. There is a need not only to have the capabilities to produce products but also for production to be cost-competitive and to adhere to global standards.

First, production capabilities play an important role in the extent of value-chain participation. If countries are not able to transform raw materials and intermediate goods at competitive prices, they may find that they can participate in only a few levels of the value chain.

Production capabilities are also sometimes insufficient on the continent in areas where countries have a natural advantage in the form of raw materials or labour costs. This can be seen in

the large proportion of exports of minerals that are processed in export markets, with the products from these raw materials sometimes being imported back into the continent.

Finally, production capabilities are important for maintaining standards for products and obtaining certification. Many suppliers that are not large, well-established players have difficulty in meeting required standards and obtaining the necessary certification. Firms will have a reduced incentive to set up manufacturing plants where they believe their standards cannot be adhered to. This has a ripple effect as the setting up of manufacturing facilities tends to result in the establishment of suppliers at lower stages of the value chain around the manufacturing facilities.

Distance and infrastructure

There are vast distances between markets on the continent, which also means that transferring products at different levels of the value chain can be costly. This challenge is further exacerbated by the lack of enabling infrastructure connecting countries, especially rail, which can provide cost-effective transportation. In 2019, Africa had fewer kilometres of road than it had 30 years before and the highest costs of transporting goods in the world.⁵⁰

Due to logistical challenges, including poor road infrastructure and a lack of rail infrastructure, some

firms find it more cost-effective to ship goods from an African country to another continent (e.g. Europe) and then on to another African country.

Given that in order to build effective regional value chains, raw materials and intermediate goods may need to move across multiple countries (for production) and finished goods may be sold in many markets on the continent, costs can build rapidly if transportation between countries is costly and inefficient because the transport infrastructure is poor and causes delays.

Trade facilitation

Key to regional integration and building value chains is the facilitation of trade. Trade facilitation ensures intermediate products can move about the continent for value addition at different stages of the value chain, helping build RVCs. It also ensures products produced on the continent can be sold into markets on the continent. Trade facilitation has been hampered by tariff barriers and non-tariff barriers.

Tariffs

The establishment of RECs throughout the continent has boosted some regional trade. However, trade between RECs is still required to build RVCs. This is important in cases where comparative advantages in raw materials and labour costs and, for example, varying levels of industrialization mean that some countries outside of the RECs could form part of RVCs. Tariffs in the

RECs can, however, raise the cost for producers as intermediate goods are traded multiple times across borders.

These tariffs also affect the choices of sourcing by producers as inputs from other African countries that may be competitively priced become too expensive once tariffs are taken into consideration.

Non-tariff barriers

Many countries apply non-tariff measures that may include sanitary and phytosanitary standards (SPS), trade-related technical barriers (TBTs), quotas, subsidies, anticompetitive measures, import or export licences, export restrictions and custom surcharges. While these measures may be effective in protecting economies from unfair trade practices or poor health standards in exporting countries,

these can become non-tariff barriers if they are used for protectionism and restricting imports.⁵¹

These non-tariff barriers can significantly raise trade costs. They can also affect the time it takes for goods to move across borders, which may cause complications in production processes.



Industrial policy

Industrial policy plays a key role in creating intraregional trade as well as in forming regional value chains. These work as roadmaps for the industrialization of the economy and development of skills.

Although many countries draw up policies that would be highly effective, many face challenges in the implementation phase. There tend to be a variety of reasons for this, including the inability of policy-makers to understand how sectors and industries function in practice, insufficient political will and a lack of inclusion of all relevant stakeholders in creating policy.

At times, industrial policy does not have the desired effect because countries do not create

"learning policies" that are adapted as the conditions and dynamics change. Instead, policies are kept in place as they are seen to be the right policies to follow despite observed alterations in operating environments.

An additional challenge to RVCs and intra-regional trade is related to the lack of collaboration between industrial policies in different countries. This could be beneficial in cases where some countries could produce intermediate goods due to competitive advantage or comparative advantage of raw materials and other countries could then participate in other steps of the value chain of a product.

Pockets of industrialization

A number of countries on the African continent are more industrialized than the majority of others. These tend to have larger economies and make up the largest proportion of exports into the continent. This provides incentives for large firms especially to locate in these countries.

While this provides an opportunity to create RVCs, many of these large firms can control the dynamics of trade and investment in the markets in which they operate. Such firms largely have their own supply networks set up, which they continue to use upon entry into new markets. As a result, these firms do not invest in production capabilities

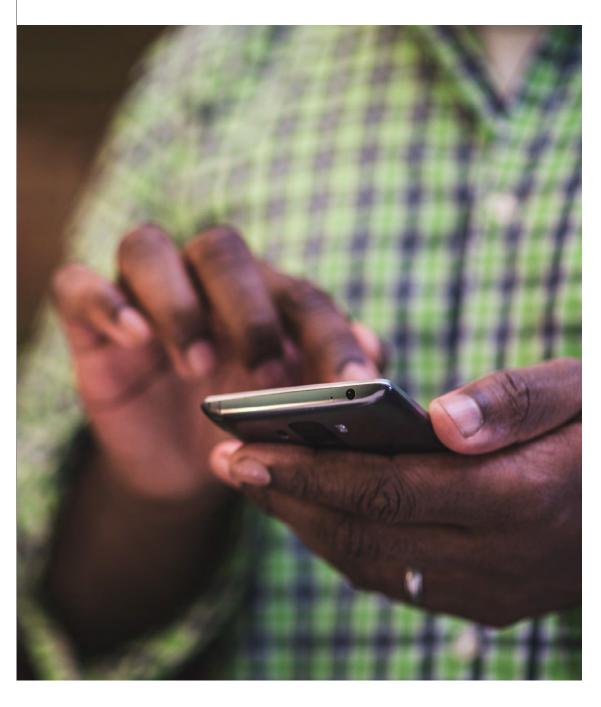
in the markets into which they expand and thus the opportunities to create value addition in those markets are not realized.

An example of this is a large retailer that has opened stores in certain markets but does not source products in those stores from local suppliers, instead making use of its own supply networks and importing most of the products that are then sold locally. As a result, production capabilities, local content and local value addition are not advanced in the markets where these retailers operate.



4 Addressing intra-regional trade and regional value chains (RVCs)

There are a number of options for catalysing intra-regional trade.



Despite some impediments to intra-regional trade on the continent and by extension the construction of RVCs, several remedies could be employed to promote better trade and RVC outcomes.

Industrial policy

Industrial policy is a key component for trade as it can be used to accelerate industrialization in nations and increase local production capabilities. Below we outline some key aspects that should be taken into consideration when designing and implementing industrial policy in order to increase participation

in value chains. While local production will result in significant benefits, it is important that governments designing policy do not act abruptly and short-sightedly by pursuing import substitution strategies that may potentially cause longer-term disruption and uncertainty for companies' supply chains.

Determine areas of advantage

It is important for industrial policy to be based on current and future advantages that a specific economy possesses or can cultivate in future. These advantages will ensure that the country is competitive regionally and possibly globally from either a cost and/or a production standard point of view (e.g. producing complex products that may not be widely available or being the highest-quality

producer of certain products). These advantages may include endowments of raw materials, technical know-how, labour costs or favourable industrial policy measures that favour production in certain sectors. In identifying and maximizing these advantages, countries can develop their own "value proposition" for export markets.

Aim for increased complexity and variety

Countries that have a great diversity of knowhow, particularly complex, specialized know-how, can produce a wider variety of sophisticated products.⁵² Increased complexity in production typically goes hand in hand with higher value addition. This enables countries to capture greater production benefits by allowing them to participate in increasing steps of the value chain. Furthermore, by diversifying and increasing their variety of exports, countries are able to increase trade possibilities with other countries. A greater variety of exports and increased complexity of products also works to better insulate industries from shocks in specific markets (e.g. commodity price fluctuations).

Create 'learning policies'

Industrial policies need to be able to adapt to changing dynamics in the sectors in which the policies seek to have an impact. This requires keeping abreast of global and local changes in key factors and ensuring that policy-makers learn from these developments and adjust industrial policy accordingly.

An example of this is the transport sector, where the advent of mobile phones and internet connectivity have given rise to increasingly accessible and affordable mobility. However, in some countries,

this access and its economic benefits have been constrained by policies and legislation that were enacted before these technological developments occurred. As such, many innovations are hampered in these countries.⁵³

By creating learning policies, countries can assimilate technological and other changes into their sectors, enabling them to take advantage of innovations and be globally competitive.

Attract investment

While industrial policies are often aligned with public-sector investment (through means such as public provision of infrastructure), private investment is a critical driver of industrial development. Foreign direct investment (FDI) not only consists of monetary investment but can include skills, technology and business support to local firms and suppliers. In addition, FDI can support trade as it is often export-focused.54

Understandably, industrial policies are often designed to maximize the benefit for a country and its citizens. However, acceptable levels of flexibility and concessions are required to create an attractive environment for FDI.

In Rwanda, for example, VW has made significant investment in vehicle production. Key to this investment were incentives including corporate tax incentives for companies that make investments exceeding \$50 million and incentives for exporting, such as a reduced corporate tax rate of 15% (versus 30%) for companies that export goods manufactured in Rwanda.

In Ethiopia, a multitude of incentives such as industrial parks, access to bank loans and financial incentives have attracted businesses such as Ericsson and H&M.55

Coordinate policy with other nations within value chains

Policy coordination can be used to stimulate intra-African trade and RVCs by combining the comparative and competitive advantages of individual countries or developing specialization in certain parts of value chains for certain products.

A good example is that of the Association of the Southeast Asian Nations (ASEAN) regional organization members, who use a hub-andspoke model in the automotive sector. Vehicle components are manufactured in five of the member countries (Indonesia, Malaysia, the Philippines, Viet Nam and Singapore) and are shipped to Thailand, where the vehicles are assembled.56 Box 3 provides an overview of the

Thailand experience and how the country will need to adapt post-COVID-19 pandemic. Countries such as Lao People's Democratic Republic and Cambodia are also part of this model and make use of their advantage of lower labour costs to participate in the value chain through producing labour-intensive components (e.g. seat covers and aluminium die casting parts).57

The hub-and-spoke model described below enables many countries to participate in and benefit from the automotive sector in Asia. In order to achieve this, though, policies in the various countries need to be aligned in order to ensure that countries focus on producing certain goods.



Since 2010, Thailand has been ramping up its automotive production capability, which accounts for 14% of total industrial production and employs 800,000–900,000 people. This has been achieved, first, by stimulating local demand through the Ecocar, with excise tax that supported a transition towards green vehicles and alternative energy. Secondly, it has optimized its strategic position on the Indochina peninsula. Thailand has the perfect location, connected as it is to 2 billion people in South-East Asia and China by land and by sea and with world-class infrastructure.^a

It has also intentionally driven the development of the industry in an inclusive manner by creating opportunities for local SMMEs to form the most significant part of production as Tier 3 suppliers and for Tier 2 in partnership with global OEMS. This has created the much-needed local capability through a mutually beneficial skills transfer and a globally competitive positioning, with Thailand now accounting for 2.01 million units (2019) of the world's production from 1.65 million units in 2010.

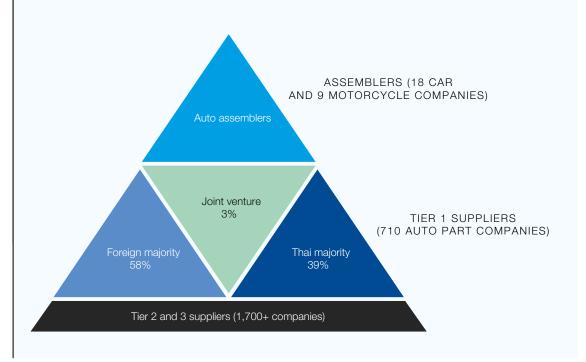
Throughout this process, Thailand has sought to transition its low-skilled workforce to high-skilled occupations in the industry: 61% of all workers in the Thai automotive industry are high-skilled labour with a high vocational diploma or above, and forecasts for 2021 indicate that 27% will have a bachelor's degree in engineering and 5% will hold a master's degree or above. However, the industry began to slow in 2019 due to the declining Thai demand for cars, while the economy also slowed down as a result of an international trade war.^b

COVID-19 has exacerbated the situation, bringing about a 40% decline in production and, as producers seeks to rely more extensively on automation for the future, there will be limited intake of staff. Workers with a high-school

education on production lines will likely be most affected, especially in assembly-line quality checks and technical work due to gaps in computer and English skills.

The key lessons learned from Thailand's experience are as follows: first, to diversify the supply chain in auto parts in order to manage reliance on a single production base; second, to enhance inventory management while balancing just-in-time principles to ensure production continuity; third, and most important, to crowd in neighbouring countries on a competitive basis to create a more compelling case for FDI investment in the region, rather than just the country. Lastly, it has become important to understand and time the transitions in the electric vehicle (EV) and CASE (connected, autonomous, shared and electric) trends to ensure competitiveness with European countries. At the same time, there is an opportunity to grab exports to Indonesia and the Philippines while large OEMs have shut down operations in Viet Nam, which could support the Thailand case for further FDI investment.c

- a. Thailand Board of Investment (2015). Thailand
 Automotive Industry the Next Generation.
- b. The National Thailand (2020). COVID-19
 Crisis Will Lead to Accelerated Change in the
 Automotive Industry: Researchers: https://www.nationthailand.com/business/30396247?utm_source=homepage&utm_medium=internal_referral (link as of 8/1/21).
- c. Global Data (2020). Thailand Vehicle Production to Decline Between 25–30% in 2020, Forecasts GlobalData: https://www.globaldata.com/thailand-vehicle-production-decline-25-30-2020-forecasts-globaldata/ (link as of 8/1/21).



Trade policy and facilitation

Trade policy can boost intra-regional trade and the creation of RVCs as it can stimulate trade as well as providing significant economic benefits to countries that participate in trade where the "rules of the game" are set up well.

Design optimal rules of origin

Rules of origin can have a significant impact on the depth and pattern of regional integration through their influence on the choice of intermediate inputs used in goods that are eligible for preferential treatment. A number of approaches to rules of origin can be taken in order to encourage local value addition and production and to promote intraregional trade and RVCs.

First, rules of origin should be sufficiently stringent to promote local value addition. This prevents countries that do not enjoy preferential access to markets from using countries that do as sources of origin, thus gaining this preferential access (i.e. encountering lower duties and tariffs).

Second, it is important that rules of origin are clear and understandable, transparent and predictable. This ensures that the rules of origin can be implemented well.

Finally, rules of origin should be evolutionary. That is, the required local value addition or the portion of inputs to be sourced from within a regional trade area should be low in the beginning as many countries have weak institutional capacities, low levels of competitiveness and limited capabilities to participate in RVCs. Initially low requirements enable these countries to build up production capability while still having access to cheaper raw materials and intermediate goods. Once countries have improved their production capacity and capability, greater local value addition requirements can be imposed.⁵⁸

Address tariffs barriers

High tariffs can dampen intra-regional trade as well as hamper the creation of RVCs as the costs of production can increase significantly when production takes place across many countries that each impose their own tariffs.

Although RECs may have generally lower tariffs for trade between their members, the opportunities for RVCs may lie in production occurring across

countries that are members of different RECs. Africa has lagged behind other regions in reducing tariffs, particularly in intermediate goods.⁵⁹

The African Continental Free Trade Area (AfCFTA) will play a significant role in removing tariff barriers, given its aim of significantly reducing tariffs on the continent and achieving 97% tariff-free trade across African markets.

Address non-tariff barriers

While non-tariff measures (NTMs) may be required to prevent unfair trade or protect the health of citizens, it is important that these are not used in a protectionist manner that impedes imports.

It will be imperative to promote uniformity of standards and certification across the continent to make compliance easier. In addition, the use of NTMs should be monitored to ensure they are not used as tariff barriers and are simultaneously addressed. 60

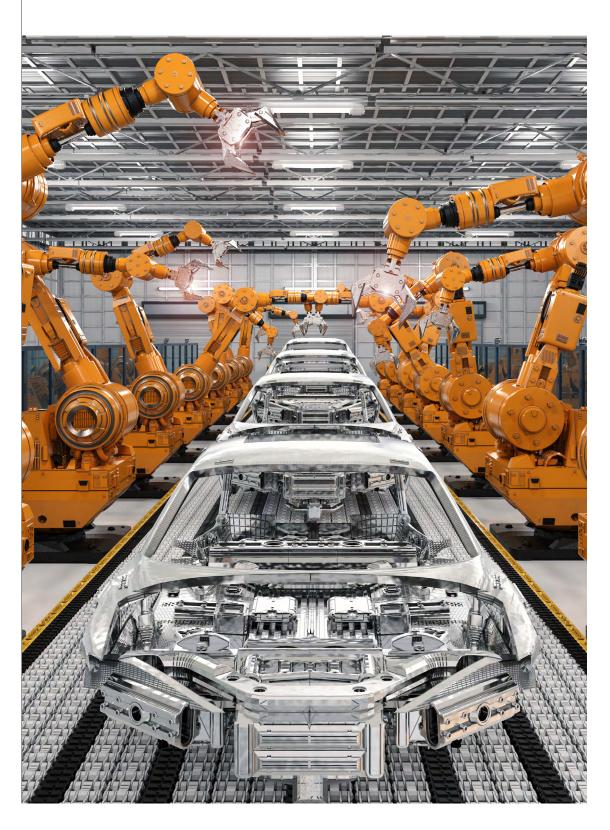
Develop infrastructure

Trade and RVCs are significantly affected by the connectivity between countries. Without proper infrastructure, transportation of goods can be prohibitively expensive and constrain competitiveness. Thus, the development of regional infrastructure will be key to stimulating intra-regional trade along with RVCs.



5 Auto Pact – blueprint for industrialization

This case study highlights the impact of driving an industry-led RVC.



Overview of the automotive industry in Africa

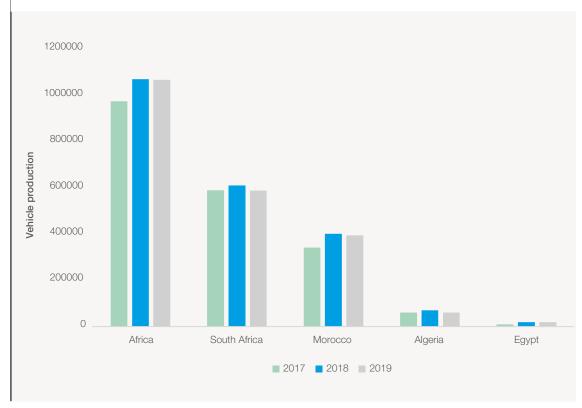
While Africa's automotive market is still underdeveloped, the potential of the automotive industry in Africa must be recognized, and growth across the automotive value chain including vehicle sales, aftersales, vehicle assembly and production is evident. The continent is regarded as the final frontier for the global automotive industry as percapita income levels continue to rise, financial markets develop and cars become more accessible for a greater share of the population.⁶¹

In addition to Africa having a young urbanizing population, almost all of the raw material needed for the manufacture and running of motor vehicles is available within the continent. Furthermore, the potential economic benefits of free trade within the African Continental Free Trade Area (AfCFTA) could be substantial. However, due to reduced purchasing power, the absence of suitable vehicle finance options and fierce competition from lowercost imported second-hand vehicles, the total African automotive consumer market is yet to be realized. In addition to these well-known market challenges, the lack of dedicated research into consumer trends and insights further restricts the

understanding of Africa's emerging automotive market.⁶² Vehicle density remains low, with the motorization rate of the continent at around 42 vehicles per 1,000 inhabitants.

This is far below the global average of 180 vehicles per 1,000 inhabitants, and lower than other developing regions such as Latin America (176) and Developing Asia, Oceania and the Middle East (79),63 and provides significant opportunity for economic growth and job creation in the sector, as long as effective automotive ecosystems are developed. Between 2005 and 2015, registrations and sales of new vehicles (passenger and commercial combined) increased by a compound annual growth rate (CAGR) of 3.6% on the continent. While coming from a low base and although slightly higher than the global average of 3.5%, total sales growth in Africa was significantly slower than in other emerging regions such as Asia and the Middle East (8.9%), and Latin America (4.2%).64 There was a gradual year-on-year increase in vehicle production in 2017–2019 with a CAGR of 10% largely attributable to passenger vehicle production.

FIGURE 8 Trend in regional vehicle production



Source: Prepared by Deloitte based on Marklines and OICA statistics, 2019

South Africa and Morocco are the continent's primary automotive manufacturers, with the sector contributing 7.5% and 16% to each country's GDP respectively. However, emerging African countries such as Egypt, Ghana, Nigeria and Algeria provide potential automotive production opportunities, with several countries such as Nigeria and Kenya having

embarked on plans to develop domestic automotive production. In 2019, intra-African automotive exports accounted for approximately 16% of Africa's total automotive exports to the world. The current trends in intra-regional automotive trade highlight the opportunity to enhance trade across West African and East African economic communities.

FIGURE 9

Intra-regional automotive trade (\$ millions)

		Importing regions					
		AMU	ECCAS	COMESA	EAC	ECOWAS	SADC
	AMU	0.070	0.002	0.077	0.002	0.028	0.002
w	ECCAS	0.00059	0.019	0.015	0.008	0.003	0.010
region	COMESA	0.005	0.054	0.091	0.080	0.008	0.109
Exporting regions	EAC	0.00006	0.022	0.060	0.076	0.001	0.050
Щ	ECOWAS	0.001	0.002	0.001	0.0003	0.14	0.0009
	SADC	0.004	0.076	0.790	0.16	0.190	1.864
		Significant flows	trade	Moderate trade flows	Low trace flows		egional notive trade

Source: Prepared by Deloitte using ITC calculations based on United Nations Comtrade statistics, 2020 (www. trademap.org/Index.aspx).

Origins/early stages

The SSA (Sub-Saharan Africa) Automotive Pact (Auto Pact) is the brainchild of a coalition of industrialists and economists who saw the possibility that vehicle manufacturing could be a catalyst for the industrialization of South Africa as it was for Germany. While South Africa is the leading market for vehicle manufacturing on the

continent, trends from 2015 onwards have shown that Ethiopia, Nigeria and Kenya are gearing their economies to realize the potential of a stronger automotive sector. This is timely given the rising middle class and growing industrialization of the agricultural and mining sectors.

The case for a regional value chain

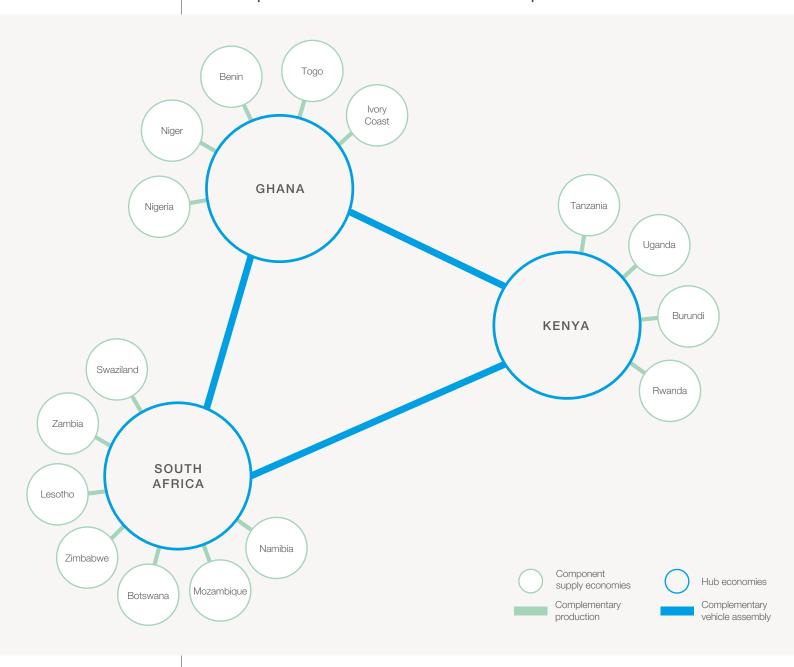
The Auto Pact has built the case for an increase in demand for vehicles in East Africa and Ethiopia. If global imports of pre-owned vehicles were curtailed, then new vehicle demand could potentially reach 445,176 units in 2035. The most attractive markets to lead these efforts include:

- Kenya, with demand for 80,340 units in 2020 increasing to 174,020 units in 2035
- Tanzania, where demand increases from 32,301 units in 2020 to 78.058 units in 2035

Ethiopia, with demand for 30,380 units in 2020 increasing to 112,814 units in 2035

This is over and above the South Africa market growth of 445,176 units annually by 2035.65

The local market demand creates a firm foundation for intensifying manufacturing on the continent, while also establishing it as strategic supplier to the growing demand in the neighbouring Middle East and North African markets of Saudi Arabia, Iran and Egypt.



The implementation of the Auto Pact will have farreaching socioeconomic benefits, creating 11,072 spoke jobs and 46,482 hub jobs in the region, with a shared gross value add (GVA) estimated at ~\$2 billion.

This model of RVC integration will benefit from the newly established Africa Free Trade Area agreements in terms of removing key trade barriers, accelerating the maturing of industrial strategies and, most importantly, creating economic development policy alignment. However, some of the critical barriers that have hindered the progress of the Auto Pact include lack of scalable industrial economic planning, local production capability and political will.

Despite this, the experience shows that various Regional Economic Communities are working towards this aligned strategy, starting with their respective industrial policy and trade partnerships with original equipment manufacturers (OEMs) and developing mutually beneficial bilateral and multilateral country agreements.

The lessons learned through the effective implementation of the Auto Pact will support African countries to address some of the complexities in the rules of origin and also develop progressive policy to promote and protect indigenous innovation with global automotive sector partners.



6 Challenges in the automotive Industry

Lack of scale and local capability have been stumbling blocks for the development of the automotive industry on the continent.



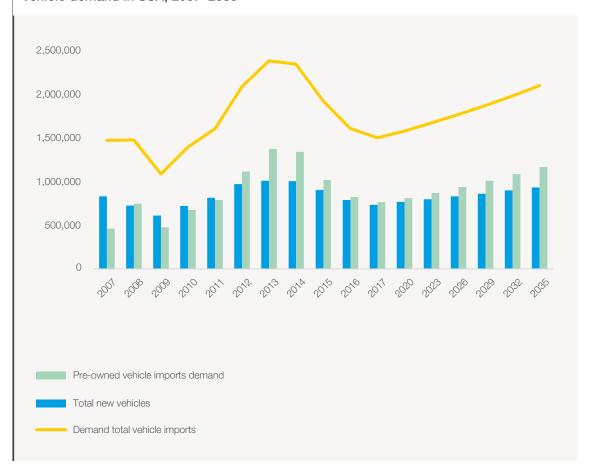
Scale of the market for new vehicles

The development of the Auto Pact has highlighted the need to focus on markets that can create scale of production. Trade economists say that to create a feasible complete knock-down (CKD) operation, a minimum of 300,000 vehicles of a model must be produced. Therefore, understanding how local demand can be encouraged in a sustainable

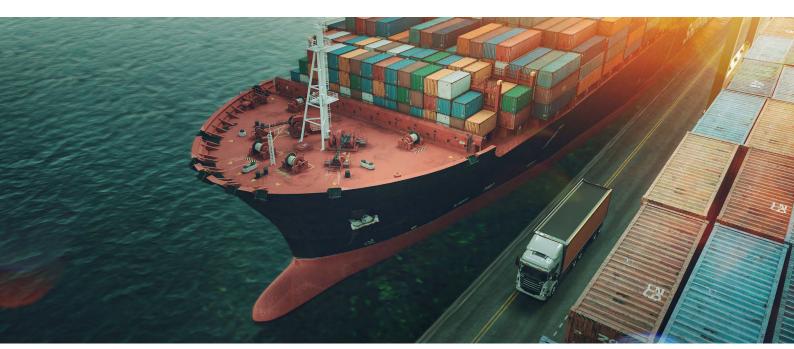
manner is very important. One of the prime hindrances in scaling the African market for new vehicles is the continent's reliance on used car imports. This is projected to escalate for SSA in the next 15 years, as shown in Figure 11, implying that Africa's demand for vehicles will likely continue to be met by other continents for the foreseeable future.

FIGURE 11

Vehicle demand in SSA, 2007-2035



Source: Africa Used Vehicle Report, 2018



In 2016, well over 96% of vehicles imported into Kenya were second-hand vehicles, while 80% of all vehicle sales in both Ethiopia and Nigeria were used vehicle imports. In addition, three-quarters of vehicles in SSA are second-hand vehicles, with the region importing more pre-owned vehicles (764,880 units) than new (734,084 units) in 2017.

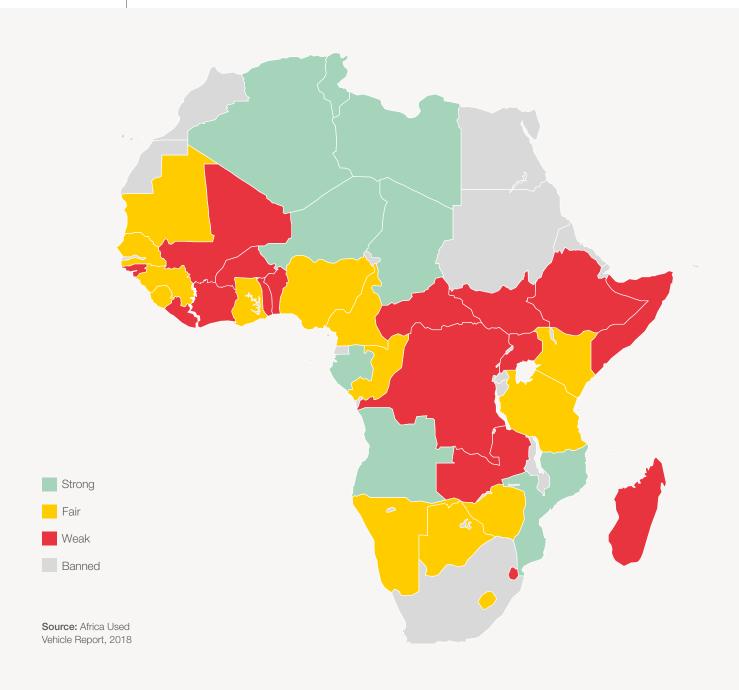
Trade in used vehicles has variable effects on producers of new vehicles. In low-income countries. used-car imports often lead to depressed sales and lower prices for new vehicles, while in high-income countries the effects may be trivial.66 Given the income levels of countries on the African continent, used-car imports indisputably affect new vehicle producers negatively. For that reason, it is important for African countries that aspire to develop their automotive sector but are currently susceptible

to used-vehicle imports to consider reviewing or enacting their used-vehicle import controls with caution (see Table 5 for approaches). This will ensure that the used vehicles manufactured in other continents do not impair Africa's ability to produce new vehicles.

Figure 12 shows that only Egypt, South Africa, Sudan and Morocco have imposed a total ban on used-vehicle imports. Ten African countries have used import bans on vehicles more than five years old and have a strong tax fee-based scheme, while 16 countries have a vehicle ban on vehicles between six and nine years old and have imposed a tax based on vehicle age. Lastly, 24 countries have banned imports of used vehicles that are 10 years or older and have imposed a graduated sanction that will hold parties that infringe this ban accountable.

FIGURE 12

Used-vehicle import controls in Africa



Used-vehicle import controls	Description
Age limits	Some countries have adopted an approach that entails placing age limits on imports. This is an effective policy response for countries without vehicle emission standards and developed inspection and maintenance systems. For example, Kenya is considering a €4/IV emission standard and has already set an age limit of eight years for imports.
Inspection	Some countries have stringent tests in place as a precondition for vehicle registration, implying that not all vehicles can be registered once imported. For example, Zambia's Bureau of Standards requires that vehicles pass a roadworthiness inspectionprior to import from Japan. Japan, Singapore, the United Kingdom, the United Arab Emirates and South Africa have an appointed agent who conducts these inspections, and vehicles that fail this inspection cannot be registered.
Used-vehicle import bans	Some countries have banned the import of used vehicles completely (e.g. Chile, Indonesia, Turkey, South Africa), while others are using fiscal tools to promote cleaner technology. Compared to other countries globally, Sri Lanka has a higher share of hybrid electric vehicles. This is attributable to a stringent and aggressive vehicle taxation scheme that provides significant tax reductions for hybrid and electric vehicles imported into the country.
Taxation	Some countries have adopted an approach that entails taxing older vehicles on first registration. For example, Russia has an age-based taxation system for imported vehicles: 30% tax increase on imported cars older than one year; 35% tax increase for imported vehicles from three to five years old; for vehicles older than five years old, the tax is €2.5–5.8 per cm³ of engine volume. Also, Moldova applies increased taxes for imported vehicles older than three years, while banning the import of vehicles more than 10 years old.

Source: Adapted from UNECE, 201767

Despite the need to scale the African market for new vehicles, there are some key constraints on buying new vehicles, such as the limited financing options available in markets. Less than ~30% of vehicles are financed, as seen in Kenya (29%), Ghana (27%) and Nigeria (12%). This is because most vehicles that are not financed are imports, which are not sold at market-related prices (rather, they are sold cheaply in their countries of origin). This makes it difficult for vehicle financiers and insurance companies to determine the true value of the assets and the truly reflective costs for vehicle finance and insurance. Thus, many financiers and insurers may be reluctant to offer vehicle finance or insurance.

Importation of vehicles still remains one of the most challenging barriers, and this is a difficult shift as the taxes earned range from 10% to 50% of the customs value. This annuity income often accounts for the second-largest value on the balance of payments due to foreign exchange (forex) adjustments. Encouragingly, in 2019 Ghana banned the importation of cars more than 10 years old in an effort to encourage carmakers to set up factories, and Kenya is expected to make a similar pronouncement as part of its automotive investment plan. A paradigm shift is required among trade facilitation technocrats to support the administration at large and enable politicians to

appreciate the long-term sustainable value that can be created in developing a competitively productive automotive sector as opposed to relying on preowned vehicle imports.

The automotive sector is able to grow a middle class of workers. It employs 2,000-3,000 people with an average minimum wage of \$425 per month, who are then able to stimulate further production through their own consumption.68

There is a need to credit and qualify the largely SMME-based/dominated maintenance market to ensure vehicles are serviced properly in-country and the credibility of the brand is not damaged as a result of grey parts (substandard parts that are often falsely branded) or inexperienced mechanics. This can increase opportunities for local entrepreneurs and create an enhanced parts and services network in the region.

In recent years, it has become more lucrative to export scrap metal from Africa. Since 2013, an average of 15 million tons per annum of used metal have been exported from Africa, with South Africa as the largest contributor in used metal exportation on the continent, contributing up to 40% of all steel in 2017. This has resulted in the South African National Treasury publishing a draft Taxation Laws

Amendment Bill that proposes export tax rates for ferrous scrap (\$64/t), aluminium scrap (\$193/t), red metals scrap (\$540/t) and other waste and scrap metals (\$64/t). "[Introducing] a price-raising effect by levying a tax on the export of scrap metal means that scrap merchants are hopefully incentivized to provide the scrap to local steel mills without it being a blanket export ban," explained DTIC Chief Economist Stephen Hanival.⁶⁹ There is little capacity locally to recycle the metal for production, which

results in a failure to take advantage of the circular economy by removing unsafe vehicles from the roads and creating a lucrative by-product.

Governments have recognized that requiring the public-sector fleet to be purchased from local manufacturers is a useful strategic lever. The scale of this then makes it easier to attract investment and can be further built upon by demand from business and the general public.

Lack of local manufacturing capability

There is limited local automotive manufacturing capability on the continent, apart from in South Africa and Morocco, with Tier 1 and 2 suppliers. In the countries where there is activity – such as Ethiopia, Ghana and Nigeria – much of it is led by semi-knocked down (SKD) operations that largely import components for local assembly. Component manufacturers are dependent on large automotive original equipment manufacturers making investments in the region to make it attractive for them to set up

operations. They are also challenged by imports of grey parts that are currently acceptable because there is limited quality assurance control. While it may be a tedious exercise to set up and manage a system to assure quality imports, it can unlock critical value in the value chain and enhance cross-border trade if quality of components is assured among countries in the region. Linked to this is a need to create a skills base that can support such industrialization; more emphasis is required on technical skills.

Industrial policy

Each country will require its own research base to better understand its competitive advantage in relation to both the global and regional value chain and to position itself as either a hub or spoke. For instance, Uganda's strong manufacturing capability and trade route to Kenya/Ethiopia makes it suitable to supply pre-stitched seat covers; it has direct access to leather and highly developed processing skills. ⁷⁰ This should take into consideration how production will likely change with the Fourth Industrial Revolution while making the most of the available resources, both in terms of raw materials

and an openness to innovating alternative mobility solutions.

Part of this assessment requires an understanding of the localization capability and how this can intrinsically serve to create integrated value chains in-country and in-region by investing and partnering to build local expertise and create an ecosystem with global OEMs. It is important to recognize that component manufacturing is subject to a global supply-chain selection process and therefore competitiveness is critical.

Political will

A significant effort is still required to push governments and their constituencies to make the paradigm shift needed to achieve a production-based economy, and this cannot be underestimated when one considers how the opposition party in Ghana made the tax of imported vehicles a point of contention. Therefore, the incentive structure needs to be carefully thought through for all stakeholders to make this

a compelling case at both a country and regional level. Once there is alignment in-country, a coordinated and concerted effort is still needed to create regional and pan-African alignment. While there seems to be a general intent to create a regional and pan-African trade hub, there is a deep need to build technical industrialization capability among technocrats.



Building a regional automotive industry

Advances in the automotive sector set the tone and pace for other sectors to mobilize and create stronger integrated RVCs.



The role of Individual governments and RECs

As many countries begin to see the potential of creating a viable production-led economy, they are pushing for progressive policy to attract global industry partners. Large OEMs that understand the value of the market in Africa are building cooperative engagements with governments to shape a mutually beneficial policy environment to shift investment to large-scale strategic production capacity – as seen most recently in the case of Morocco and Ghana.

The Regional Economic Communities around the hubs need to start organizing and negotiating component production and work with Tier 2 and Tier 3 suppliers to enable local capability. The work done by the Regional Economic Communities can accelerate implementation efforts in the African Continental Free Trade Area (ACFTA).

As regions prepare themselves, they can begin forming trade facilitation bilaterals that can begin to address both tariff and non-tariff trade barriers and enable each region to be more competitive. This will help boost trade in related industries and realize a job-multiplier effect. The much-anticipated Auto Pact between Ghana and South Africa will be the first to initiate this momentum. The shared success of both Thailand and Morocco discussed earlier lies in the development of their special economic zone (SEZ), understanding their strategic positioning and deepening their local capability with enhanced competitiveness. Box 4 provides a view of the impact of SEZs in RVC integration and how these are expected to adapt in the future.71

ВОХ 4 Role of SEZs in RVC

The United Nations Conference on Trade and Development's review Special Economic Zones emphasizes the strong synergy between global value chain (GVC) integration and the development of SEZs. It highlights how in Asia, Latin America and the Caribbean, some champions of GVC integration such as the Republic of Korea, Malaysia and Mexico have heavily relied on SEZs to sustain their GVC integration strategy, while others have achieved good results with a limited presence of SEZs (e.g. Chile).^a

In Africa, the results are again mixed. Some countries with relatively high GVC participation, such as the United Republic of Tanzania and Botswana, have a significant number of SEZs relative to the median, while others, such as Namibia, have no SEZs. Tunisia used SEZs to achieve its relatively high GVC participation and has since extended SEZ benefits to the broader economy. However, the overall trend seems to indicate that countries that are less integrated have fewer SEZs.

SEZs have been instrumental in the development of GVCs and, as policy tools, in boosting countries' participation in GVCs. Trade costs such as tariffs, transportation and insurance, as well as other border taxes and fees, accumulate when intermediate goods are imported, processed and then re-exported downstream in complex GVCs, going through various transformation steps in different countries.^b

An important point for policy-makers to bear in mind in the light of the current economic downturn is that SEZs demonstrate a higher propensity to create employment when compared to the general economy. For example, Ethiopia has been able to generate nearly 50,000 jobs within a few years through its SEZs, with a high proportion going to women, while in Kenya, export processing zones (EPZs) account for close to 60,000 jobs.c

It is important for Africa and the automotive sector to consider some of the key lessons learned

through the 30-year review of SEZs. Some include:

- The economic value of SEZ should be assessed to ensure they don't outweigh the cost – as in the case of foregone revenues from duties and taxes and the shift of existing operations into the SEZs to benefit from the tax relief and thereby reduce the tax base.
- The SEZ should be transitioned to shift away from focusing on low-skilled labour opportunities and perpetuating a middle-class trap. There have been early examples in the Philippines and Malaysia that have been able to attract FDI to SEZs and upgrade to higher-value-added and technologyintensive industries, including electronics, services and software development. Therefore, in designing and transitioning SEZs, there needs to be a strong focus on local capacity development to truly create the desired socioeconomic impact.d
- There is a growing trend towards creating SEZs that are better aligned to the United Nations Millennium Development Goals (MDGs), particularly in relation to employment creation, inclusive growth and green growth. These are going to be important criteria to attract both development funding institutions (DFI) and foreign direct investment (FDI) in new markets and for the sustainability of SEZs in the Fourth Industrial Revolution.
- United Nations Conference on Trade and Development (2019). Special Economic Zones: https://unctad.org/system/files/official-document/ wir2019 en.pdf (link as of 7/1/21).
- b. Ibid.
- Ibid. C.
- d. Ibid.

AAAM

Through its embedded local and regional partners, the African Association of Automotive Manufacturers (AAAM) is working to build a deeper understanding among key industry players of the potential value creation that regional integration will bring. It is making strategic investments in

advanced data analytics that will serve to inform key decision-makers on the strategic placement of production capacity. Most importantly, its efforts are bridging the gap in creating a cooperative policy environment for local growth and development.

Creating local and global partnerships

The support and commitment from global automotive markets such as the European Union and the Japanese Automotive Association further strengthens the potential success of this RVC by deliberately partnering with established GVCs.

This enhances Africa's capacity to compete globally and in a highly integrated value chain and benefit from

the deep expertise and skills to grow and enhance its own local production capability. Mostly importantly, it changes the narrative that local production works best with global partnership and inter-regional policy alignment. This is further supported by the recent announcement by VW, Toyota and Nissan to initiate manufacturing in Ghana.72

The evolution of the automotive industry

The automotive industry is on the cusp of an evolution, with advances in electric and autonomous vehicles and transformations in mobility. As Africa builds its automotive industry, it should focus on development that promotes innovation and drives adoptions that will be sustainable for the growth and development of the sector. Many countries in Africa have generous deposits of vanadium, lithium and other minerals that could be used for energy-storage solutions. International funders such as the World Bank and the Clean Technology Fund⁷³ are working with industry players and governments to invest in the automotive sector and this could further boost local capability. The ongoing development of tech SMMEs as listed by Disrupt Africa74 showcases the potential of SMMEs to break into RVCs. As the industry transitions to Industry 4.0 and embraces the segment of one (the trend for mass customization), automation, robotics and artificial intelligence, it will open up space for other innovative technologies and business models. There

has also been evidence from a global specialized machine builder and global tech company supporting automotive and automotive component manufacturers to use digital solutions. They have been supporting OEMs in India and South Africa recently to increase their competitiveness through improved management of quality control and reducing the cost of operating multiple manufacturing lines given the challenge of scale in these markets. They have had great success in India and have proven that digital adoption can have a positive labour-market impact. A recent German study on the Digitalization and the Future of Work: Macroeconomic Consequences further demonstrates how the net effect remains small, and is actually positive over the next five years.75 However, there is a need to plan for the large-scale structural change introduced by Industry 4.0, and developing markets such as Africa must embrace this opportunity, working with global players to create a more progressive and equitable economic development agenda.

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Endnotes

- 1. World Economic Forum (2020). The Great Reset Initiative: https://www.weforum.org/great-reset/ (link as of 7/1/21).
- 2. World Economic Forum Regional Action Group Africa Meeting (2020).
- 3 Office of the United States Trade Representative, Trade Is Key to Africa's Economic Growth, https://ustr.gov/about-us/ policy-offices/press-office/blog/trade-key-africa%E2%80%99s-economic-growth (link as of 13/1/21).
- 4. Ibid.
- International Labour Organization (2020), The Effects of COVID-19 on Trade and Global Supply Chains: https://www.ilo. 5. org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms 746917.pdf (link as of 7/1/21).
- 6. UNIDO Industrial Analytics Platform (2020), Managing COVID-19: How the Pandemic Disrupts Global Value Chains: https://iap.unido.org/articles/managing-covid-19-how-pandemic-disrupts-global-value-chains (link as of 7/1/21). Note: Due to the Chinese New Year, data for January and February are published jointly by the Chinese authorities.
- 7. Organisation for Economic Co-operation and Development (2020), COVID-19 and Global Value Chains: Policy Options to Build More Resilient Production Networks: https://read.oecd-ilibrary.org/view/?ref=134_134302ocsbti4mh1&title=COVID-19-and-Global-Value-Chains-Chains-Policy-Options-to-Build-More-Resilient-Production-Networks (link as of 7/1/21).
- 8. UNIDO Industrial Analytics Platform (2020).
- 9. OECD (2020).
- 10. Brookings (2020). Learning from the Best: Evaluating Africa's COVID-19 responses: https://www.brookings.edu/blog/ africa-in-focus/2020/07/08/learning-from-the-best-evaluating-africas-covid-19-responses (link as of 7/1/21).
- 11. Businesstech (2020). South African-made Ventilators Go into Production: https://businesstech.co.za/news/ technology/417535/south-african-made-ventilators-go-into-production/ (link as of 7/1/21).
- 12. Oxford Business Group (2020). Covid-19 Accelerates Ghana's E-health Revolution: https://oxfordbusinessgroup.com/ news/covid-19-accelerates-ghanas-e-health-revolution (link as of 7/1/21).
- 13. African Medical Supplies Platform (2020): https://amsp.africa/about-us/; Novartis (2020): New Collaboration Between Novartis and Africa Medical Supplies Platform to Facilitate Supply of COVID-19-related Medicines: https://www.janngo. com/wp-content/uploads/2020/09/New-collaboration-between-Novartis-and-Africa-Medical-Supplies-Platform-Release- September 1 2020 8.15AM CET.pdf (links as of 7/1/21).
- 14. AUDA-NEPAD (2020). Harnessing Innovation and Emerging Technologies to Address the Impact of COVID-19 in Africa: https://www.nepad.org/publication/white-paper-harnessing-innovation-and-emerging-technologies-address-impact-of (link as of 9/1/21).
- 15. Note: insights derived using ITC calculations based on United Nations Comtrade statistics, 2020: www.trademap.org/Index.aspx (link as of 7/1/21).
- 16. SAIIA. (2018). Can the African Continental Free Trade Area Offer a New Beginning for Trade in Africa?: https://saiia.org.za/ research/can-the-african-continental-free-trade-area-offer-a-new-beginning-for-trade-in-africa/ (link as of 9/1/21).
- 17. Note: insights derived using ITC calculations based on United Nations Comtrade statistics, 2020: www.trademap.org/Index.aspx (link as of 7/1/21).
- lbid. 18.
- 19.
- 20. Government of Canada (2020). Moroccan Automotive Value Chain Profile and Opportunities: $\underline{\text{https://www.tradecommissioner.gc.ca/morocco-maroc/market-reports-etudes-de-marches/0005071.aspx?lang=eng} \\ \underline{\text{https://www.tradecommissioner.gc.ca/morocco-maroc/market-reports-etudes-de-marches/0005071.aspx?lang=eng} \\ \underline{\text{https://www.tradecommissioner.gc.ca/morocco-maroc-marches/0005071.aspx?lang=eng} \\ \underline{\text{https://www.tradecommissioner.gc.ca/moroc-marches/0005071.aspx?lang=eng} \\ \underline{\text{https://www.tradecommissioner.gc.ca/moroc-marches/0005071.aspx?lang=eng} \\ \underline{\text{https://www.tradecommissioner.gc.ca/moroc-marches/0005071.aspx?lang=eng} \\ \underline{\text{https://www.tradecommissioner.gc.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.ca/moroc-marches/0005071.aspx.c$ (link as of 7/1/21).
- 21. Note: insights derived using ITC calculations based on United Nations Comtrade statistics, 2020: www.trademap.org/Index.aspx (link as of 7/1/21).
- 22.
- 23. Groupe PSA (2018). Groupe PSA Will Assemble OPEL and PEUGEOT Vehicles in Namibia in 2018: https://media.groupepsa.com/en/groupe-psa-will-assemble-opel-and-peugeot-vehicles-namibia-2018 (link as of 7/1/21).
- 24. New Era Live (2020). Solution in Sight for Peugeot Assembly Plant Woes: https://neweralive.na/posts/solution-in-sightfor-peugeot-assembly-plant-woes (link as of 7/1/21).
- 25. United Nations Economic Commission for Africa (UNECA), African Union (AU), African Development Bank (AfDB) and United Nations Conference on Trade and Development (UNCTAD) (2019). Next Steps for the African Continental Free Trade Area (AfCFTA): https://www.tralac.org/documents/resources/africa/2898-assessing-regional-integration-in-africa-ixuneca-auc-afdb-unctad-july-2019/file.html (link as of 7/1/21).
- 26. Note: The AU's 2063 Agenda is the continent's strategic framework that seeks to achieve inclusive and sustainable development and is a concrete manifestation of the pan-African drive for unity, self-determination, progress, freedom and collective prosperity pursued under Pan-Africanism and African Renaissance.

- 27. African Union zero draft report, Action Plan for Boosting Intra African Trade: https://www.au.int/web/sites/default/files/ newsevents/pressreleases/26498-pr-action_plan_for_boosting_intra-african_trade_f-english.pdf (link as of 12/1/21).
- Africa Trade Policy Centre of the Economic Commission for Africa and World Trade Organization (2017). Promoting 28. Connectivity in Africa: The Role of Aid for Trade in Boosting Intra-African Trade: https://repository.uneca.org/bitstream/ handle/10855/24165/b11875720.pdf?sequence=1&isAllowed=y (link as of 7/1/21).
- African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade: Issues Affecting 29. Intra-African Trade, Proposed Action Plan for Boosting Intra-African Trade and Framework for the Fast Tracking of a Continental Free Trade Area. African Union Commission: https://au.int/en/documents/20120531-0 (link as of 11/1/21).
- Draper, P., Edjigu, H. and Freitag, A. (2018). Analysing Intra-African Trade: AFCFTA Much Ado About Nothing?', World 30. Economics Journal, December 2018: https://www.world-economics-journal.com/Journal/Papers/Analysing%20Intra-African%20Trade.details?ID=725 (link as of 11/1/21).
- 31. South African Institute of International Affairs (2020). Understanding the Agreement for African Continental Free Trade Area: Considerations for Korean Firms: https://saiia.org.za/research/understanding-the-african-continental-free-tradeagreement/ (link as of 7/1/21).
- 32. SAIIA (2020), Understanding the African Continental Free Trade Agreement: https://saiia.org.za/research/understandingthe-african-continental-free-trade-agreement/ (link as of 7/1/21).
- 33. Ibid.
- tralac (Trade Law Centre) (2019). Frequently Asked Questions About the African Continental Free Trade Area (AfCTA): 34. https://www.tralac.org/documents/resources/fags/3079-african-continental-free-trade-area-fags-december-2019update/file.html (link as of 7/1/21).
- 35. UNECA, AU, AfDB and UNCTAD (2019). Next Steps for the African Continental Free Trade Area (AfCFTA): https:// www.tralac.org/documents/resources/africa/2898-assessing-regional-integration-in-africa-ix-uneca-auc-afdb-unctadjuly-2019/file.html (link as of 11/1/21).
- Joint Leaders' Statement on the Regional Comprehensive Economic Partnership (RCEP) (2020): https://rcepsec.org/wp-36. content/uploads/2020/11/RCEP-Summit-4-Joint-Leaders-Statement-Min-Dec-on-India-2.pdf (link as of 7/1/21).
- CNBC (2020). "A Coup for China": Analysts React to the World's Largest Trade Deal That Excludes the US: https://www. 37. cnbc.com/2020/11/16/rcep-15-asia-pacific-countries-including-china-sign-worlds-largest-trade-deal.html (link as of 7/1/21).
- 38. AfDB, OECD and United Nations Development Programme (UNDP) (2014). Global Value Chains and Africa's Industrialisation: African Economic Outlook 2014: http://africaneconomicoutlook.org/sites/default/files/content-pdf/ Edition Thematique EN web.pdf (link as of 11/1/21).
- tralac. (2017). Brief on Regional Integration and the Continental Free Trade Area: https://www.tralac.org/news/ 39. article/11500-brief-on-regional-integration-and-the-continental-free-trade-area.html (link as of 11/1/21).
- ITC (2018). A Business Guide to the African Continental Free Trade Area Agreement: https://www.intracen.org/ 40. uploadedFiles/intracenorg/Content/Publications/AfCFTA%20Business%20Guide_final_Low-res.pdf (link as of 11/1/21).
- tralac (2019). Frequently Asked Questions about the African Continental Free Trade Area (AfCFTA): An Update: https:// 41. www.tralac.org/documents/resources/faqs/3079-african-continental-free-trade-area-faqs-december-2019-update/file. html (link as of 11/1/21).
- 42. Mo Ibrahim Foundation (2014). Facts and Figures: Regional Integration – Uniting to Compete: http://static. moibrahimfoundation.org/downloads/publications/2014/2014-facts-&-figures-regional-integration-uniting-to-compete.pdf (link as of 11/1/21).
- 43. Overseas Development Institute (2010). Impediments to Intra-Regional Trade in Sub-Saharan Africa: https://www.odi.org/ sites/odi.org.uk/files/odi-assets/publications-opinion-files/7482.pdf (link as of 11/1/21).
- Note: Rwanda rejoined the Economic Community of Central Africa States (ECCAS) REC in 2015 following its earlier 2007 44. withdrawal from the REC, and Liberia joined the West African Monetary Zone (WAMZ) in February 2010. Tunisia and Somalia joined COMESA only in July 2018.
- 45. tralac (2017). Brief on Regional Integration and the Continental Free Trade Area: https://www.tralac.org/news/ article/11500-brief-on-regional-integration-and-the-continental-free-trade-area.html (link as of 11/1/21).
- 46. Note: insights derived using ITC calculations based on United Nations Comtrade statistics, 2020: www.trademap.org/ Index.aspx (link as of 7/1/21).
- 47 ECOWAS (2018). ECOWAS Develops Regional Automotive Industry Policy: https://www.ecowas.int/ecowas-developsregional-automotive-industry-policy/ (link as of 7/1/21).
- 48. lbid.
- 49. African Growth and Opportunity Act info (AGOA.info) (2018), South Africa: AGOA Remains Critical in Developing Regional Value Chains in Africa: https://agoa.info/news/article/15479-south-africa-agoa-remains-critical-in-developing-regionalvalue-chains-in-africa.html (link as of 7/1/21).
- 50. UNCTAD (2019). Economic Development in Africa Report 2019: Made in Africa - Rules of Origin for Enhanced Intra-African Trade: https://unctad.org/system/files/official-document/edar2019_en_ch1.pdf (link as of 11/1/21).

- 51. World Bank (2016). Factory Southern Africa? SACU in Global Value Chains: http://documents1.worldbank.org/ curated/en/973351468195001238/pdf/102850-WP-P149486-Box394847B-PUBLIC-Factory-Southern-Africa-FINAL-PUBLISH-002.pdf (link as of 11/1/21).
- 52. UNCTAD (2019). Economic Development in Africa Report 2019: Made in Africa - Rules of Origin for Enhanced Intra-African Trade: https://unctad.org/system/files/official-document/edar2019_en_ch1.pdf (link as of 11/1/21).
- Wee Tracker (2020). A Rare Win Is Coming for Regulation-Hit Ride-Hailing In Africa: https://weetracker.com/2020/05/11/ 53. e-hailing-regulation-africa/ (link as of 7/1/21).
- 54. Markowitz, M. (2020). FDI Trends in SADC: Implications for Value Chains, Industrialization and Inclusive Growth: https://www.africaportal.org/publications/fdi-trends-sadc-implications-value-chains-industrialisation-and-inclusive-growth/ (link as of 11/1/21).
- AGOA.info. (2020). Looking Back: Unpacking the Trends that Shaped Africa's Business Environment: https://agoa.info/ 55. news/article/15578-looking-back-unpacking-the-trends-that-shaped-africa-s-business-environment.html (link as of 7/1/21).
- 56. ASEAN Briefing (2019). The ASEAN Automobile Industry: Top Destinations for Manufacturers: https://www.aseanbriefing. com/news/aseans-automobile-industry/ (link as of 7/1/21).
- ASEAN-Japan Centre (2020). Global Value Chains in ASEAN Automobiles: https://www.asean.or.jp/ja/wp-content/ 57. uploads/sites/2/GVC_Automobiles_Paper-12_January-24-2020-web-_edited.pdf (link as of 11/1/21).
- 58. UNCTAD (2019). Economic Development in Africa Report 2019, Made in Africa - Rules of Origin for Enhanced Intra-African Trade: https://unctad.org/system/files/official-document/edar2019_en_ch1.pdf (link as of 11/1/21).
- 59. International Growth Centre (2020): The Long Road Towards Supply Chain Trade in Africa: https://www.theigc.org/blog/ the-long-road-towards-supply-chain-trade-in-africa/ (link as of 11/1/21).
- 60. World Bank (2016): Factory Southern Africa? SACU in Global Value Chains: http://documents1.worldbank.org/ curated/en/973351468195001238/pdf/102850-WP-P149486-Box394847B-PUBLIC-Factory-Southern-Africa-FINAL-PUBLISH-002.pdf (link as of 11/1/21).
- Deloitte Insights (2020). Automotive Sector Report: Evaluation of the Supply Chain Landscape in the Africa Region. 61.
- 62.
- 63. Deloitte Insights (2018). Deloitte Africa Automotive Insight: Navigating the African Automotive Sector: Ethiopia, Kenya and Nigeria: https://www2.deloitte.com/content/dam/Deloitte/za/Documents/deloitteafrica/ZA Deloitte-Africa-automotiveinsights-Ethiopia-Kenya-Nigeria-Apr16-2017.pdf (link as of 11/1/21).
- lhid 64.
- 65. The Sub-Saharan African Automotive Pact Task Team: Justin Barnes and Alec Erwin (2019). Estimating the Potential Impact of an Africa Automotive Pact on the East African Community and Ethiopia. Report prepared for African Association of Automotive Manufacturers.
- 66. US International Trade Commission (2016). Examining Barriers to Trade in Used Vehicles: https://www.usitc.gov/ publications/332/used vehicle wp id-44 final web 0.pdf (link as of 11/1/21).
- 67. United Nations Economic Commission for Europe (2017). Used Vehicles: A Global Overview. Available: https://www. unece.org/fileadmin/DAM/trans/doc/2017/itc/UNEP-ITC_Background_Paper-Used_Vehicle_Global_Overview.pdf (link as of 7/1/21).
- 68. Figures based on interviews conducted with specialists.
- 69. Mining Weekly (2020). DTIC Makes Case for Export Tax on Scrap Ahead of Infrastructure-led Recovery Effort. Available: https://www.engineeringnews.co.za/article/dtic-makes-case-for-export-tax-on-scrap-ahead-of-infrastructure-ledrecovery-effort-2020-08-19/rep_id:4136 (link as of 7/1/21).
- The Conversation (2017). What Uganda Needs to Do to Manufacture More and Crack the Export Markets: 70. https://theconversation.com/what-uganda-needs-to-do-to-manufacture-more-and-crack-export-markets-77566 (link as of 7/1/21).
- 71. United Nations Conference on Trade and Development (2019). Special Economic Zones: https://unctad.org/system/files/ official-document/wir2019 en.pdf (link as of 7/1/21).
- Modern Ghana (2019). Toyota, Nissan, VW to Assemble Cars in Ghana in 2020: https://www.modernghana.com/ 72. news/968431/toyota-nissan-vw-to-assemble-cars-in-ghana-in.html (link as of 7/1/21).
- World Bank (2020). Batteries Can Help Renewables Reach Full Potential in Africa: https://www.worldbank.org/en/news/ 73. feature/2019/02/28/batteries-can-help-renewables-reach-full-potential-in-africa (link as of 7/1/21).
- 74. Disrupt Africa (2020). African Start-ups to Watch in 2020: https://disrupt-africa.com/2020/01/12-african-startups-towatch-in-2020/ (link as of 7/1/21).
- 75. Arntz, M., Gregory, T. and Zierahn, U. (2019). Digitalization and the Future of Work: Macroeconomic Consequences. SSRN Electronic Journal. DOI: 10.2139/ssrn.3413653.



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