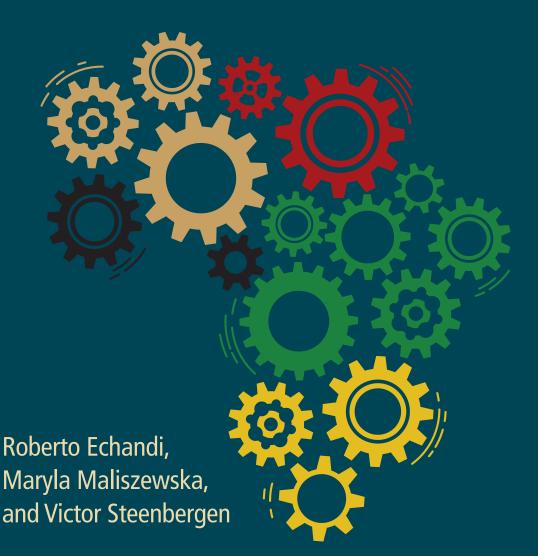
MAKING THE MOST OF THE

African Continental Free Trade Area

Leveraging Trade and Foreign Direct Investment to Boost Growth and Reduce Poverty







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Foreword

Africa is in the spotlight. The establishment of the African Continental Free Trade Area (AfCFTA) promises to turn Africa into a modern, industrialized, cohesive, and influential player on the global stage. A modern Africa—one that is no longer depleting her mineral wealth to export to foreign markets, but instead industrializing her economies, incubating the entrepreneurial zeal of her burgeoning youth population, and giving her people a chance to live a better life—is a dream whose time has come. The AfCFTA aims to utilize trade as an engine of growth and sustainable development by boosting intra-Africa trade. The AfCFTA is more than a pledge to eliminate tariffs, cut red tape, or simplify customs checks. It is a unique opportunity to create an integrated, continentwide market and a vital step toward building the "Africa we want" in line with the aspirations of the African Union Agenda 2063.

Making the Most of the African Continental Free Trade Area: Leveraging Trade and Foreign Direct Investment to Boost Growth and Reduce Poverty highlights the gateways to Africa's increased prosperity through the closer economic cooperation the AfCFTA promises. It estimates the potential economic and social benefits of the AfCFTA in terms of boosting trade, attracting foreign direct investment (FDI), enhancing participation in global value chains, accelerating economic growth, reducing poverty, and increasing shared prosperity. The report discusses the political economy of success and the steps necessary to turn the AfCFTA promise into reality.

The deep integration that the AfCFTA promises would build resilience to shocks and play a critical role in lowering the barriers that currently impede economic growth. The Agreement Establishing the African Continental Free Trade Area, if fully implemented, would ease the flow of goods, services, and investment across a market of more than 1.3 billion people. Clear rules are expected to foster entrepreneurship and cross-border investment and ensure markets function fairly and efficiently. The resulting jobs and income growth could lift up to 50 million people out of extreme poverty by 2035, recouping some of the damage caused by the COVID-19 (coronavirus) pandemic.

Africa has attempted regional integration before—many agreements currently cover different subregions. What makes the AfCFTA stand out is the depth of political will, the geographical and policy coverage, and the articulation of all existing regional

economic communities under a single normative umbrella with a dispute settlement mechanism to ensure compliance and enforcement of commitments undertaken. This is a momentous commitment, signaling that each member state is indeed ready to embrace an international rules-based trade and investment system.

Most African countries need to look beyond their domestic markets to grow their economies and help their people move up the income ladder. Trading with neighbors should present some of the best prospects for economic growth, given the advantages of proximity. Yet African countries currently trade more with the outside world than with each other. In fact, Africa's intraregional borders rank as some of the most restrictive globally when measured by the cost of cross-border trade. Those costs typically stem from burdensome regulatory procedures and poor infrastructure, transport, and logistics. Reducing them would spur the flows of goods, services, capital, and people that are so vital for development. The AfCFTA requires countries to cooperate on simplifying and harmonizing trade and transit procedures and to establish institutional structures and processes to monitor the elimination of trade barriers. Income gains from trade facilitation measures alone could amount to US\$292 billion by 2035, as this report estimates.

A consolidated market for Africa, with lower entry barriers and more regulatory convergence, is also likely to attract foreign investment from within the continent and the rest of the world. FDI would, in turn, create jobs and attract advanced technology and expertise. Foreign investment, if managed well, can build local capabilities and forge the connections that help countries integrate into regional and global value chains. Directing FDI toward export-oriented manufacturing and services, and creating upstream value-chain activities, could help Africa reduce its dependence on natural resource exports and its vulnerability to commodity price fluctuations. This report finds that greater FDI through deep integration could raise Africa's exports as much as 32 percent by 2035, with intra-Africa exports growing by 109 percent, especially in the manufactured goods sectors.

Nevertheless, gains from the AfCFTA agreement cannot be assumed to be automatic. State parties must take concrete steps to overcome significant challenges and risks as well as implement domestic policy reforms. The AfCFTA will bring higher-paid, better-quality jobs. But the gains from trade liberalization may not always be shared equally by all sectors of society. Policy makers would need to monitor the AfCFTA's distributional impacts carefully—across sectors and countries and between skilled and unskilled and male and female workers. Doing so will help them design policies that reduce the costs of job switching and provide effective safety nets where they are needed most. Not doing so risks the backlash against globalization that has been seen in recent years.

Countries must now make specific commitments under the AfCFTA legal instruments to which they have agreed. Other important aspects of the agreement, including investment, intellectual property rights, competition policy, digital trade, and women

and youth in trade, are still being negotiated. The AfCFTA cannot merely be a dialogue at the political level. As negotiations progress, building public and grassroots support for the agreement will be vital. State parties should engage with a critical mass of the business community across sectors—including micro, small, and medium-sized firms—at each step of the negotiations and implementation. Business community participation will help small firms use the AfCFTA effectively to generate economic opportunities and jobs.

Indeed, successful conclusion of the negotiations is the crucial first step. The content, structure, and depth of commitment in each topic area are key to actualizing the aspirations. However, success will require going beyond a text comprising norms and disciplines. State parties must agree to incorporate into the AfCFTA agreement provisions that are pro-competitive for Africa, thereby sending the right signals to traders and investors. To make the promise of the AfCFTA agreement a reality, bolstering an expert, independent Permanent Secretariat is crucial. A strong secretariat can help governments build robust domestic institutions to administer, monitor, and enforce the AfCFTA.

The time for change is now. The old development paradigms have not worked for Africa. The AfCFTA has signaled that Africa is open for business. While the rest of the world has been beset with uncertainty and calls for trade protectionism in recent years, Africa has forged ahead and officially began trading under the AfCFTA regime at the start of 2021.

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Executive Summary

The creation of the African Continental Free Trade Area (AfCFTA) provides a unique opportunity to boost growth, cut poverty, and reduce Africa's dependence on the boom-and-bust commodity cycle. A World Bank (2020) report estimates that the AfCFTA has the potential to raise income in the continent by 7 percent by 2035 and lift 40 million people out of extreme poverty, mainly by spurring intraregional trade (termed the "AfCFTA trade scenario" for purposes of this analysis). Reductions in nontariff barriers on goods and services and improvements in trade facilitation measures will account for about two-thirds of the US\$450 billion in potential income gains by removing long delays across most of the continent's borders and lowering compliance costs in trade, making it easier for African businesses to become integrated into regional and global supply chains.

This report builds on that earlier study by including potential gains arising from greater flows of foreign direct investment (FDI), termed the "AfCFTA FDI broad scenario," and from deeper integration beyond trade, the "AfCFTA FDI deep scenario." FDI has traditionally been low in Africa. The AfCFTA is likely to attract cross-border investment by eliminating tariff and nontariff barriers and replacing the existing patchwork of bilateral and regional trade deals with a single, unified market. Investors in any one of 55 member countries will have access to a continent of 1.3 billion people with a combined GDP of US\$3.4 trillion. Integration in global and regional value chains offers a further magnet for FDI and the jobs, investment, and know-how that FDI brings.

Accounting for the impact of the AfCFTA on FDI and for the effects of deeper integration (beyond trade) further expands the gains from the creation of the continentwide market. The AfCFTA FDI broad scenario incorporates the expected benefits of increased FDI. Lowering barriers to entry and harmonizing regulation across countries should draw more cross-border investment, further boosting real income gains in Africa to about 8 percent in 2035. The "AfCFTA FDI deep scenario" simulates additional gains to be reaped if members expand the agreement to harmonize policies on investment, competition, e-commerce, and intellectual property rights. Deeper integration in these policy areas would build fair and efficient markets, improve competitiveness, and attract further FDI flows by reducing political and regulatory risk and raising investor confidence. The AfCFTA FDI deep scenario would increase income gains at the continental level by up to 9 percent by 2035.

Africa may record an increase of 111 percent in FDI under the broad scenario and of 159 percent under the deep scenario, resulting from a combination of expected increases in intra-Africa FDI of between 54 percent (AfCFTA FDI broad scenario) and 68 percent (AfCFTA FDI deep scenario) and a rise in FDI from the rest of the world into Africa of between 86 percent (AfCFTA FDI broad scenario) and 122 percent (AfCFTA FDI deep scenario). Europe is expected to account for the lion's share (60 percent) of increased FDI in Africa, followed by Asia, North America, and South America. Africa's least integrated economies stand to gain the most in relative terms.

Sectoral patterns of trade and output change significantly under the two scenarios that expand the integration of firms into regional value chains. Exports of textiles and apparel; chemical, rubber, and plastic products; and processed foods increase the most under the AfCFTA trade scenario. Under the AfCFTA FDI deep scenario, exports of selected sectors get an additional boost. For transport services; processed foods; wood and paper products; chemicals, rubber, and plastic products; and petroleum and coal products, the additional increase in exports is related to the drop in trade costs. For energy-intensive manufactures, fossil fuels, and communication services, the additional increase in exports is related to the increase of FDI in those capital-intensive sectors.

Under the AfCFTA FDI deep scenario, output of capital-intensive sectors and of those sectors benefiting from the increase in domestic demand expands the most. The increase in FDI leads to greater expansion of output of construction, energy-intensive manufactures, communication services, and insurance services under the AfCFTA FDI broad scenario. Declining trade costs trigger an expansion of transport services and petroleum and coal products under the AfCFTA FDI deep scenario. Overall, several services sectors expand under the AfCFTA FDI deep scenario, including air transport and hospitality, supporting the recovery of these sectors badly hit by COVID-19 (coronavirus).

Women and skilled workers are likely to see the biggest wage gains from the trade agreement. Wages of female workers are expected to be 11.2 percent higher in 2035, and male workers' wages could grow by 9.8 percent. Both the broad and deep scenarios are expected to result in even larger increases in wages, but with regional differences. Women's wages in Central Africa would grow faster than men's amid an expansion in energy-intensive manufacturing, which employs a relatively high percentage of female workers. In southern Africa, men's wages grow more because manufacturing and construction, two male-dominated sectors, are among those likely to expand the most. In Central Africa, North Africa, and West Africa, wage growth for skilled workers is likely to be higher than for the unskilled. In East Africa, where agriculture and construction expand the most, and in southern Africa, where growth is mainly in manufacturing and in construction, unskilled workers' wages grow more.

Poverty levels fall further under both the broad and deep scenarios. The trade pact alone, not counting increased FDI flows, is expected to reduce the number of people in

Africa living in extreme poverty (on less than US\$1.90 a day in purchasing power parity terms) by 40 million in 2035, to 277 million, after accounting for the increase in poverty caused by the COVID-19 pandemic. Extreme poverty could fall by an additional 5 million under the AfCFTA FDI broad scenario and by an additional 10 million under the AfCFTA FDI deep scenario. The AfCFTA FDI deep scenario could create 17.9 million new jobs, with 2.45 percent of the continent's workers shifting to expanding sectors by 2035.

Unlocking these potential gains in trade, investment, and jobs will not be straightforward. The AfCFTA negotiations should be concluded as planned, making it a deep trade agreement that goes beyond trade in goods to cover trade in services, investment, competition policy, trade-related intellectual property rights, and e-commerce. Increasing the role of the African private sector and generating greater grassroots support for the AfCFTA, going beyond government leadership, are also crucial.

The AfCFTA has the potential to catapult Africa's development. However, realizing that potential will require implementation of a set of parallel actions (box ES.1). Governments must promote favorable national trade and investment policies to maximize potential benefits. Potential distributional and social effects must be a priority alongside maximizing the benefits of trade. Pairing the AfCFTA with a "complementary agenda" can ensure the proper administration and implementation of the agreement and provide ways to maximize opportunities and minimize risks during the transition toward an open market across Africa.

Box ES.1 Actions to maximize the potential benefits of the AfCFTA

The conclusion of negotiations is critical. The content, structure, and depth of commitments in each topic area will be vital to turning the aspirations of the African Continental Free Trade Area (AfCFTA) into reality. Suggested priorities in each topic include the following:

Trade in goods

- Tariffs: Maintain commitment to review the 3 percent of tariff lines currently subject to exclusion from liberalization.
- Rules of origin: Consider allowing self-certification by exporters willing to assume the financial risk of irregularities.
- Trade facilitation: Fully implement commitments and agree on modern rules.

Trade in services

- Commit to an ambitious structure, meaningful disciplines, and accountability.
- Publish audits that identify regulatory barriers to trade in services.
- Bind the status quo: Commit to no new barriers to services trade during the progressive liberalization process, at least in the five priority sectors—business, communication, financial, transport, and tourism services.

Box ES.1 Actions to maximize the potential benefits of the AfCFTA (continued)

Investment policy

- Agree on transparent, precise, enforceable rules and disciplines that increase the credibility and predictability of administrative action.
- Promote nonlitigious means for addressing investor-state grievances.

Intellectual property protection

- Streamline the current varied regulatory approaches across members (some bound by the World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Rights, others by different multilateral and bilateral treaties) with a single approach.
- Extend protection to nascent products and areas (geographical indications; traditional knowledge).

Competition policy

 Weave currently fragmented and overlapping national and regional frameworks into a coherent normative umbrella, possibly drawing lessons from existing mega regional trade agreements such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership.

E-commerce (digital trade)

- Actualize the potential and unique opportunity for consensus by establishing a common position.
- Draw lessons from digital issues covered in deep trade agreements elsewhere, and address typical barriers to e-commerce (for example, transport costs, postal infrastructure, taxation regime, data localization and privacy, and so on).

Engage a critical mass of the private sector more deeply in the AfCFTA process. Private sector buy-in to and effective use of the AfCFTA will be crucial for its potential to generate jobs to be realized. Thus, various segments of the African private sector must be deeply engaged in the negotiation and implementation processes. These processes must be inclusive (by sector and firm size), be consultative at each stage of discussions, and go beyond top-down institutions. Specific steps could include the following:

- Design focused, complementary, country-specific policies that can help with export market access for small and medium enterprises that are unsure about their ability to benefit from the agreement.
- Encourage the secretariat, regional economic communities, or international partners to provide additional assistance to low-income countries.
- Use stakeholder consultations as an opportunity to explain how the AfCFTA will operate in practice, and how exporters, importers, and investors can leverage the provisions of the agreement.

Promote a favorable trade and investment policy ecosystem to attract export-oriented foreign direct investment (FDI) in new manufacturing and services sectors that can connect firms with regional and global value chains and gradually move people to higher-value-added jobs. The AfCFTA could help Africa diversify the type of FDI it attracts, moving away from the predominant natural resource—seeking FDI it has historically attracted, toward export-oriented FDI in manufacturing and

Box ES.1 Actions to maximize the potential benefits of the AfCFTA *(continued)*

services, thereby reducing its vulnerability to a commodities-driven boom and bust. Measures to facilitate this include the following:

- Conduct a comprehensive analysis of investment incentives and use policy dialogue to rationalize them.
- Simplify regulations and red tape on trade procedures and investment approval to attract exportoriented investors.
- Provide certainty and predictability for new firms to expand operations.
- Explore the use of nonlitigious mechanisms to address investor-state grievances.

Pair the AfCFTA with a strong complementary agenda, agreeing on concrete actions and policies with domestic stakeholders. A strong AfCFTA Permanent Secretariat, with a select number of high-quality technical staff, free from political pressure, is crucial to support effective implementation; help governments build strong domestic institutions to administer, monitor, and enforce the AfCFTA; and engage in multistakeholder consultations. Such an agenda needs to perform the following function:

- Properly administer the agreement by building the capacity of trade ministries.
- Ensure adequate implementation across border agencies and regulatory bodies for services sectors.
- Identify specific sectors for export expansion and those that may be vulnerable, and set up mechanisms to ensure a smooth transition toward an open continental market.

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INTRODUCTION

The African Continental Free Trade Area (AfCFTA) provides a tremendous opportunity to stimulate Africa's trade and thereby contribute to its industrialization, accelerate economic growth, create new jobs, and reduce poverty. The AfCFTA will create a continentwide market, reducing barriers to trade and investment and boosting competition. African countries that have managed to reduce barriers to trade and investment have been able to accelerate their growth and poverty reduction. In a similar vein, the AfCFTA will raise Africa's attractiveness to regional value chains and to investors both by increasing the size of the market that foreign investors can access by locating in an African country and by facilitating access to inputs from throughout the African region.

This report deepens the earlier analysis of the potential implications of the AfCFTA for growth and poverty reduction. The earlier study, *The African Continental Free Trade Area: Economic and Distributional Effects* (World Bank 2020; henceforth called the "2020 AfCFTA Report"), shows that the AfCFTA has the potential to boost the continent's income by 7 percent (above the baseline without the AfCFTA) by 2035 and bring 30 million² people out of extreme poverty (living on less than US\$1.90 per day), as well as raise the incomes of 68 million others who live on less than US\$5.50 per day. The 2020 AfCFTA Report highlights that, beyond implementing tariff reductions, achieving these gains depends crucially on improvements to nontariff barriers (NTBs) on goods and services, and especially to trade facilitation measures, which alone account for US\$292 billion of the US\$450 billion in potential income gains.

This new report builds on the previous analysis by considering the potential gains arising from greater foreign direct investment (FDI) flows and deeper integration beyond trade. First, it accounts for the fact that, in addition to increasing trade directly, the AfCFTA agreement will further accelerate economic growth by boosting investment from within and outside the African region. Second, it also accounts for the potential impact of the second phase of the negotiations, which envisages an agreement covering more than trade policies in goods and services (which is the focus of the first phase of negotiations), notably including provisions related to investment

policy, competition policy, and intellectual property rights. By accounting for these two aspects, the report updates the previous estimates of the potential implications of the AfCFTA for trade, growth, and poverty reduction, as well as for employment reallocation and wages (disaggregating skilled and unskilled workers and female and male workers).

WHAT DOES THE AFCFTA ENTAIL?

The agreement establishing the AfCFTA entered into force in May 2019 for the 22 countries that by then had deposited their instruments of ratification. As of February 2022, 41 countries had ratified the agreement (see map 1.1). In July 2019, the heads of state adopted the Niamey Declaration, which launched the operational phase of the AfCFTA. Once completed, the AfCFTA will be the largest free trade area in the world



Map 1.1 Ratification of the AfCFTA as of February 2022

Source: Data from Tralac (https://www.tralac.org/resources/by-region/cfta.html). Note: AfCFTA = African Continental Free Trade Area.

as measured by membership and will potentially cover a market of 1.3 billion people with a gross domestic product of US\$3.4 trillion (World Bank 2020).

At present, the AfCFTA treaty contains only the legal framework for trade in goods, trade in services, its institutional setup, and provisions for state-to-state dispute settlement. The specific terms of trade liberalization in both goods and services are still being negotiated in the form of annexes to the protocols of the treaty. Official trading under the AfCFTA tariffs began January 1, 2021. Negotiations on trade in goods, including rules of origin, have been completed. However, negotiations on trade in services, additional protocols on investment, competition policy, intellectual property rights, and e-commerce are ongoing. The COVID-19 (coronavirus) pandemic and the complexity of negotiations among 54 members contributed to the delays with respect to the original schedule.

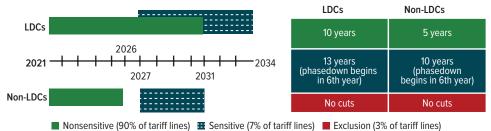
Substantial aspects of the AfCFTA therefore remain to be addressed, notably those envisaged to be covered in the second phase of the negotiations. Harmonization in the investment, competition, and intellectual property rights policy areas is an important complement to trade liberalization efforts, providing for consistent protections that can support entrepreneurship and cross-border investment and ensure markets function fairly and efficiently. As with trade arrangements, the rules on investment, competition, and intellectual property rights vary across Africa with a range of overlapping national, bilateral, and regional initiatives. For example, African countries are party to as many as 515 bilateral investment treaties, of which 173 are intra-Africa treaties (UNECA 2019). There is therefore considerable scope for the second phase of negotiations to improve harmonization, with the potential to significantly bolster the overall effects of the AfCFTA on intra-Africa trade and investment integration.

Under the trade components of the AfCFTA in the first phase, countries have agreed to progressively eliminate tariffs on at least 90 percent of goods, in addition to addressing NTBs and restrictions on trade in services. Tariff reductions are scheduled over 5 or 10 years, depending on a country's level of development (figure 1.1). The agreement allows trade in sensitive goods to be liberalized over longer time frames (up to 7 percent of tariff lines) or exempted altogether from liberalization (up to 3 percent of tariff lines). In addition, annexes to the agreement require countries to cooperate on simplifying and harmonizing trade and transit procedures and to establish institutional structures and processes for monitoring the elimination of NTBs. Member countries have also agreed to make detailed commitments on liberalizing services sectors, including logistics and transport, financial services, tourism, professional services, energy services, construction, and communications.

The AfCFTA treaty contains a Protocol on Trade in Services. The protocol distinguishes between normative commitments that apply generally to all services sectors on the one hand and, on the other, market access commitments for specific sectors and the different "modes of supply" (that is, the different modalities under which services can be traded). In addition, the Protocol on Trade in Services calls on Member

Figure 1.1 Tariff liberalization schedule under the AfCFTA

Tariffs are progressively cut, giving LDCs more time than non-LDCs to meet targets. LDCs will achieve full liberalization by 2034, and non-LDCs will meet their targets by 2031.



Source: World Bank.

Note: AfCFTA = African Continental Free Trade Area; LDCs = least developed countries (Angola, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, Equatorial Guinea, Ethiopia, The Gambia, Guinea, Guinea-Bissau, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Somalia, Sudan, Tanzania, Togo, Uganda, and Zambia).

States to negotiate additional norms and disciplines guiding domestic regulation in various specific services sectors. AfCFTA countries have identified five priority services sectors: business services (a broad category of services including professional services and many services that can be provided through call centers) and telecommunication, financial, transport, and tourism services. Addressing barriers to trade in services is important for two reasons: First, eliminating barriers to trade in services will lower the costs of production of physical goods because the cost of services used for production in manufacturing and agriculture is embedded in the cost structure of the physical goods. Second, eliminating barriers to trade in services should also enable greater FDI. Given that the lion's share of FDI worldwide is concentrated in services sectors, eliminating barriers to trade in services also leads to the dismantling of barriers to FDI (Echandi and Sauve 2020).

MEASURING THE IMPACTS OF THE AFCFTA ON TRADE, GROWTH, AND POVERTY REDUCTION

The 2020 AfCFTA Report quantifies the long-term economic and distributional implications of the AfCFTA (World Bank 2020). It assesses the implications for economic growth, international trade, wages, employment reallocation, and poverty. The study uses a global computable general equilibrium (CGE) model and a microsimulation framework to quantify the agreement's impact. In line with ongoing negotiations, the AfCFTA scenario, referred to as "AfCFTA trade," simulates the impact of reductions in tariffs and NTBs as well as in trade facilitation bottlenecks.

- Tariffs on intracontinental trade are progressively reduced in line with AfCFTA modalities. Starting in 2020, tariffs on 90 percent of tariff lines are gradually eliminated (over 10 years for least developed countries [LDCs] and 5 years for non-LDCs). Starting in 2025, tariffs on an additional 7 percent of tariff lines are gradually eliminated (over 8 years for LDCs and 5 years for non-LDCs). Up to 3 percent of tariff lines, which account for no more than 10 percent of intra-Africa imports, can be excluded from liberalization by the end of 2030 for non-LDCs and until 2033 for LDCs.
- NTBs on both goods and services are reduced on a most favored nation basis. It is assumed that 50 percent of the NTBs can be addressed with policy changes within the context of the AfCFTA—with a cap of 50 percentage points. It is also assumed that there will be additional reductions on NTBs on exports.
- The AfCFTA will also be accompanied by measures to facilitate trade, with commitments closely aligned with the Trade Facilitation Agreement. The 2020 AfCFTA Report borrows estimates of the size of these trade barriers from the existing literature (de Melo and Sorgho 2019). The resulting reductions in trade cost from the adoption of trade facilitation measures range between 2 percent and 10 percent over 2020–35.

This current report replicates this AfCFTA trade scenario as a starting point for the quantification of the economic and distributional impacts of the AfCFTA.

The AfCFTA trade scenario, however, does not adequately capture the potential dynamic gains from trade. Notably, AfCFTA member countries can be expected to enjoy faster productivity growth by taking advantage of the economies of scale in a larger market as well as to attract substantial FDI, leading to bigger gains. The additional integration in policy areas beyond trade would also be expected to bring additional economic benefits. This study aims to expand the earlier analysis to account for the dynamic gains arising from faster growth of FDI flows and deeper integration beyond trade; however, productivity gains remain outside the scope of the current study.

Building on the AfCFTA trade scenario, two additional scenarios are considered: (1) the "AfCFTA FDI broad scenario" incorporates the impacts of FDI from a preferential trade agreement among all countries on the continent, representing shallow but broad integration; and (2) the "AfCFTA FDI deep scenario" simulates the impact of provisions in additional policy areas to be covered by the AfCFTA, notably in investment policy, competition policy, and intellectual property rights, representing deep integration that further boosts FDI gains from the AfCFTA.

The study uses a variety of quantitative tools to carry out the estimations. The quantitative tools and scenarios used are summarized in figure 1.2. As in the 2020 AfCFTA Report, the global CGE model ENVISAGE is used to simulate the economic impacts of the AfCFTA trade scenario, compared with the baseline scenario in 2017. The CGE model is built upon the GTAP database version 10. Appendix C includes the

Computational general Microsimulations Gravity model equilibrium model Base year 2017 Baseline Liberalization of tariffs, NTBs in goods Impacts of FDI of AfCFTA FDI trade and services, trade extending the facilitation measures network of PTAs under the AfCFTA AfCFTA FDI broad to all African . countries AfCFTA FDI deep Impacts on FDI of Additional trade cost expanding depth reductions brought about and coverage of by deep commitments provisions of under the AfCFTA the AfCFTA Tools Scenarios

Figure 1.2 Tools applied and scenarios analyzed in the report

Source: World Bank.

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; NTBs = nontariff

barriers; PTA = preferential trade agreement.

geographic and sectoral aggregation used in this report. Gravity analysis (left-hand side of figure 1.2) is then used to yield estimates of potential impacts of the AfCFTA FDI broad and AfCFTA FDI deep scenarios on FDI flows in and out of the continent, including among the AfCFTA members themselves, as well as the additional expected trade cost reductions driven by deeper preferential commitments. The gravity-based estimates of FDI flows are then introduced into the global CGE model ENVISAGE (right-hand side of figure 1.2), and the economic implications of the AfCFTA trade scenario are simulated, augmented with FDI flows (AfCFTA FDI broad) and also accounting for the policy-area integration in the second phase (AfCFTA FDI deep). Finally, the economic impacts under the three scenarios are translated into their effects on poverty and income distribution using the Global Income Distribution Dynamics microsimulation framework.

VALUE ADDED AND ROAD MAP OF THE REPORT

This report makes important contributions that can guide policy makers engaged in the negotiations and implementation of the AfCFTA. This report highlights the gateways and barriers to Africa's increased prosperity made possible by closer integration with the global economy. It also provides estimates of the economic and social benefits of implementing

the AfCFTA from boosting trade, attracting FDI, enhancing participation in global value chains, accelerating economic growth, reducing poverty, and increasing shared prosperity.

The report includes new data and applies new methodological approaches to provide the following:

- An overview of the status of FDI, covering recent bilateral and sectoral data on FDI flows in and out of the continent;
- Comprehensive estimates of the impacts on FDI of deep preferential trade agreements based on the database on deep trade agreements (Hofmann, Osnago, and Ruta 2017) and the structural gravity approach;
- Estimates of potential country-specific intra- and extra-Africa FDI flows conditional on the country coverage and depth of the commitments under the AfCFTA; and
- Distributional impacts of the AfCFTA through trade and FDI, highlighting the impacts on poverty as well as on workers by skill and gender.

The structure of the report is as follows: Chapter 2 provides background on historical trends in FDI inflows and outflows from the continent using the most recent statistics and discusses the preliminary data on the impacts of COVID-19. That chapter also touches on the role of FDI in productivity gains as well as its role in supporting integration into global and regional value chains. Chapter 3 applies a gravity approach to the estimation of the potential impacts of the AfCFTA on FDI flows. Chapter 4 uses those estimates in the CGE model ENVISAGE to quantify the impacts of the AfCFTA on growth and its distributional outcomes using the Global Income Distribution Dynamics microsimulations module. Chapter 5 concludes with policy recommendations.

NOTES

- The African Continental Free Trade Area: Economic and Distributional Effects (World Bank, 2020) is available here: https://openknowledge.worldbank.org/bitstream/handle/10986/34139 /9781464815591.pdf.
- 2. The African Continental Free Trade Area: Economic and Distributional Effects (World Bank, 2020) estimates that the AfCFTA trade scenario could lift as many as 30 million people from extreme poverty (World Bank 2020). These estimates were conducted before the COVID-19 (coronavirus) pandemic. Considering that the global pandemic saw a net increase in 2020 of almost 51 million people living in extreme poverty relative to the prepandemic level, the updated estimates presented in this study suggest that implementation of the AfCFTA trade scenario could, by 2035, lift 40 million people from extreme poverty and 75 million people from moderate poverty measured using a poverty line of US\$5.50 a day.

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FDI Trends, Productivity Gains, and Links to Regional Value Chains in Africa

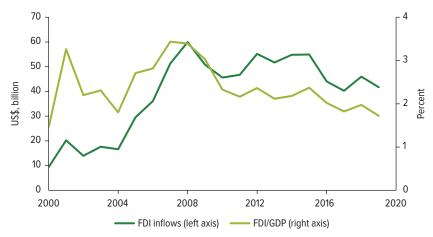
KEY MESSAGES

- Foreign direct investment (FDI) can help increase countries' exports and integration into global markets.
- FDI can also improve the productivity of domestic firms by linking them to multinationals via investment, partnerships, and trade.
- Countries in Africa with larger market size and fewer trade barriers already attract significantly more FDI from inside and outside the continent, which offers encouraging signs about the potential of the African Continental Free Trade Area (AfCFTA) to boost FDI inflows.
- Africa's levels of FDI and global value chain (GVC) intensity are low and underdeveloped compared with other parts of the world because of fragmented markets, FDI barriers, and political and regulatory risks.
- The AfCFTA has a crucial role to play in lowering trade barriers for goods and services to boost Africa's regional and global value chain participation.

OVERALL FDI TRENDS BEFORE COVID-19

After rising rapidly for years, total FDI flows into African countries declined in the wake of the 2008–09 global financial crisis. They reached about US\$42 billion in 2019, or 1.7 percent of total African GDP (figure 2.1). Although the stock of FDI in Africa has continued to rise rapidly throughout this period, peaking at more than US\$800 billion in 2017, much of it can be attributed to FDI to or from Mauritius, which has historically been considered an offshore financial center. Excluding Mauritius, increases in the total stock of FDI in Africa are somewhat more modest, but nonetheless totaled about US\$500 billion in 2018, or 22 percent of GDP (figure 2.2).

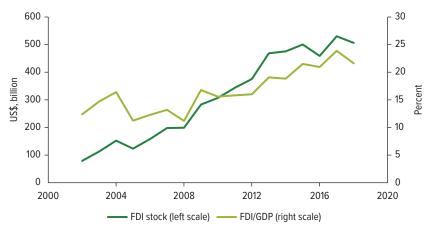
Figure 2.1 Total FDI inflows to Africa, 2000–19



Source: Based on data from World Development Indicators.

Note: Excludes Mauritius. FDI = foreign direct investment; GDP = gross domestic product.

Figure 2.2 Total stock of FDI in Africa, 2002–18



Source: Based on data from World Bank Bilateral FDI Database.

Note: Excludes Mauritius. FDI = foreign direct investment; GDP = gross domestic product.

Data on announcements of greenfield FDI projects and cross-border mergers and acquisitions targeting Africa are more volatile but display similar overall trends. After 2008, the value of new projects fell before stabilizing somewhat in more recent years (figures 2.3 and 2.4). Global FDI flows were already in decline before the COVID-19 (coronavirus) crisis after peaking in 2015, and the flow-on effects for investment in Africa are evident. Nonetheless, an increase in the number of greenfield projects in 2019 and the steady number of merger and acquisition deals suggest that investors have continued to identify opportunities amid the rapid development of the continent.

1,200 1,000 Number of projects JS\$, billion Project capital expenditures (left scale) —— Project count (right scale)

Figure 2.3 Greenfield FDI projects in Africa, 2003–19

Source: Based on data from fDi Markets. Note: FDI = foreign direct investment.

Figure 2.4 M&A deals targeting Africa, 2000–19



Source: Based on data from Refinitiv Eikon. Note: M&A = merger and acquisition.

SOURCES OF FDI INTO AFRICA

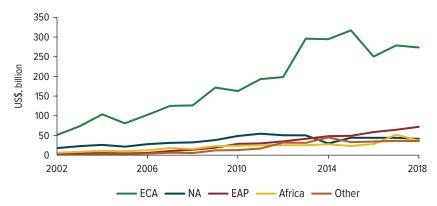
Historically, the Europe and Central Asia region, particularly Western Europe, has been the dominant source of FDI flowing into Africa, consistently accounting for about 60 percent of the FDI stock in the region (excluding FDI to Mauritius) (figure 2.5). In fact, the total value of European FDI in the region continued to rise until 2015, peaking at more than US\$317 billion. North America has also been an important source historically, but its stock of FDI in the continent has declined gradually since 2011, and North America now holds less than 10 percent of Africa's total FDI stock.

Figure 2.5 Share of FDI stock in Africa, by source region, 2002–18

Source: Based on data from World Bank Bilateral FDI Database.

Note: Excludes Mauritius. EAP = East Asia and Pacific; ECA = Europe and Central Asia; FDI = foreign direct investment; NA = North America.





Source: Based on data from World Bank Bilateral FDI Database.

Note: Excludes Mauritius. EAP = East Asia and Pacific; ECA = Europe and Central Asia; FDI = foreign direct investment; NA = North America.

These trends have been accompanied by a steady increase in FDI from the East Asia and Pacific region, primarily driven by China (figure 2.6). The stock of Chinese FDI in Africa grew at an annual rate of 42 percent between 2002 and 2018, reaching US\$44 billion in 2018. As a result, the share of all FDI in the region originating from Asia has risen from less than 5 percent in 2002 to as much as 15.7 percent in 2018, with China alone making up 9.7 percent.

Intra-Africa FDI—direct investment by firms in Africa into other countries in the region—has also increased steadily, rising 12 percent annually from 2002 to 2008 (again, excluding FDI to and from Mauritius). In 2017, the stock of intra-Africa FDI hit a high of US\$52 billion, or 11 percent of the region's total FDI stock. Southern Africa,

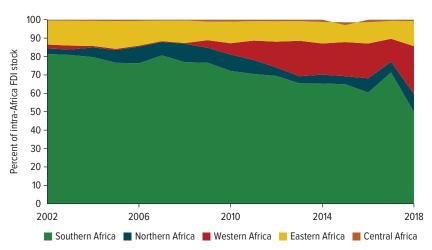


Figure 2.7 Intra-Africa FDI, by source subregion, 2002–18

Source: Based on data from World Bank Bilateral FDI Database. Note: Excludes Mauritius. FDI = foreign direct investment.

specifically South Africa, is the main source of intra-Africa FDI, making up 60 to 70 percent of intra-Africa FDI stock in most years, and West Africa has recently emerged as another important source (figure 2.7). Investment from Northern Africa has also increased in recent years, from less than 1 percent of Africa's FDI stock in 2002 to almost 6 percent in 2018.

DESTINATIONS FOR FDI INTO AFRICA

Southern Africa is not only the major source of intra-Africa FDI but has also historically been a major destination. In 2018, however, the US\$107 billion invested in southern Africa accounted for only about 23 percent of the region's FDI stock compared with 50 percent in 2004 (figure 2.8). FDI flows to North Africa surged in the 2000s, reaching US\$24 billion at its peak in 2007, helping it overtake Southern Africa as the largest recipient of FDI (figure 2.9). North Africa has since accounted for more than 30 percent of FDI stock on the continent. Although Europe remains the dominant source region, FDI from the Middle East is more prevalent in North Africa, contributing more than 11 percent of the subregion's FDI stock in 2018. The stock of FDI directed toward West Africa, primarily Nigeria, has also increased significantly, reaching US\$97 billion in 2018 (or 23 percent of all FDI stock in Africa). Europe, North America, and East Asia have all played a role, as has increased intra-Africa FDI directed toward West Africa, which totaled US\$13.2 billion in 2018. FDI directed toward East Africa is less pronounced, reaching US\$78 billion in 2018 (excluding Mauritius). This subregion is the least dependent on FDI from Europe, with FDI from China playing a significant role instead. Intra-Africa FDI is also important in East Africa, totaling US\$13.8 billion in 2018.

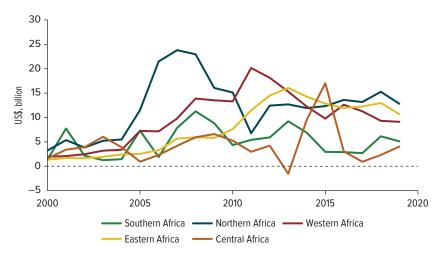
300 250 200

Figure 2.8 FDI stock in African subregions, 2002–18

US\$, billion 150 100 50 0 2002 2006 2010 2014 2018 Southern Africa -Northern Africa — Western Africa Eastern Africa — Central Africa East Africa (including Mauritius)

Source: Based on data from World Bank Bilateral FDI Database. Note: Excludes Mauritius, except as noted. FDI = foreign direct investment.

Figure 2.9 FDI inflows, by African subregion, 2000–18



Source: Based on data from World Bank Bilateral FDI Database. Note: Excludes Mauritius. FDI = foreign direct investment.

SECTORAL BREAKDOWN OF FDI INTO AFRICA

Historically, the FDI flowing into Africa has been concentrated in natural resources and domestic market-seeking FDI opportunities. Efficiency-seeking FDI, the type of investment connecting host countries into networks of international patterns of production in goods and services, is much less common. From 2003 to 2007, extractive industries such as coal, oil, gas, and metal ore mining projects made up 40 percent of the estimated US\$272 billion of new greenfield FDI projects announced

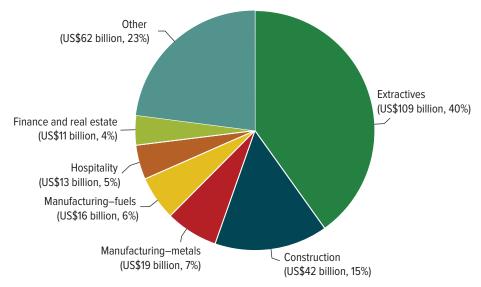


Figure 2.10 Greenfield FDI projects by sector, 2003–07

Source: Based on data from fDi Markets. Note: FDI = foreign direct investment.

in Africa (figure 2.10).¹ Since then, the value of projects focused on raw materials has fallen in absolute terms while investment in other sectors has grown, diversifying the sectoral mix of Africa's FDI. Between 2015 and 2019, extractives projects totaled just US\$61 billion, or about 15 percent of the total (figure 2.11). Sectors that have attracted significant new greenfield investment more recently include utilities such as electricity generation and distribution (US\$86 billion, up from about US\$8 billion over 2003–07), logistics such as transportation and warehousing (US\$35 billion, up from US\$7 billion), and chemicals manufacturing (US\$31 billion, up from US\$9 billion). The increased investment in utilities includes a surge in renewable energy projects, which totaled almost US\$37 billion over 2015–19. Across all manufacturing sectors, investment has increased from US\$69 billion to US\$105 billion. Investment in services, such as finance, real estate, communications, information technology services, and business services, has also grown significantly.

Different aspects of this diversification have been driven by investors from different regions. European and North American investments, which made up about half of all greenfield project announcements in 2015–19, were concentrated in utilities and extractives projects. By contrast, investments in finance and real estate made up the largest share of projects from China and elsewhere in the East Asia region. The growth of intra-Africa investment has also contributed to diversification, including significant investments in chemicals, construction, and communications, as well as utilities and other manufacturing, such as building materials. Investment from other regions, primarily the Middle East, has been heavily concentrated in construction.

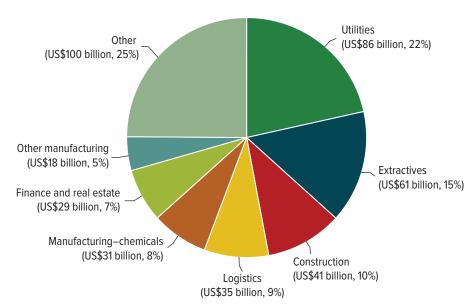


Figure 2.11 Greenfield FDI projects by sector, 2015–19

Source: Based on data from fDi Markets.

Note: "Other manufacturing" includes building materials, paper, rubber, plastics, wood products, and so on. FDI = foreign direct investment.

IMPACTS OF COVID-19

With FDI flows globally already in decline, the COVID-19 crisis further disrupted investment in 2020, significantly reducing the flow of FDI to Africa. The United Nations Conference on Trade and Development's preliminary estimates suggest FDI flows to Africa totaled US\$38 billion in 2020, down 18 percent from US\$46 billion in 2019 (UNCTAD 2021).

For the limited number of countries for which recent quarterly data on FDI inflows are available, FDI fell in the second and third quarters of 2020 (figure 2.12). Across the 14 African countries with second-quarter data available, inflows fell from US\$4.3 billion in the first quarter to US\$3.6 billion in the second quarter, down 18 percent year over year (compared with the second quarter of 2019).

Across the 10 African countries with third quarter data available, inflows fell from US\$2.8 billion in the first quarter of 2020 to US\$1.5 billion in the second quarter and were negative in the third quarter (because of net disinvestment, driven by South Africa and Angola). These data indicate a year-over-year decline of 24 percent in the second quarter and 105 percent in the third quarter.

Total announced greenfield FDI projects in Africa declined even more dramatically, falling to as little as US\$5 billion in the second quarter of 2020 (down 71 percent year over year) and to US\$4.2 billion in the third quarter (down 79 percent) (figure 2.13). The number of project announcements likewise fell sharply, and declines occurred in

Figure 2.12 Impact of COVID-19 on quarterly FDI flows to Africa, 2015–20

Source: Based on IMF Balance of Payments.

Note: The 14 countries are Algeria, Angola, Cabo Verde, the Arab Republic of Egypt, Lesotho, Madagascar, Morocco, Mozambique, Namibia, Rwanda, São Tomé and Príncipe, South Africa, Tanzania, and Zambia. The 10 countries exclude Egypt, Madagascar, Rwanda, and Tanzania. FDI = foreign direct investment.

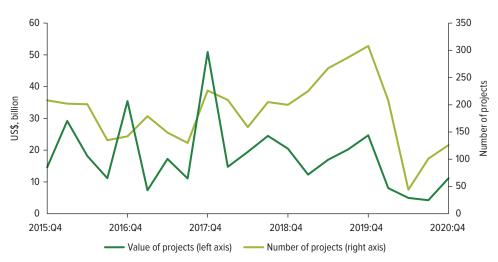


Figure 2.13 Impact of COVID-19 on greenfield FDI projects in Africa, 2015–20

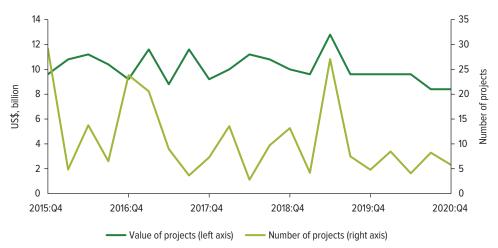
Source: Based on data from fDi Markets. Note: FDI = foreign direct investment.

nearly every major sector. There were some early signs of recovery in the fourth quarter data, although the value of announcements remained down 55 percent year over year.

The total value of mergers and acquisitions targeting countries in Africa remained volatile in the wake of COVID-19, falling to US\$1.6 billion in the second quarter of 2020 (down 85 percent year over year) before rising to US\$3.3 billion in the third quarter and falling back to US\$2.3 billion in the fourth quarter (up slightly in year-over-year terms) (figure 2.14).

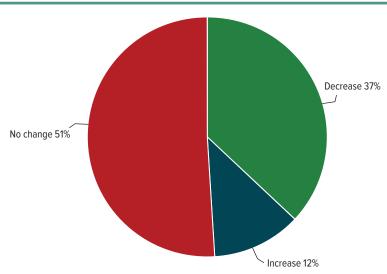
Results from the World Bank pulse survey of multinational enterprises carried out in the third quarter of 2020 indicate that the outlook for foreign investment is clouded (Saurav et al. 2020). Of the 74 multinational enterprise affiliate firms surveyed in Africa, half indicated that they did not yet expect their foreign parent to change the level of investment in their host country (figure 2.15). However, of those that did expect

Figure 2.14 Impact of COVID-19 on merger and acquisition deals targeting Africa, 2015–20



Source: Based on data from Refinitiv Eikon.

Figure 2.15 Share of African MNE affiliates in the third quarter of 2020 expecting their foreign owner to change investment in their host country



Source: Saurav et al. 2020.

Note: N = 74. MNE = multinational enterprise.

the level of investment to change, most expected investment to decrease (37 percent of all respondents in Africa). Although considerable uncertainty remains, these results highlight the challenge ahead as African countries seek to retain and attract FDI through the recovery period.

GREATER PARTICIPATION IN REGIONAL AND GLOBAL VALUE CHAINS CAN ATTRACT MORE FDI

Increasing integration into global markets generates stronger incentives for FDI to take advantage of the expanded market, further boosting trade and growth. FDI benefits host countries by bringing with it the necessary jobs, capital, know-how, and connections to enter new global production processes (Gammoudi, Cherif, and Asongu 2016; Toone 2013). Stimulating firms to begin participating in or to upgrade in GVCs can ultimately help developing countries industrialize more rapidly. By supplying intermediate inputs (both goods and services) to global production networks, firms no longer need to wait for the emergence of an in-country industrial base or the upstream capabilities formerly required to compete internationally. The rapid development of newly industrialized Asian economies in the past few decades and other experiences in the developing world have strengthened the belief that participation in GVCs can be a vehicle for accelerating the economic transformation of low-income countries (World Bank 2020).

Participation in GVCs and FDI expansion go hand in hand. The emergence and evolution of GVCs has mirrored multinational enterprises' investment and trade decisions as they have relocated their production activities worldwide. The surge in GVCs since the 1990s reflects these decisions and has accelerated the expansion of FDI. Greater trade integration and openness to foreign markets induces initial FDI from the lead firm by lowering its entry costs into the host country. Lower entry costs and high switching costs encourage the lead firm to bring its GVC partners into the host country as well, and a herd effect triggers subsequent FDI. Finally, FDI stimulates further GVC entry and upgrading through spillovers and agglomeration effects. As a result, GVC expansion has mirrored the growth of multinational enterprises' investments to unbundle production processes and relocate them worldwide. In turn, countries' GVC centrality is highly correlated with their FDI centrality (see figure 2.16; Qiang, Liu, and Steenbergen 2021). A recent example of the impact of trade liberalization on attracting FDI and stimulating a country's export growth, GVC participation, and industrialization is presented in box 2.1 on Costa Rica.

Unfortunately, both integration into global supply chains and FDI inflows are low in African countries compared with other parts of the world. Although Africa's GVC participation—defined as the sum of foreign value added plus domestic value added in exports to a third country (whether in Africa or the rest of the world)—rose in

8 DEU CHN USA 6 GVC centrality, 2017 (in logarithm) THE 4 LUX 2 AGO PER MAR COL MAC MMR 0 AZE ■ RRN 2 4 6 8 10 FDI centrality, 2017 (in logarithm) ● EAP ● ECA ● LAC ● MENA ● NA ● SA ● SSA ━

Figure 2.16 Correlation between countries' GVC centrality and their FDI centrality

Source: World Bank 2020.

Note: EAP = East Asia and Pacific; ECA = Europe and Central Asia; FDI = foreign direct investment; GVC = global value chain; LAC = Latin America and the Caribbean; MENA = the Middle East and North Africa; NA = North America; SA = South Asia; SSA = Sub-Saharan Africa.

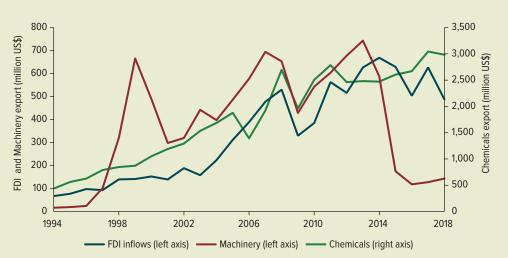
Box 2.1 How trade integration helped Costa Rica attract FDI and diversify from agriculture to high-tech manufacturing and services

In the early 1980s, Costa Rica was exporting undifferentiated and unprocessed agricultural products, such as coffee, bananas, and sugar. The Costa Rican government decided to adopt an export-oriented growth strategy, including trade liberalization and the promotion of export-led foreign direct investment (FDI), to create employment, diversify exports, and boost the country's productivity. Generous investment incentives and proactive investment promotion were key factors that attracted lead firms into Costa Rica. Following the arrival of the world-leading company Intel in the late 1990s, more and more multinational enterprises started to invest and set up shop in Costa Rica, gradually diversifying and upgrading the country's production base and exports. The country's FDI volume grew from 3 percent of GDP in 1997 to 8 percent, its all-time high, in 2007 (figure B2.1.1).

(Box continues on next page)

Box 2.1 How trade integration helped Costa Rica attract FDI and diversify from agriculture to high-tech manufacturing and services *(continued)*

Figure B2.1.1 Costa Rica's foreign direct investment inflows and export growth, 1994–2018



Source: Based on data from United Nations Conference on Trade and Development and UN Comtrade Database. *Note:* FDI = foreign direct investment.

Since the turn of the century, foreign companies have upgraded their operations in Costa Rica toward more knowledge-intensive activities, including software design and research and development. Along with this trend, the Costa Rican government has shifted toward a more selective approach to attracting FDI, focusing on companies that operate in knowledge-intensive sectors such as knowledge-processing services, medical devices and the life sciences, and clean technologies. FDI has thus been key in transforming Costa Rica's economy. Partly because of high FDI inflows, the country has successfully transformed its export composition from primary products to high-tech manufacturing and value-added services industries, and it has been pivotal in diversifying the country's exports, boosting economic growth, and generating skilled jobs.

Source: Adapted from Qiang, Liu, and Steenbergen 2021.

absolute terms from US\$46 billion in 2000 to about US\$190 billion in 2018, its share of GVC participation remained constant at 2 percent. This level of participation pales in comparison with developing countries in the East Asia and Pacific and South Asia regions (Asia-Pacific), which managed to increase their share of GVC participation during the same time from 11 to 17 percent, resulting from a more than fivefold increase in their absolute GVC trade (figure 2.17, panels a and b). These trends also closely track FDI inflows across the world. Africa raised its share of global FDI inflows from 1 to 3 percent, whereas the Asia-Pacific region raised its share from 10 to 31 percent between

a. Value of GVC participation by region b. Total share of GVC participation, by region, 2000-18 2,000 20 1,500 15 US\$, billion Percent 1,000 10 500 5 0 0 2012 2000 2003 2000 2003 2006 2009 2015 2018 2006 2009 2012 2015 2018 c. FDI inflows by region d. Total share of global FDI inflows, by region, 2000-18 600 40 500 30 400 US\$, billion Percent 300 20 200 10 100 0 0 2000 2003 2006 2009 2012 2015 2018 2000 2003 2006 2009 2012 2015 2018 – Africa – Latin America and the Caribbean Asia-Pacific

Figure 2.17 GVC participation and FDI inflows by region, 2000-18

Source: Based on data from Eora global supply chain database (panels a and b) and data from UNCTAD FDI Statistics (panels c and d).

Note: GVC participation is defined as the sum of the foreign value added and the domestic value added in exports to a third country. Panels a and b: For Africa, Latin America and the Caribbean, and Asia-Pacific (East Asia and Pacific and South Asia combined), only GVC participation for developing countries is reported (high-income countries are excluded). GVC = global value chain. Panels c and d: For Africa, Latin America and the Caribbean, and Asia-Pacific (East Asia and Pacific and South Asia combined), only FDI inflows for developing countries are reported. Both high-income countries and offshore financial centers are excluded. FDI = foreign direct investment.

2000 and 2018 (figure 2.17, panels c and d). Latin American countries have landed somewhere in between these two extremes, outperforming Africa but failing to catch up with the Asia-Pacific region.

Although Africa's exports of intermediate goods tend to be limited, the continent has managed to join some GVCs. African exports tend to enter at the very beginning of GVCs, serving as inputs for other countries' exports, reflecting the still-predominant role of agriculture and natural resources in African exports. For example, Botswana, the Democratic Republic of Congo, and Nigeria have all integrated into GVCs through exports of oil and other natural resources. There are, however, some examples of countries expanding their GVC participation by supplying foreign firms with manufactured inputs. Morocco has become a sizable producer of auto parts by attracting major manufacturers in the automotive industries (Freund and Moran 2017). Similarly, GVC participation in some countries (Ethiopia, Kenya, South Africa, and Tanzania) grew by 10 percentage points or more, approaching what Poland and Vietnam—now success stories—experienced in the late 1990s and 2000s (World Bank 2020). Most of this integration has occurred in apparel, agribusiness, and to a lesser extent transport and tourism. In many of these cases, FDI played a critical role in establishing the sector and expanding its GVC participation (see, for example, box 2.2 on Ethiopia's textiles and garment sector).

Both global and regional FDI are important for Africa's industrialization, but they have different effects on global and regional value chain participation, different focus sectors, and different economic impacts. Foreign ownership specifies how firms are linked to global production and distribution networks and the extent to which firms are locally or regionally embedded (Granovetter 2018). Whereas global FDI tends to stimulate GVC participation, intraregional FDI often expands intraregional value chains (UNECA 2020).

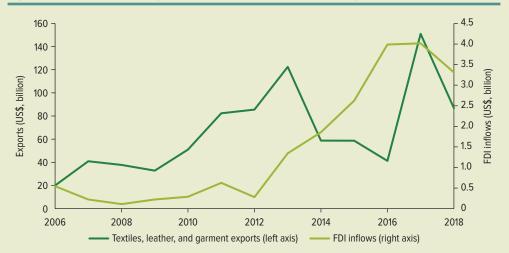
Box 2.2 Ethiopia's textiles and garment sector exports were supported by FDI flows

The expansion of Ethiopia's textiles and garment sector was supported by an open trade regime that stimulated inward foreign direct investment (FDI). Ethiopia has thus emerged as one of the largest foreign investment hubs in Africa. Since 2006, Ethiopia's garment sector exports have been expanding at an annual rate of more than 50 percent, and it currently hosts about 65 international investment projects. From 2009 to 2017, Ethiopia's total apparel exports to the rest of the world grew from about US\$33 million to more than US\$151 million, roughly coinciding with an increase in FDI from about US\$220 million to US\$4 billion (figure B2.2.1).

(Box continues on next page)

Box 2.2 Ethiopia's textiles and garment sector exports were supported by FDI flows (continued)

Figure B2.2.1 Ethiopia's foreign direct investment inflows and export growth, 2006–18



Source: Qiang, Liu, and Steenbergen 2021. *Note:* FDI = foreign direct investment.

The significant flow of foreign investment into Ethiopia's textiles and garment sector has gone hand in hand with the government's state-driven industrialization strategy to attract FDI. The arrival of Turkish textile giants in 2008 was an important milestone because they established factories and created thousands of jobs locally, as well as helping to increase Ethiopia's global value chain participation by attracting additional investors. To provide further incentives to prospective foreign investors, the government implemented a series of policies beginning in 2012, including removing sectoral restrictions on FDI and exempting foreign investors from customs duties and income taxes. Facilitated by the government's efforts to improve Ethiopia's infrastructure and establish specialized industrial parks, a significant number of transnational garment manufacturers, mostly from Asia, arrived after 2013 to cluster in those parks and invest in production bases (Balchin and Calabrese 2019). Some Western brands, such as PVH Corp., also began to source from Ethiopia in the mid- to late 2010s. FDI thus helped achieve noticeable GVC growth in a short period.

Source: Adapted from Qiang, Liu, and Steenbergen 2021.

THE AFCFTA CAN BOOST REGIONAL AND GLOBAL VALUE CHAIN PARTICIPATION

The AfCFTA has a crucial role to play in lowering trade barriers for goods and services to boost Africa's regional and global value chain participation. High trade barriers hamper Africa's GVC participation. Africa still faces many barriers that reduce its competitiveness and participation in GVCs compared with other regions, notably East Asia. As discussed in chapter 1, the AfCFTA provides a unique opportunity to remove

many of these barriers and increase the competitiveness of African exports in regional and global markets.

In addition to an open trade regime, adopting a business-friendly policy environment will help stimulate participation in regional value chains (RVCs) and GVCs. The development of regional production networks is driven by enabling free trade, especially exports and imports of inputs and machinery. In addition to implementing intraregional trade agreements, such as the AfCFTA, governments can collaborate to stimulate RVCs by preventing race-to-the-bottom incentives and promoting services and shared infrastructure development (Weigert and El Dahshan 2019). To strengthen RVCs, policy makers could encourage multinational enterprises to build up their upstream value chain activities—including raw materials, components, and spare parts—and locate these activities across the region (Weigert and El Dahshan 2019).

World regions vary widely as to whether they are more closely integrated at a global level (with GVCs) or whether they are more dependent on trade within the region (with RVCs). Countries' trade with RVCs involves only production partners in the region, whereas extraregional value chain trade involves only partner countries outside the region. Europe and Central Asia, for example, is the most regionally integrated region, with four times as many regional links as global links (figure 2.18). Both the Middle East and North Africa and Sub-Saharan Africa are among the least

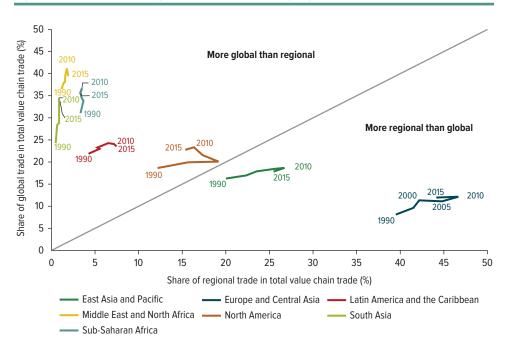


Figure 2.18 Global versus regional value chain trade, by region, 1990–2015

Source: World Bank 2020.

regionally integrated regions in the world. In fact, their share of global trade as a proportion of total value chain trade increased between 1990 and 2015. This global tilt has occurred because a high share of Africa's exports tends to enter at the very beginning of value chains, reflecting the still-predominant role of agriculture and natural resources in African exports (World Bank 2020).²

RVCs are increasingly seen as complementary to GVCs for accelerating Africa's economic transformation and industrialization. For some countries, trading within the region may serve as a way to learn to export and produce higher-quality goods, thus allowing countries to use integration into regional markets as a stepping-stone to global markets. Countries can thereby collectively position themselves more strongly to climb a specific GVC as a regional bloc, propelling structural transformation and growth in the process (AfDB, OECD, and UNDP 2014; Barrientos et al. 2016; Hallward-Driemeier and Nayyar 2017). A typical example of such activity is the integration of East Asian manufacturers into the electronics GVC, led by Japan, China, and the Asian Dragons. Examples of nascent RVCs in Africa include the automotive sector in North Africa and the clothing sector in southern Africa (Weigert and El Dahshan 2019). However, significant barriers, such as high transport costs and inadequate cross-border infrastructure, hamper the development of RVCs (Engel et al., forthcoming).

It is important to distinguish between different types of foreign investors, although distinctions are increasingly blurred. Morris, Plank, and Staritz (2015) point to a fundamental difference between global (extraregional), regional, and diaspora investors in Africa's manufacturing sector:³

- Global investors tend to own or source from production units in several countries and regions, following a global strategy involving long-run production of a narrow range of basic products made in large plants, and specializing in a narrow range of functional activities. Their plants have little autonomy and activities are generally limited to manufacturing, with higher-value functions concentrated at head offices. Expats generally have an important role in management positions. In many cases, such investors are from East or South Asia, but serving European and North American markets. Primary drivers to invest in Africa are low labor costs and duty-free access to target markets.
- Regional investors have head offices in their home countries with responsibility for higher-value functions and the organization of production networks focused on a specific geographic region. Notwithstanding important differences among regional investors, they do not have global investment and sourcing strategies, and their investments are based on geographic and cultural proximity. This proximity also enables them to manage their regional production networks by allowing flexible use and easy spatial flow of management, technical, and logistical resources. These investors tend to be regional market leaders. Their primary drivers for foreign investment are lower labor costs compared with their domestic economy, FDI incentives, preferential market access, and geographic proximity.

• Diaspora investors often come from immigrant families that have settled in the host country for many decades. Because they are not indigenous, they are often regarded as foreign, yet they are locally embedded. Decision-making is controlled locally, which leads to greater functional flexibility. They typically operate in owner-managed single operation firms and are not part of tightly organized production networks, nor do they operate with regional or global reach. However, in contrast to indigenous investors, they can draw on their diaspora status to link to global networks for input sourcing and to access buyers and end markets.

Attracting different types of investors will shape the development of a country's specific global or regional value chains. The type of foreign ownership determines how they are linked to global production and distribution networks and the extent to which firms are locally or regionally embedded (Granovetter 2018). Greater intraregional FDI could thus greatly increase the chance of the emergence of intraregional value chains (UNECA 2020).

The type of foreign ownership attracted may also have implications for a sector's potential for upgrading, job creation, and development of "backward links" to domestic or regional suppliers. In their study on Tanzanian apparel, Boys and Andreoni (2020) find that GVC-oriented firms make the greatest contribution to recent export growth and employment generation. But the authors focus on a narrow range of lower-value functions, mostly apparel assembly. RVC-oriented firms perform a wider range of functions, including producing their own yarn and fabric inputs and developing their own design and branding. They are also more likely to source inputs regionally. Boys and Andreoni (2020) find evidence that RVCs can serve as "learning grounds" for more demanding but lucrative global markets. As an example, an own-brand manufacturer learned to export by serving the South African market before being able to start meeting the tougher requirements of US buyers. Gold et al. (2017) find important technology spillovers and productivity improvements from both regional and global FDI. However, they note that firms receiving investments from other African countries show higher average employment growth and report greater collaboration between African investors' headquarters firms and their foreign affiliates on patents, product upgrading, and research and development, further suggesting that there may be additional benefits to intra-Africa FDI.

NOTES

- Greenfield FDI data come from fDi Markets, which uses newspaper announcements to capture FDI flows. This information should be seen as an approximation at best, given that an announced investment value can differ significantly from actual FDI inflows. Many capital investment values are also estimated, further limiting their accuracy.
- Many of these commodities require extensive processing and need to be combined with many other inputs to be suitable for consumers (for example, coltan as an input for mobile phone production), which thereby raises demand for them more in global than in regional markets.

3. Although Morris, Plank, and Staritz (2015) describe the apparel industry in southern Africa (see box 4.1), the authors argue that many of these distinguishing conditions between global and regional investors would hold in other sectors as well.

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KEY MESSAGES

- Trade liberalization in Africa should boost foreign direct investment (FDI) because lowering entry barriers and regulatory risks should attract investors.
- By creating a continentwide market and eliminating barriers to trade in goods and services, the African Continental Free Trade Area (AfCFTA) will also encourage competition and improve the environment for FDI. The negotiations on the Protocol on Trade in Services and the Protocol on Investment will critically influence foreign investment.
- Gravity-based estimates suggest that, as a result of the AfCFTA, Africa may record an increase of 111 percent in FDI assuming that the AfCFTA covers all African countries with preferential trade commitments equivalent to an average African preferential trade agreement (PTA) (the AfCFTA FDI broad scenario) and an increase in FDI of 159 percent when assuming a more ambitious integration agreement that also covers protocols on investment, competition, and intellectual property rights (the AfCFTA FDI deep scenario).
- Such large percentage increases in FDI can occur mainly because African countries currently receive relatively low levels of FDI.
- African countries are expected to increase their own cross-border (bilateral)
 FDI by between 54 percent (the AfCFTA FDI broad scenario) and 68 percent (the AfCFTA FDI deep scenario).
- West Africa, including Angola, the Democratic Republic of Congo, and Nigeria, stands to record the highest FDI growth rates.
- South Africa, as the biggest recipient of FDI on the continent, stands to consolidate its position as Africa's investment hub. Its outward investment is set to grow by US\$12 billion (11 percent) compared with 2017.

PREVIOUS STUDIES OF THE IMPACTS OF TRADE AGREEMENTS ON FDI FLOWS

Researchers have developed a number of frameworks for understanding the potential effects of trade liberalization and PTAs on FDI (Blomstrom and Kokko 1997; Ekholm, Forslid, and Markusen 2007; Neary 2009; Yeaple 2003). In theory, the direction of these effects will vary depending on investor motivations, the location of investors (within versus outside a trade agreement), the relative level of development and attractiveness of the countries involved, and a host of other factors (Echandi, Krajcovicova, and Qiang 2015).

Reduction of trade barriers may reduce the "tariff-jumping" incentive for some FDI inflows. An individual firm looking to expand sales into a new country faces the options of either exporting to a separate firm in that country or establishing an affiliate there via horizontal (domestic market–seeking) FDI. In this case, in which FDI is used as a mechanism for avoiding costs associated with trade, any lowering of trade barriers might reduce the incentive for a firm to make direct investments overseas. Accordingly, some studies have found that bilateral and regional PTAs have a negative effect on horizontal FDI among countries party to the agreement (Blomstrom and Kokko 1997; Im 2016; Jang 2011).

However, in different circumstances the relationship will run in the opposite direction, with reduced trade barriers driving increased FDI. For example, lowering trade barriers can provide incentives for vertical (efficiency- or resource-seeking) FDI among countries party to an agreement by enabling firms to distribute production activity across multiple locations on the basis of technology, skills, cost, or resource availability (Baltagi, Egger, and Pfaffermayr 2008; Blomstrom and Kokko 1997; Li and Maani 2018; Yeyati, Stein, and Daude 2003). Developing countries may be in a particularly good position to benefit from this kind of investment effect from entering a PTA with a more developed country. Recent research has demonstrated the key role PTAs may play in this regard (Kox and Rojas-Romagosa 2020; Osnago, Rocha, and Ruta 2017).

Trade agreements may also provide incentives for additional domestic market-seeking FDI from firms outside the region because the costs of exporting throughout that region are reduced once an in-region affiliate has been established. Consistent with the prevalence of this "export-platform" model, a number of studies provide evidence of greater FDI inflows into regions participating in trade agreements (Feils and Rahman 2008; Im 2016; Neary 2009; Yeyati, Stein, and Daude 2003). The benefits of additional export-platform FDI may be concentrated in the most attractive host country participating in a PTA. However, as highlighted by Yeaple (2003), modern global value chains involve a mix of vertical and horizontal FDI strategies that further reinforce the potential for trade agreements to increase FDI into and among participating countries.

Additional dynamic processes may also contribute to a positive effect of trade liberalization on FDI in the longer term. For example, as noted by Blomstrom and

Kokko (1997), productivity gains generated by greater international trade exposure and integration into global value chains should boost incomes and therefore market size, further attracting market-seeking FDI while also strengthening the broader macroeconomic climate for investment. Trade relationships can also foster investment: previous trade with a destination country can provide a foreign firm with information, connections, and experience that make it easier to subsequently commit to direct investment in an overseas affiliate.

Empirical research generally supports the overall positive effects of trade agreements on FDI flows. Studies have found positive effects for specific agreements such as the North American Free Trade Agreement (Cuevas, Messmacher, and Werner 2005; MacDermott 2007), the European Union single market (Baltagi, Egger, and Pfaffermayr 2008), and the China–Association of Southeast Asian Nations agreement (Thangavelu and Narjorko 2014; Li, Scollay, and Maani 2016). Medvedev (2012) finds PTA membership is associated with an increase in net FDI inflows in a panel of developed and developing countries, with the result primarily driven by increased FDI to developing countries. Using data from a survey of firms in emerging markets, Gomez-Mera and Varela (2017) find that PTA membership increases investment attractiveness, although the effect diminishes with distance. Kox and Rojas-Romagosa (2020) use a structural gravity model analysis to measure the effects of international agreements on bilateral FDI stocks and flows, finding that signing a PTA increases bilateral FDI stocks by about 30 percent, on average.

The specific content of a PTA, and particularly the extent to which it includes investment-related provisions, can also have a significant bearing on its effects on FDI. "Deep" trade agreements, which go beyond tariffs and other direct market access measures to include disciplines such as investment, competition, and product regulations, have become increasingly common, as have stand-alone or accompanying bilateral investment treaties (BITs) that enshrine protections for investors, such as investor-state dispute resolution mechanisms. Deeper trade agreements increase vertical FDI (Osnago, Rocha, and Ruta 2017).

Deep trade agreements and BITs can support FDI inflows by directly lowering entry barriers, such as prohibitions and limits on foreign ownership, screening mechanisms, and restrictions on foreign managerial personnel. An open FDI regime is an essential enabling condition for FDI inflows. For example, De la Medina Soto and Ghossein (2013) find a positive correlation between average openness to foreign equity investment across sectors and per capita FDI inflows across 103 economies. Mistura and Roulet (2019) find that liberalizing FDI restrictions by about 10 percent, as measured by the Organisation for Economic Co-operation and Development's FDI Regulatory Restrictiveness Index, could increase bilateral FDI in stocks by an average of 2.1 percent. As highlighted by Echandi (2015) and Kusek and Silva (2018), export-oriented FDI is particularly affected by entry barriers because in the absence of pull factors, such as a sought-after market or resources, the presence of entry barriers can be enough to drive firms to locate elsewhere.

More often, deep trade agreements and BITs provide investor protections, such as investor-state dispute resolution mechanisms, that are designed to reduce regulatory risk. Factors such as a lack of government transparency, sudden changes in laws or regulations, breaches of contract, expropriation, or other regulatory risks can undermine investor confidence in a location and deter investment. Accordingly, survey evidence suggests a country's legal and regulatory environment is among the top-three considerations for prospective investors, behind only political and macroeconomic stability (Kusek, Sauray, and Kuo 2020). Empirical evidence also links reduced regulatory risk to increased FDI flows (Hebous, Kher, and Tran 2020). In theory, enshrining investor protections in international agreements can reduce or compensate for these risks by providing investors with recourse and by acting as a policy commitment mechanism. By design, these protections reduce the policy space available to domestic policy makers, creating a trade-off for countries between investor protection and policy sovereignty.

Studies find positive effects on FDI resulting from the inclusion of strong investment provisions in PTAs (Berger et al. 2013; Büthe and Milner 2013; Lesher and Miroudot 2006; Osnago, Rocha, and Ruta 2017). Berger et al. (2013) find that the positive effects of deep trade agreements are primarily driven by entry provisions, while Osnago, Rocha, and Ruta (2017) find that deeper PTAs increase the flow of vertical FDI between countries. Kox and Rojas-Romagosa (2020) find that both PTAs and BITs have a positive effect on FDI, but do not find a significantly different impact of deeper PTAs. Finally, an important caveat to the effects of investment provisions and BITs is their potential to provide incentives for, or enable, tax avoidance.¹

POTENTIAL EFFECTS OF THE AFCFTA ON FDI

The AfCFTA will help Africa diversify the FDI it attracts beyond natural resources, reducing its vulnerability to a commodities-driven boom and bust. The AfCFTA could lure more export-oriented efficiency-seeking FDI into new sectors of trade in goods and services. As discussed in chapter 2, Asia is now a major source of FDI for Africa, with intra-Africa FDI growing from a low base. Africa's FDI mix has shifted away from investment in resources to more domestic market–seeking investment in manufacturing and services.

The AfCFTA will affect FDI in Africa through several channels. The effects of trade liberalization on FDI vary depending on investor motivations, the location of investors, the relative level of development and attractiveness of the countries involved, and other factors. In the case of the AfCFTA, these effects are difficult to disentangle because of the complex nature of existing intra-Africa trade arrangements, liberalization schedules, and uncertainty over the accompanying investment protocol.

The first phase of the AfCFTA should help increase both intra-Africa FDI and external FDI into Africa by enlarging the regional market. By enhancing opportunities

for expansion of regional value chains, trade liberalization should encourage firms to internationalize their operations in neighboring countries where they can achieve efficiencies. In addition, by unifying the African market, the first phase of the AfCFTA should attract increased FDI from outside the region. The AfCFTA increases the size of the market that foreign investors can access by locating in an African country. It may also increase the attractiveness of Africa for efficiency-seeking external investors by facilitating access to inputs from throughout the African region. At the same time, by reducing trade barriers, at least in theory, the AfCFTA may reduce the incentives for domestic market–seeking African firms in manufacturing to establish subsidiaries in other African countries. However, the limited existing level of intra-Africa FDI in manufacturing suggests there is little "tariff-jumping" FDI that would decline under this mechanism. Moreover, given the significant weight of FDI in services, and considering that provision of services in most cases requires proximity to consumers through domestic market–seeking FDI, this type of FDI may also increase.

Conclusion of the second phase of negotiations has the potential to further bolster both external and intra-Africa FDI. Settled investment, intellectual property, and competition protocols would provide firms with reliable investor and intellectual property protections and the confidence that they are on equal footing with incumbent firms in prospective host countries. As discussed earlier in this chapter, extensive literature supports the positive effects of deep trade agreements on FDI, although the evidence behind the impacts of BITs on FDI is mixed. Falvey and Foster-McGregor (2018) suggest these effects are strongest when there are larger differences in income between participating countries because such agreements allow firms to take advantage of cost differences through vertical FDI. Although this finding may cast doubt on the potential magnitude of the benefits of investor protections for intra-Africa FDI, the same study identifies the strongest effects of BITs on FDI where previous FDI relationships are limited, which aligns with the limited historical volumes of intra-Africa FDI.

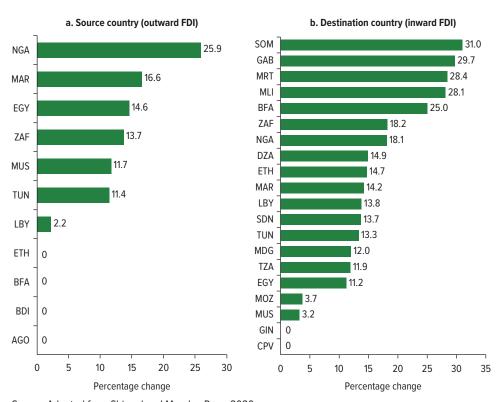
In addition, the dynamic effects of the AfCFTA's trade liberalization may further stimulate investment on the continent. As summarized by UNECA (2020), other dynamic effects include the following:

- Increased competitive pressures among rival firms driving improvements in efficiency and productivity, which in turn stimulates investment
- Terms-of-trade effects that increase the relative returns on tradable goods, further stimulating investment and raising output and employment in the affected sectors
- Faster growth and income convergence accruing from gains from trade
- Increased scope for regional complementarity, leading to overall production diversification and reduced dependence on imported manufactured goods
- Greater regional cooperation supporting the coordination of policies, including those for regionwide transport and communications

Although these dynamic effects are harder to estimate and are likely to emerge only gradually, they highlight how deeper regional integration can drive investment and growth through a number of mechanisms.

To date, the only substantive empirical analysis of the effects of the AfCFTA on FDI in Africa is by Shingal and Mendez-Parra (2020), who find significant positive effects of regional trade liberalization. The authors use a gravity model approach to compare current greenfield FDI flows in Africa in 2018 to a counterfactual in which an African free trade area is in effect. Overall, they find that trade liberalization under the AfCFTA would have increased intra-Africa FDI announcements by 14 percent, with significant differences across countries (figure 3.1). On the one hand, inward FDI is expected to increase most in relatively poor countries in Sub-Saharan Africa, including Somalia (31 percent), Gabon (30 percent), Mauritania (28 percent), Mali (28 percent),

Figure 3.1 Estimated change in intra-Africa greenfield investment due to the AfCFTA scenario relative to the baseline in 2018



Source: Adapted from Shingal and Mendez-Parra 2020.

Note: The figure shows estimates from conditional general equilibrium analysis using the general equilibrium Poisson pseudo-maximum likelihood estimator. The percentages indicate changes in intra-Africa greenfield investment in the counterfactual scenario (a successfully implemented AfCFTA) relative to the baseline (no AfCFTA) in 2018. AfCFTA = African Continental Free Trade Area.

and Burkina Faso (25 percent). Outward FDI, on the other hand, is predicted to rise most in large regional players, including Nigeria (26 percent), Morocco (17 percent), the Arab Republic of Egypt (15 percent), and South Africa (14 percent). Significantly, none of the African countries is found to lose.

Additional results examining the transmission channels confirm a significant positive effect of increased bilateral trade on bilateral FDI. Specifically, Shingal and Mendez-Parra (2020) estimate that a 10 percent increase in bilateral imports (or exports) of final goods is associated with a 2 percent to 3 percent increase in inward bilateral greenfield FDI. The magnitude of these effects is larger for trade in intermediate goods, in line with the expected potential for trade liberalization to support vertical efficiency-seeking FDI. These effects are strongest for intra-Africa trade and FDI but also hold for external trade and FDI flows.

ESTIMATING THE IMPACTS OF THE AFCFTA ON FDI USING A GRAVITY MODEL

The potential impact of the AfCFTA on the stock of FDI can be estimated by analyzing the effects of other PTAs. As discussed in chapter 1, the 2020 AfCFTA Report (World Bank 2020) did not take into account the potential increase in FDI flows, and therefore both the baseline scenario and the AfCFTA trade scenario presented in that report assume the same trade balance with no additional capital inflows or outflows. This report estimates two new scenarios to simulate the effects of the implementation of the AfCFTA on bilateral FDI stocks: (1) the AfCFTA FDI broad scenario incorporates the impacts of FDI from PTAs among all countries on the continent, representing a shallow but broad integration; and (2) the AfCFTA FDI deep scenario simulates the impact of provisions in additional policy areas to be covered by the AfCFTA, notably in investment policy, competition policy, and intellectual property rights, leading to a deep integration that further boosts FDI gains from the AfCFTA.

This analysis uses gravity models to estimate the causal effect of the different scenarios on investment, while also considering other socioeconomic and political determinants. The estimate relies on a gravity econometric model using a panel covering 225 economies for the period 2002–17. The results can be understood as impacts occurring once all the adjustments have taken place. Therefore, an increase of 100 percent indicates a doubling of the FDI stock from its level in 2017. The analysis assumes that the full effects materialize in step with the timeline of full implementation of the AfCFTA. Under both scenarios, both direct and third-country (indirect) effects are analyzed. Therefore, the results indicate not only how the AfCFTA is expected to change investment flows between African countries but also to what extent the agreement will alter the position of Africa in the global FDI landscape.

To assess the benefits of the AfCFTA for attracting additional FDI, the analysis starts by measuring the current level of regional integration between African countries and the level of additional integration that would be acquired from AfCFTA. This analysis is based on the World Bank's Deep Trade Agreements database. Details of the methodology and results are presented in box 3.1, and the implications of the results are then described.

The current level of regional integration through PTAs between African countries is mixed. Four major clusters can be identified (figure 3.2). The first bloc, on the right side of the network, is composed of the dense relationships resulting from membership in at least one of the following groups: the Common Market for Eastern and Southern Africa (COMESA), the Southern African Development Community (SADC), the

Box 3.1 Measuring the potential scope and depth of the AfCFTA

This analysis is based on the World Bank's Deep Trade Agreements database. Preferential market access is commonly measured by two complementary indicators. The first one, *PTA-bin*, consists of a binary indicator equal to one when two countries are members of the same agreement and zero otherwise. It takes the value of one if two countries are joint members of either a free trade agreement, an economic integration agreement, or a currency union. Free trade agreements differ from economic integration agreements in that they involve the liberalization of services. The second indicator, *PTA-core*, is the total number of core provisions that are included and legally enforceable in a preferential trade agreement (PTA). A provision is considered to be core if it consists of commitments either that reinforce those agreed to at the multilateral level (World Trade Organization "+" provisions) or that regulate additional policy areas such as competition policy, investment, movement of capital, and intellectual property rights (World Trade Organization "x" provisions) (see Hofmann, Osnago, and Ruta 2017 for details). See table B3.1.1.

Following the market access indicators PTA-bin and PTA-core, the introduction of the African Continental Free Trade Area (AfCFTA) can be thought of as two different and complementary scenarios. In the AfCFTA FDI (foreign direct investment) broad scenario, which relies on the PTA binary indicator (PTA-bin), all prospective members gain preferential treatment, such that for all pairs of African countries the PTA-bin indicator is equal to one. Given that some country pairs already share membership in at least one PTA, this corresponds, in the network in figure 3.2 in the main text, to creating links between all the countries that do not currently have one. The AfCFTA FDI deep scenario also considers the depth of the AfCFTA. Given that the exact content of the agreement is yet to be determined, this scenario builds on the assumption that its level of depth will be equal to the deepest relationships already existing between African countries. As can be seen in figure 3.2, these relationships consist of market access between members of the Southern African Development Community (SADC; the PTA-core of SADC is 28). It is worth emphasizing that this assumption does not require the content of the AfCFTA to exactly match the provisions of SADC. Rather, it builds on the proposition that different provisions can be combined to achieve similar depth levels. The implementation of the AfCFTA FDI deep scenario, in table B3.1.1, corresponds to first creating links between all countries that do not currently have them. In addition, all existing links are then upgraded to a deeper level of integration (PTA-core equal to 28).

Box 3.1 Measuring the potential scope and depth of the AfCFTA *(continued)*

 Table B3.1.1
 PTA integration level in 2017 and acquired PTA integration from the AfCFTA

ISO code	Economy	(1) Number of PTA partners (PTA-bin) in 2017	(2) Number of PTA partners acquired from AfCFTA FDI broad scenario (PTA-bin)	(3) Average preferential access (PTA- core) in 2017	(4) Average preferential access acquired from AfCFTA FDI deep scenario (PTA-core)
MDG	Madagascar	25	32	9.754	18.246
MUS	Mauritius				
MWI	Malawi				
SWZ	Eswatini				
SYC	Seychelles				
ZMB	Zambia				
ZWE	Zimbabwe				
EGY	Egypt, Arab Rep.	22	35	6.877	21.123
LBY	Libya				
SDN	Sudan				
BDI	Burundi	20	37	7.298	20.702
KEN	Kenya				
RWA	Rwanda				
UGA	Uganda				
SSD	South Sudan	20	37	7.193	20.807
CODa	Congo, Dem. Rep.	19	38	6.667	21.333
COMb	Comoros				
DJI	Djibouti				
ERIc	Eritrea				
ETH	Ethiopia				
TZA	Tanzania	17	40	6.140	21.860

(Table continues on next page)

Box 3.1 Measuring the potential scope and depth of the AfCFTA *(continued)*

 Table B3.1.1
 PTA integration level in 2017 and acquired PTA integration from the AfCFTA (continued)

ISO code	Есопоту	(1) Number of PTA partners (PTA-bin) in 2017	(2) Number of PTA partners acquired from AfCFTA FDI broad scenario (PTA-bin)	(3) Average preferential access (PTA- core) in 2017	(4) Average preferential access acquired from AfCFTA FDI deep scenario (PTA-core)
BEN	Benin	14	43	3.439	24.561
BFA	Burkina Faso				
CIV	Côte d'Ivoire				
GNB	Guinea-Bissau				
MLI	Mali				
NER	Niger				
SEN	Senegal				
TGO	Togo				
CPV	Cabo Verde	14	43	2.947	25.053
GHA	Ghana				
GIN	Guinea				
GMB	Gambia, The				
LBR	Liberia				
NGA	Nigeria				
SLE	Sierra Leone				
BWA	Botswana	12	45	4.211	23.789
LSO	Lesotho				
MOZ	Mozambique				
NAM	Namibia				
ZAF	South Africa				
DZA	Algeria	5	52	0.351	27.649
MAR	Morocco				
TUN	Tunisia				

(Table continues on next page)

(Box continues on next page)

Box 3.1 Measuring the potential scope and depth of the AfCFTA (continued)

Table B3.1.1 PTA integration level in 2017 and acquired PTA integration from the AfCFTA (continued)

ISO code	Economy	(1) Number of PTA partners (PTA-bin) in 2017	(2) Number of PTA partners acquired from AfCFTA FDI broad scenario (PTA-bin)	(3) Average preferential access (PTA- core) in 2017	(4) Average preferential access acquired from AfCFTA FDI deep scenario (PTA-core)
CAF	Central African Republic	5	52	0.175	27.825
CMR	Cameroon				
COG	Congo, Rep.				
GAB	Gabon				
GNQ	Equatorial Guinea				
TCD	Chad				
AGO ^a	Angola	0	57	0	28
ESH	Western Sahara				
MRT	Mauritania				
MYT ^d	Mayotte				
REU ^d	Réunion				
SHN ^d	St. Helena				
SOM	Somalia				
STP	São Tomé and Príncipe				

Source: World Bank.

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; ISO = International Organization for Standardization; PTA = preferential trade agreement.

- a. Angola's and the Democratic Republic of Congo's membership in the Southern African Development Community is not accounted for, given that they have not entered its PTA protocol.
- b. Comoros joined the Southern African Development Community in August 2017; therefore, only preferential access resulting from membership in the Common Market for Eastern and Southern Africa is reflected.
- c. Eritrea is the only country that has not yet signed the AfCFTA agreement out of the 55 African Union members. It is included in this study given that the objective is to evaluate the potential of the AfCFTA.
- d. Mayotte, Réunion, and St. Helena are not part of the African Union. They are included in this study for the sake of consistency, given that they are included in regional aggregates in the underlying data used in the computable general equilibrium analysis in this report. Because of their small relative size and the lack of observations, their inclusion in this table does not affect results.

Southern African Customs Union (SACU), and the East African Community (EAC). Countries that are members of both COMESA and SADC (Eswatini, Madagascar, Malawi, Mauritius, Seychelles, Zambia, and Zimbabwe) are the most integrated countries on the African continent. Each country shares preferential agreements with 25 other African countries (also see the third column in table B3.1.1). In addition, economic integration among this group of countries is the highest in the continent, given that SADC has a PTA-core index of 28. They are followed, at the bottom right, by Egypt, Libya, and Sudan, which are members of both COMESA and the Greater Arab Free Trade Area (GAFTA). In the middle of the cluster in light blue are members of either or both COMESA and EAC. At the top of the cluster are members of both SACU and SADC, and Tanzania, which is a member of both EAC and SADC. In general, the countries included in this cluster have the highest average preferential access, as represented by the average PTA-core index (see the last column in table B3.1.1). The exceptions are Algeria, Morocco, and Tunisia, which are members only of a shallow agreement, GAFTA (together with Egypt, Libya, Sudan, and other non-African countries). The second cluster consists of West African countries that have joined the Economic Community of West African States (ECOWAS). Membership in this agreement grants preferential access to 14 other countries. A subset of ECOWAS countries is also linked through the West African Economic and Monetary Union (WAEMU) and therefore enjoys a slightly higher level of integration. The third group, at the bottom of figure 3.2, is composed of countries that are members of the Central African Economic and Monetary Community (CEMAC), which features the lowest level of PTA depth within Africa. The fourth group of economies, at the top of the network, consists of those with no preferential agreements with any other African country (see also table B3.1.1).

The AfCFTA aims to cover a broad set of policy areas that would significantly deepen the current level of integration. The agreement will reduce tariffs among member countries and cover policy areas such as trade facilitation and services as well as regulatory measures such as sanitary standards and technical barriers to trade. The agreement will complement existing subregional economic communities and trade agreements in Africa by offering a continentwide regulatory framework and by regulating policy areas—such as investment and intellectual property rights protection (table 3.1)—that so far have not been covered in most subregional African agreements.²

Extending the scope of and deepening the AfCFTA will have different impacts across countries. Panels a and b of map 3.1 display acquired PTA partners and acquired preferential access that will accompany implementation of the AfCFTA as compared with regional integration as of 2017 (the last year for which data are available) under the AfCFTA FDI broad and AfCFTA FDI deep scenarios, respectively. For the AfCFTA FDI broad scenario, the acquired level of integration consists of the sum of acquired preferential relations for a given country. For the AfCFTA FDI deep scenario, the acquired level of integration due to the AfCFTA is the average increase in the PTA-core index for a given country across all partners (see box 3.1). Focusing on the scope

ESH MRT **BWA** REU ZAF **LSO** SOM **AGO** NAM **TZA** MOZ MYT **STP** SHN **ZMB SWZ GMB BEN** MWI GIN **ZWE MUS** MDG СОМ CIV NGA BDI SLE KEN **SYC** BFA **SDN GNB** 1110 SSD CPV UGA GHA DJI **RWA** MV **TGO** SEN 11/ 14111 **ERI** MAR **LBR EGY LBY ETH** MLI **NER** COD CAF TUN COG GNQ DZA **GAB** TCD **CMR Deeper integration** More shallow integration

Figure 3.2 The network of preferential trade agreements in Africa in 2017

Source: World Bank.

Note: Economies are represented by nodes featuring the economies' ISO codes. PTA relations are represented by links connecting the nodes. The color of nodes and links is proportional to the level of integration (where darker green indicates a deeper level of integration and lighter green indicates more shallow integration). An ISO-code correspondence and the PTA level of integration for each economy as measured by both number of PTA partnerships (PTA-bin) and average PTA-core are reported in table B3.1.1. ISO = International Organization for Standardization; PTA = preferential trade agreement.

Table 3.1 Policy areas covered in selected subregional African agreements and by the AfCFTA

Policy Area	East African Community	Common Market for Eastern and Southern Africa	Southern African Development Community	Economic Community of West African States	West African Economic and Monetary Union	Southern Africa Customs Union	Economic and Monetary Community of Central Africa	African Continental Free Trade Area
Tariffs on manufacturing goods	>	>	>	>	>	>	>	>
Tariffs on agricultural goods	>	>	>	>	>	>	>	>
Export taxes	×	>	>	×	>	×	>	>
Customs	>	>	>	>	×	>	×	>
Competition policy	>	>	>	×	>	>	>	>
State aid	>	>	>	×	×	×	>	×
Antidumping	×	>	>	>	×	×	>	>
Countervailing measures	×	>	>	×	×	×	×	>
STE	×	×	×	×	×	×	×	>
TBT	>	>	>	×	×	>	>	>
GATS	>	>	>	>	>	×	>	>
SPS	>	>	>	×	×	>	>	>
Movement of capital	>	>	×	>	>	×	>	>
Public procurement	>	×	×	×	×	×	×	×
IPR	>	×	×	×	×	×	×	>
Investment	>	>	>	×	×	×	×	>
Environmental laws	>	>	×	>	×	×	>	×
Labor market regulation	>	>	×	×	×	×	×	×

Note: AfCFTA = African Continental Free Trade Area; GATS = General Agreement on Trade in Services; IPR = intellectual property rights; SPS = sanitary and phytosanitary measures; STE = state trading enterprises; TBT = technical barriers to trade. Source: World Bank 2020.

of acquired integration under the AfCFTA FDI broad scenario (panel a of map 3.1), the most integrated countries (Mauritius, Seychelles, Zimbabwe, Madagascar, Malawi, Zambia, and Eswatini) acquire 32 new PTA partners each, and countries that had no previous integration gain preferential access to all of the other 55 economies of the African continent. The acquired integration under the AfCFTA FDI deep scenario (panel b of map 3.1) brings to light the fact that some treaties establishing preferential access in the baseline are, in fact, very shallow. Countries that are members only of CEMAC (Cameroon, the Central African Republic, Chad, the Republic of Congo, Gabon, Guinea) or the GAFTA—Algeria, Morocco, Tunisia—profit from implementation of the AfCFTA almost as much as countries that have no PTAs. In addition, within the ECOWAS bloc, countries that are not members of WAEMU experience slightly deeper levels of acquired integration.

Building on these calculations, a gravity model is estimated to quantify the relationship between FDI stock and the scope and the depth of PTAs. Details of the econometric gravity model are provided in appendix A. Given that implementation of the AfCFTA is expected to also affect investment between African countries and non-African countries, the estimation considers both direct and indirect (or third-country) effects.³ Third-country effects are transmitted to other country pairs weighted by geographical distance between country pairs and the countries of origin and destination. After the selection of 2017 as the baseline, the effects of joining the AfCFTA and benefiting

Map 3.1 Acquired PTA integration from the AfCFTA

Source: World Bank.

Note: AfCFTA = African Continental Free Trade Area; PTA = preferential trade agreement.

from preferential access are estimated using the coefficients in the gravity equation and applying the "AfCFTA preferences shock"—that is, the AfCFTA FDI broad scenario. The AfCFTA preferences shock captures the upgrade in preferential access resulting from participation in the AfCFTA of all African country pairs that do not already experience preferential treatment from any current subregional African PTA. The AfCFTA preferences shock for a country pair captures both the direct effect within the pair and the indirect effects from all third countries' upgrades in preferential access due to the AfCFTA (see appendix A for details).

Next, the effects of deepening the AfCFTA agreement are calculated. The effects on the stock of FDI under the AfCFTA FDI deep scenario are based on the estimated effect of an increase in the core depth of a PTA from the gravity regression (see the corresponding column in table A.1 in appendix A). The expected effect of an increase in the core depth of a PTA includes direct and indirect effects. Thus, the effects of joining the AfCFTA with a core depth equal to 28 in 2017 (the baseline year) are estimated using the estimated coefficients in the gravity equation and the "AfCFTA FDI deep shock." The AfCFTA FDI deep shock captures the upgrade in the depth of the preferential relationship between all African country pairs, which is calculated as the core depth count at 28 minus the depth of the PTA relationship already in place in 2017. The AfCFTA FDI deep shock for a country pair collects both the direct effect within the pair and the indirect effects from all upgrades in the depth of the preferential access of third countries due to the AfCFTA.

IMPACTS OF EXPANDING AND DEEPENING OF THE AFCFTA ON STOCK OF FDI

The results from the estimation can be summarized in three main findings:

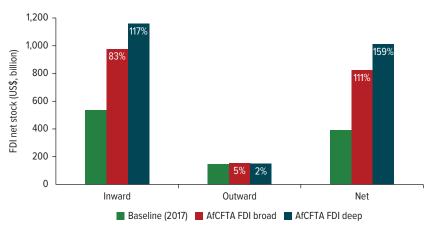
- 1. Implementation of the AfCFTA is expected to substantially increase foreign investment into the African continent. The net stock of FDI could increase by 111 percent in the AfCFTA FDI broad scenario and by 159 percent in the AfCFTA FDI deep scenario, relative to 2017. The results are driven almost exclusively by investment into the continent (indeed, outward investment from Africa to the rest of the world increases only slightly, from an already low level). The reason for such large percentage increases is mainly because African countries currently experience relatively low levels of FDI.
- 2. The AfCFTA has the potential to increase investment between its members, but the impact on inflows from third countries is likely to be much higher. At the bilateral level, investment stocks between members of the increase, on average, by 54 percent and 68 percent, under the AfCFTA FDI broad and AfCFTA FDI deep scenarios, respectively. The impact of the agreement on FDI stock from non-African partners is substantially higher, at 86 percent for the AfCFTA FDI

- broad scenario and 122 percent for the AfCFTA FDI deep scenario. The expansion of investment into Africa originates mainly from Europe and, to a lesser extent, from Asia and from both South and North America.
- 3. The coverage and depth of the agreement are key to maximizing FDI flows. At the country level, the heterogeneous impacts are driven by the initial levels of investment, the initial level of integration with AfCFTA partners, and the integration of neighboring countries. In both scenarios, investment increases in all countries, with the impact being consistently larger in the AfCFTA FDI deep scenario.

These results are described in more detail in the rest of this section.

The AfCFTA improves the attractiveness of its members for inward FDI. Figure 3.3 displays the level of FDI stock in 2017 as a baseline, together with the levels resulting from each scenario. It shows inward and outward FDI stock, as well as net stock (inward minus outward FDI stock). The figures for inward and outward FDI correspond to the sum of the stock of all African economies, whereas net stock figures net out bilateral investment between African pairs. Inward FDI roughly doubles, whereas outward FDI increases slightly. Aggregate net investment in African economies increases by 111 percent and 159 percent under the AfCFTA FDI broad and AfCFTA FDI deep scenarios, respectively. The increase in net FDI stock results mostly from the increase of inward FDI from the rest of the world, whereas outward FDI from African economies plays a very minor role because of the small magnitude of outward FDI relative to inward FDI.

Figure 3.3 FDI stock of all African economies: 2017 and AfCFTA simulations in 2017



Source: World Bank.

Note: Mayotte and South Sudan are not included because of lack of data. Mauritius is not included because of its status as an offshore financial center. AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.

All African countries benefit from the broader country coverage of the AfCFTA regardless of their level of integration with other members. Figure 3.4 shows the direct and total (direct plus indirect) effects from the formation of the AfCFTA for several groups of countries depending on the level of regional integration. Four groups are considered. Countries that show the highest current level of integration with other African countries in 2017 will show the lowest level of acquired integration resulting from the AfCFTA geographical coverage. This set of countries is referred to as "low" beneficiaries and includes countries with 20 or more PTA partners in 2017 in table B3.1.1 (column (1)). The other two intermediate groups, middle low and middle high, are defined as countries with 14 to 19 PTA partners and 5 to 13 PTA partners in 2017, respectively. The fourth group ("high" beneficiaries) includes those countries that acquire the most PTA partners because they have the lowest level of integration with other African countries in the baseline year (fewer than 5 PTA partnerships in 2017, although de facto these are countries with zero PTA partnerships in 2017).

The more the members, the bigger the potential gains. Figure 3.4 underscores the benefits from the wide country coverage of the AfCFTA. Direct effects from the formation of the AfCFTA are mostly benefiting countries that are not highly integrated with other potential members in 2017 (high beneficiaries). Countries already highly integrated with other African countries show very minor positive percentage changes

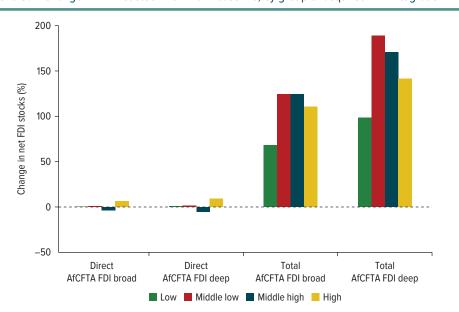


Figure 3.4 Change in FDI net stock from 2017 baseline, by group of acquired PTA integration

Source: World Bank.

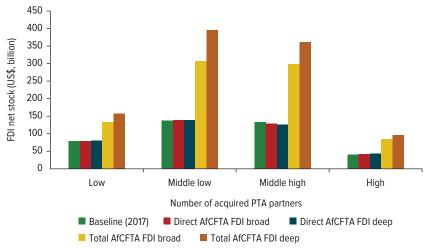
Note: Mayotte and South Sudan are not included because of lack of data. Mauritius is not included because of its status as an offshore financial center. AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; PTA = preferential trade agreement.

in FDI net stock. Only the middle-high group shows a small decrease in FDI net stock from the direct effects of the AfCFTA. This impact is driven by South Africa, which is a major source of intra-Africa FDI. However, and importantly, the increase in FDI net stock from third-country effects is extremely large when compared with the direct effects from the AfCFTA. This point can be seen in figure 3.5, where the same information as in figure 3.4 is reported in billions of US dollars. A comparison of FDI net stock under both scenarios with the baseline indicates that the direct effects from the AfCFTA are rather small. However, the total effects (including indirect or third-country effects) tend to double FDI net stock. Consequently, the third-country effects extend the benefits of the AfCFTA to all countries, even those already integrated with some other members. Overall, most of the FDI gains are related to the expanding membership in the AfCFTA, and all African countries benefit from the wide geographical coverage of the AfCFTA. Moreover, there are also gains from deepening the AfCFTA. Although the direct effects shown in figures 3.4 and 3.5 are similar for both scenarios, the third-country gains from the AfCFTA FDI deep scenario are larger.

African countries become much more attractive destinations for FDI. As indicated in table 3.2, aggregate intra-Africa FDI increases by 54 percent as a result of the AfCFTA FDI broad scenario and 68 percent as a result of the AfCFTA FDI deep scenario. Because of increased intra-Africa preferential access for AfCFTA members, there is a large increase in FDI stock from the rest of the world to African countries, whereas FDI stock from African countries to the rest of the world decreases. However, aggregate

Figure 3.5 FDI net stock, by group of acquired PTA integration: 2017 baseline and AfCFTA simulations

450
400



Source: World Bank.

Note: Mayotte and South Sudan are not included because of lack of data. Mauritius is not included because of its status as an offshore financial center. AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; PTA = preferential trade agreement.

FDI stock changes are mainly driven by increased FDI accruing to Africa from the rest of the world because FDI stocks within Africa and from Africa to the rest of the world are relatively small in the baseline in 2017. FDI stock changes in columns (2) and (3) of table 3.2 can be aggregated and result in an increase of inward FDI net stock in Africa (also evident in figure 3.3). This expansion of net investment into Africa originates mainly from Europe and, to a lesser extent, from Asia and from both South and North America (see figure 3.6).

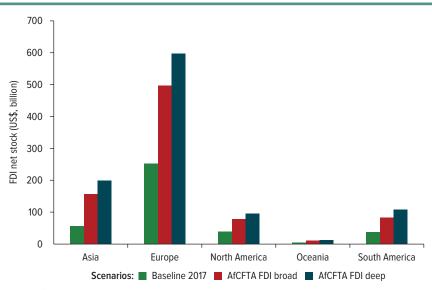
Table 3.2 Changes in bilateral FDI stock, by type of country pair from AfCFTA simulations, 2017

Scenario	(1) Intra-Africa	(2) RoW to Africa	(3) Africa to RoW	(4) Intra-RoW
Baseline (US\$, billions)	53.077	481.542	92.062	37,566.425
Change due to AfCFTA FDI broad scenario (%)	54	86	-23	7
Change due to AfCFTA FDI deep scenario (%)	68	122	-35	7

Source: World Bank.

Note: Mayotte and South Sudan are not included because of lack of data. Mauritius is not included because of its status as an offshore financial center. AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; PTA = preferential trade agreement; RoW = rest of the world.

Figure 3.6 FDI net stock to Africa from the rest of the world, by region of origin, 2017

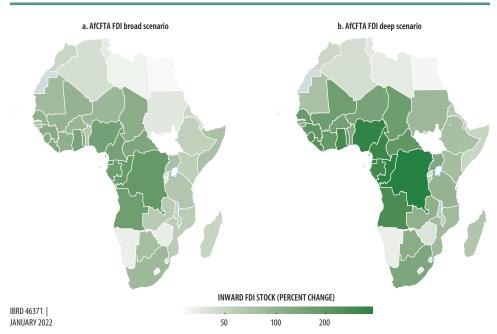


Source: World Bank.

Note: Mayotte and South Sudan are not included because of lack of data. Mauritius is not included because of its status as an offshore financial center. AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.

The aggregate gains in FDI flows mask significantly diverse outcomes across countries. Maps 3.2 and 3.3 display the percentage change in inward and outward FDI stock, respectively, for each country.⁵ On average, African countries play a more important role as destinations for FDI than as sources. As a result, percentage changes affecting inward FDI stock explain a majority of the effect on net inward investment. Exceptions are countries that can be considered offshore financial centers (Liberia, Mauritius, Seychelles) and South Africa, which is the only country within the continent with significant outward investment. In addition, for 2017, both Libya and Togo report outward FDI stocks being higher than inward FDI stocks.

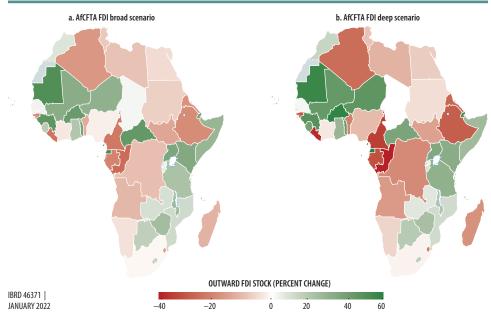
Three main factors influence how countries are affected by implementation of the AfCFTA: initial PTAs signed by the country, PTAs signed by the country's neighbors, and initial level of FDI. The first factor is the direct effect, which is determined by the initial level of integration. The second factor is an interaction of the geographical position of the country with the level of integration acquired by its neighbors. In this regard, all else equal, third-country effects will tend to be higher for countries that are more centrally located. Similarly, third-country effects will be higher if more neighbors experience increased preferential integration. Third, because percentage changes are applied to baseline investment, the initial levels of FDI play a role in determining the changes to FDI associated with AfCFTA implementation, implying that the effects will



Map 3.2 Changes in inward FDI, by country, from the AfCFTA

Source: World Bank.

Note: Mayotte and South Sudan are displayed in white because of lack of data. AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.



Map 3.3 Changes in outward FDI, by country, from the AfCFTA

Source: World Bank.

Note: Chad and South Sudan are displayed in white because of lack of data. AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.

typically differ based on whether they are discussed as growth rates (shown in maps 3.2 and 3.3) or as levels (reported in tables A.2 and A.3 in appendix A).

On average, higher increases in growth rates are observed for countries on the Atlantic Ocean coast, with West Africa in particular experiencing higher increases in inward FDI stock. The highest impacts on inward investment are recorded in Angola, Cameroon, Democratic Republic of Congo, Republic of Congo, Equatorial Guinea, Gabon, and Nigeria (see panel a of map 3.2). In terms of the value of investment, Angola, Mauritius, Mozambique, Nigeria, and South Africa attract the most inward investment directed to the continent (see table A.2 in appendix A).

South Africa could attract a substantial amount of new FDI. Excluding Mauritius, in 2017 South Africa received the most FDI within the continent. Because of its large and diversified economy, its role as a hub for investment in Africa will be consolidated after implementation of the AfCFTA. In contrast, the high estimated impacts on the Democratic Republic of Congo, the Republic of Congo, Equatorial Guinea, and Gabon reflect the economic structures of these countries. Inward investment flows in these countries have targeted activities related to natural resources, such as agriculture, oil, and minerals extraction (see World Bank Group 2020). These historical trends may be exhausted relatively quickly, however. If so, the predicted impact may overestimate the importance of the AfCFTA in attracting investment to these countries. At the other end of the spectrum, because of the construction of the analysis, investment into Western

Sahara will not be affected, given that the economy reports zero inward investment stock for 2017.

Countries affected the least tend to be those that already are members of several PTAs. Five of the 10 most integrated countries in 2017 (Egypt, Libya, Seychelles, Sudan, and Zimbabwe) are among the 10 countries for which inward FDI stock is going to change the least. Overall, these relative effects on inward stock are maintained in the AfCFTA FDI deep scenario as well, with an important difference being that the impact is greater for all countries. Relative to the AfCFTA FDI broad scenario, Sudan experiences a higher increase, followed by several members of the ECOWAS-WAEMU bloc, such as Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Liberia, Mali, Nigeria, and Sierra Leone. The PTAs in ECOWAS and WAEMU are of medium depth, and are upgraded with implementation of the AfCFTA. For any given country in this cluster, the direct effects increase and are magnified by third-country effects because preferential relations among neighboring countries increase by the same degree. The same dynamics apply to the cluster on the right side of figure 3.2. However, the scope for increased integration in this group of countries is lower, given that relations between SADC members are kept constant and the other existing agreements already entail relatively deep integration. Thus, for these countries, the increase of inward FDI from considering the depth of PTA relationships (from the broad to the deep scenario) is marginal.

Inward investment greatly exceeds outward investment for virtually all African countries. The scenarios are designed around expanding the span and depth of the AfCFTA to make the continent more attractive to investment. Therefore, the results discussed so far explain most of the change in net investment in African countries. Nevertheless, implementation of the AfCFTA is also expected to affect outward investment. Several countries experience a decrease in outward investment stock in the AfCFTA FDI broad scenario because of investment diversion (map 3.3). Although the numbers appear high, it is important to take into account baseline outward investment and the corresponding changes in billions of dollars. For instance, the Democratic Republic of Congo reports approximately US\$280 million of outward investment stock in 2017 (and US\$7 billion in inward investment stock). Following implementation of the AfCFTA, outward stock is expected to decrease by US\$70 million. Effectively, these are funds that are disinvested from abroad, and constitute a decrease of 27 percent in outward investment. Overall, given that in the same country inward investment is expected to increase by US\$12 billion, changes in outward investment are insignificant. Important reductions in outward stock, in billions of dollars, occur only in Liberia and Mauritius, both of which are offshore financial centers. Most countries experience an increase in outward investment (table A.3 in appendix A). Implementation of the AfCFTA will increase South Africa's outward investment stock by approximately US\$12 billion, or 11 percent over its 2017 levels. In percentage terms, outward investment from Comoros, Equatorial Guinea, Guinea, Mauritania, and Réunion is expected to increase by at least 40 percent; but again these large percentages translate into very small effects in levels because of their low magnitude in 2017. The impact under the

AfCFTA FDI deep scenario is similar but magnified. For outward investment, negative effects become more negative and positive effects become more positive, leading to greater variation of the impacts.

The expected increases in FDI stock will support faster accumulation of capital stock and boost economic growth and poverty reduction, enhancing the effects of the trade liberalization attributable to the AfCFTA. It will also likely have varying impacts across sectors, as well as across workers with different skills and different characteristics. This issue is analyzed in depth in chapter 4.

NOTES

- 1. The empirical literature examining the effects of BITs on FDI flows finds contrasting results. Initial work by Hallward-Driemeier (2003) finds little effect from BITs, suggesting such agreements cannot substitute for domestic institutions and property rights, and cautions that the benefits may be outweighed by restrictions such agreements impose on policy makers. Yackee (2008) likewise finds no significant effect of BITs on FDI flows, even when distinguishing between weak and strong BITs. Aisbett, Busse, and Nunnenkamp (2018) find that, when developing countries agree to investor-state dispute provisions, any positive effects on FDI are negated once a first dispute has commenced arbitration. In contrast, a number of other studies find positive effects of BITs on FDI flows (Berger et al. 2013; Dixon and Haslam 2016; Egger and Merlo 2007; Falvey and Foster-McGregor 2018; Frenkel and Walter 2018; Gomez-Mera and Varela 2017; Neumayer and Spess 2005). Dixon and Haslam (2016) and Frenkel and Walter (2018) both find that the effect of BITs on FDI are strongest when they include strong investor protections. Falvey and Foster-McGregor (2018) find that the positive effect of BITs on FDI flows increases with the difference in GDP and GDP per capita between the source and host countries, and that these effects occur primarily in cases in which no previous FDI relationship was present or in which an existing FDI relationship was disintegrating. Gomez-Mera and Varela (2017) look at the effects of both PTAs and BITs, finding that both have positive effects on FDI but the effects of BITs remain at long distances, suggesting they mitigate risks associated with investing far away.
- 2. The content of the AfCFTA as a deep trade agreement is further developed in chapter 5 of this report.
- 3. The direct effect captures the effect on bilateral FDI stocks of membership of the origin and destination countries in a bilateral investment pair, while the indirect (spatial) effects account for the effects of membership in the PTA of any other two countries with respect to the origin and destination. Two types of indirect effects are considered. The first type includes two effects reflecting relationships between all PTA partners and the origin country and between all PTA partners and the destination country. The second type includes two effects reflecting membership in a PTA between third countries, excluding the PTA relation with the origin country and the PTA relation with the destination country.
- 4. The direct effect captures the effect of increased PTA depth between the origin and destination in a pair on bilateral FDI stocks, and the indirect (spatial) effects account for the effects of increased PTA depth of any other two countries in a PTA with respect to the origin and destination. Again, two types of indirect effects are considered. The first one includes the gains generated by the depth of the PTA among all partners with an agreement with the origin and with the destination. The second one includes the gains generated by the depth of the PTA between pairs of third countries that are part of a PTA excluding the gains from the depth of the PTA of these third countries with the origin and with the destination.
- 5. Panel a of each map shows changes associated with the AfCFTA FDI broad scenario, and the AfCFTA FDI deep scenario is shown in panel b. In both maps, darker green indicates a higher effect relative to other countries. For map 3.3, negative changes are shown in red, with darker red being associated with a stronger reduction in outward investment. Percentage changes are also reported in table A.2 (inward FDI) and table A.3 (outward FDI) in appendix A, together with the change in billions of dollars, for both scenarios.

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4 Quantifying the Dynamic Gains from the AfCFTA

KEY MESSAGES

- Liberalization of tariffs, reduction of nontariff barriers (NTBs), and implementation of trade facilitation measures (which together make up the African Continental Free Trade Area [AfCFTA] trade scenario) could provide a boost to trade and a 7 percent boost to real income in 2035 compared with the baseline without the AfCFTA.
- Trade liberalization (of tariffs, NTBs, and trade facilitation measures) coupled
 with the expected boost in foreign direct investment (FDI) flows stimulated
 by the AfCFTA (the AfCFTA FDI broad scenario) would generate faster trade
 expansion and economic growth, boosting real income by 8 percent by 2035, or
 US\$506 billion, compared with the baseline without the AfCFTA.
- Assuming that the AfCFTA will go beyond trade liberalization (tariffs, NTBs, and trade facilitation measures) to also cover deeper provisions for investment, competition, and intellectual property rights (IPRs), and also factoring in the expected boost in FDI flows stimulated by the deeper AfCFTA (the AfCFTA FDI deep scenario), would generate even faster trade expansion and economic growth, bringing income gains up to 9 percent by 2035, or US\$571 billion, compared with the baseline without the AfCFTA.
- Under the AfCFTA FDI deep scenario, the potential for trade growth for the continent is substantial. The volume of total exports increases by 32 percent by 2035 (relative to the baseline). Intracontinental exports grow by more than 109 percent, and exports to non-African countries increase by 18 percent.
- Under the AfCFTA FDI deep scenario, exports of manufacturing goods to the region register the fastest growth rate, at 134 percent by 2035, agriculture and food at 80 percent, and services at 109 percent, relative to their levels without the AfCFTA.
- Under the AfCFTA FDI deep scenario, female- and skill-intensive sectors expand the most but with large heterogeneity across regions.

• The AfCFTA would help to lift up to 50 million people out of extreme poverty and create 17.9 million new jobs, with 2.45 percent of the continent's workers shifting to expanding sectors by 2035.

METHODOLOGY AND AFCFTA SCENARIOS

This chapter applies the ENVISAGE global computable general equilibrium (CGE) model and the Global Income Distribution Dynamics (GIDD) microsimulation framework to quantify the long-term economic and distributional impacts of the AfCFTA. CGE models are not forecasting tools; they generate detailed country and sectoral impacts under different scenarios to help policy makers understand the potential consequences of their decisions. However, they capture only some relationships between agents and select policies; therefore, their results need to be viewed with a full understanding of the limitations of the approach. A brief description of the ENVISAGE model is provided in box 4.1. The full details of the ENVISAGE CGE model are presented in van der Mensbrugghe (2019).

Box 4.1 The ENVISAGE global computable general equilibrium model

The full details of the ENVISAGE computable general equilibrium (CGE) model are presented in van der Mensbrugghe (2019). Production in the model is implemented as a series of nested constant-elasticity-of-substitution functions, aiming to capture the substitutability and complementarity across all inputs. Crops and livestock have a different production structure from the rest of the production goods, given that fertilizers and feed are incorporated into the value added bundle separately. The model incorporates five types of production factors: labor (differentiated by skill and by gender), capital, land, a sector-specific natural resource (such as fossil fuel energy reserves), and water.

Domestic production is allocated in the domestic market or exported, following a constant elasticity of transformation (CET) function. There are three domestic final demand agents: households, a government sector, and an aggregate investment sector. Income comes from payments to factors of production and is allocated to households (after taxes). The government sector accrues all net tax payments and purchases goods and services. Investment income is equated to the sum of domestic and foreign savings. A portion of capital income flows to a "global" holder of equity that then portions out profits from the global fund. Remittances are also incorporated and are fully bilateral.

The model incorporates multiple utility functions for determining household demand. In the specification for this report, a constant-differences-in-elasticities utility function is assumed. This function allows for more flexibility in substitution effects across goods and for nonhomotheticity.

The capital market assumes vintage capital. New capital is allocated across sectors to equalize rates of return. Installed capital is imperfectly mobile across sectors. If all sectors are expanding, old (installed) capital is assumed to receive the economywide rate of return. In contracting sectors, old capital is sold on secondary markets using an upward sloping supply curve, implying that capital is only partially mobile across sectors. Land and water are allocated across activities using a nested CET

Box 4.1 The ENVISAGE global computable general equilibrium model *(continued)*

specification. Natural resources are supplied to each sector using an iso-elastic supply function with the possibility of differentiated elasticities depending on market conditions.

Trade is modeled using the so-called Armington specification, which assumes that demand for goods is differentiated by region of origin. The model allows for domestic and import sourcing at the aggregate level (after aggregating domestic absorption across all agents) as well as at the agent level. Thus, a second Armington nest allocates aggregate import demand across all exporting regions using a representative agent specification. Exports are modeled in an analogous fashion using a nested CET specification. The domestic supply of each commodity is supplied to the domestic market and an aggregate export bundle using a top-level CET function. The aggregate export bundle is allocated across destination regions using a second-level CET function.

Dynamics in ENVISAGE involve three elements. Labor supply (by skill level) grows at an exogenously determined rate. The aggregate capital supply evolves according to the standard stock-flow motion equation, that is, the capital stock at the beginning of each period is equal to the previous period's capital stock, less depreciation, plus the previous period's level of investment. The third element is technological change. The standard version of the model assumes labor-augmenting technical change, calibrated to given assumptions about gross domestic product growth and intersectoral productivity differences. In policy simulations, technology is typically assumed to be fixed at the calibrated levels.

The model was calibrated with the latest available information, using Global Trade Analysis Project database v.10 (Aguiar et. al. 2019).

The CGE model goes hand in hand with a GIDD microsimulation tool that translates the CGE results into implications for poverty and income distribution, including impacts on employment and wages of female and male workers. The GIDD simulations are based on a global micro database that covers 90 percent of the global population and gross domestic product. It includes harmonized household surveys for 124 countries.¹

The scenarios build on and expand the analysis presented in the July 2020 World Bank report (*The African Continental Free Trade Area: Economic and Distributional Effects* [World Bank 2020]; henceforth referred to as the "2020 AfCFTA Report") to account for the impacts on FDI and the impact of the second phase of the negotiations, which covers investment, competition, and IPRs. The 2020 AfCFTA Report assesses the implications for economic growth, international trade, poverty, and employment of reductions in tariff barriers and NTBs as well as in trade facilitation bottlenecks. This report expands on that work to also account for FDI flows generated by the AfCFTA with and without deeper integration. Specifically, the ENVISAGE model is used to simulate a baseline scenario (without the AfCFTA) and the results of three scenarios: (1) the AfCFTA trade scenario, (2) the AfCFTA FDI broad scenario, and (3) the AfCFTA FDI deep scenario (table 4.1).

The baseline scenario simulates the expected path of growth and trade assuming no AfCFTA, but also assuming no COVID-19 (coronavirus) given that the research for the 2020 AfCFTA Report was conducted before the pandemic hit.

Scenario	Shocks included
AfCFTA trade	Tariff reduction, NTB reduction, trade facilitation measures
AfCFTA FDI broad	Tariff reduction, NTB reduction, trade facilitation measures, AfCFTA FDI broad scenario FDI shock ^a
AfCFTA FDI deep	Tariff reduction, NTB reduction, trade facilitation measures, AfCFTA FDI deep scenario FDI shock, ^b additional trade cost reductions brought about by deeper preferential trade agreement commitments

Table 4.1 Scenarios simulated using the ENVISAGE CGE model

Source: World Bank.

Note: AfCFTA = African Continental Free Trade Area; CGE = computable general equilibrium; FDI = foreign direct investment; NTB = nontariff barrier.

- a. AfCFTA FDI broad scenario from gravity estimations in chapter 3.
- b. AfCFTA FDI deep scenario from gravity estimations in chapter 3.
 - The AfCFTA trade scenario simulates reductions in tariffs and NTBs and improvements in trade facilitation, as in the 2020 AfCFTA Report.
 - The AfCFTA FDI broad scenario builds on the previous scenario by adding the changes in FDI net inflows (as derived from the gravity estimations presented in chapter 3) to account for the boost to FDI coming from the shallow AfCFTA, that is, covering the continent with the depth of an average African preferential trade agreement.
 - The AfCFTA FDI deep scenario extends the analysis further by accounting for the boost to FDI and additional trade cost reductions (not covered in the AfCFTA trade scenario) from extending the depth and coverage of provisions under the AfCFTA to include investment, competition, and IPRs; (as derived from the gravity estimations presented in chapter 3). The gravity-based estimates of additional FDI flows and additional trade cost reductions are phased in over 15 years (2020–35).²

The three scenarios are run up to 2035, and the results are compared with the baseline scenario in which the AfCFTA does not take place.³ The three scenarios are described in more detail in the following discussion.

The AfCFTA trade scenario simulates reductions in tariffs and NTBs and improvements in trade facilitation, as described in the 2020 AfCFTA Report. Specifically, it simulates the following changes: First, tariffs on intracontinental trade are progressively reduced in line with AfCFTA modalities. Specifically, starting in 2020, tariffs on 90 percent of tariff lines will be eliminated over a 5-year period (10 years for the least developed countries, or LDCs). Starting in 2025, tariffs on an additional 7 percent of tariff lines will be eliminated over a 5-year period (8 years for LDCs). Up to 3 percent of tariff lines that account for no more than 10 percent of intra-Africa imports can be excluded from liberalization by the end of 2030 (2033 for LDCs). Second, NTBs—on

both goods and services—are reduced on a most favored nation basis. It is assumed that 50 percent of NTBs can be addressed with policy changes within the context of the AfCFTA—with a cap of 50 percentage points. It is also assumed that there will be additional reductions to NTBs on exports. Third, the AfCFTA will also entail adoption of measures that facilitate trade with commitments closely aligned with the Trade Facilitation Agreement. Specifically, this scenario simulates trade cost reductions due to trade facilitation measures ranging between 2 percent and 10 percent over 2020–35 based on the study by de Melo and Sorgho (2019).

The AfCFTA FDI broad scenario builds on the AfCFTA trade scenario by also accounting for the impact of increases in net FDI inflows resulting from trade liberalization. The increase in net FDI inflows is modeled as changes in absolute terms in the current account balance of each of the countries included in the model (as reported by the econometric analysis in appendix A, tables A.1 and A.2). By simulating the change in net FDI inflows as changes in absolute terms instead of percentage variation, the analysis assumes that the rest of the components of the current account balance remain fixed, as assumed in the baseline scenario and the AfCFTA trade scenario. The analysis does not assume that the change in FDI inflows leads to an increase in productivity. The model endogenously assigns the sectors that capture the flow of FDI.

The AfCFTA FDI deep scenario extends the analysis further by accounting for the additional trade cost reductions arising from extending the depth and coverage of provisions under the AfCFTA to include investment, competition, and IPRs; and it also accounts for the increase in FDI inflows caused by extending these additional provisions (as derived from the gravity estimations presented in chapter 3). The additional trade cost reductions could be generated by a broader set of deep commitments not covered in the AfCFTA trade scenario. The AfCFTA trade scenario covers a narrow set of NTBs based on primarily nontechnical measures as estimated in Kee, Nicita, and Olarreaga (2009), such as quantity-control and price-based measures (for example, nonautomatic licensing, or customs fees and charges) (World Bank 2020). However, as discussed earlier, the AfCFTA will also include provisions regarding the alignment and mutual recognition of technical measures (for example, sanitary and phytosanitary, technical barrier to trade-related conformity assessments, standards, risk assessments, and so on), as well as commitments in other areas, such as investment-related provisions, competition policy, and IPRs. The impact of this broader set of measures (covered by a deeper AfCFTA) for reducing trade costs has been estimated using an econometric specification for the gravity equation that is consistent with the microeconomic theory underpinning the CGE model.⁴ The additional reductions are modeled as the decrease in iceberg trade costs resulting in sector-specific trade cost reductions. The estimates of the additional trade cost reductions are presented in appendix B.

The analysis does not take into consideration trade- and FDI-induced productivity gains, which can be relevant. Consequently, the report is likely to underestimate the

potential dynamic gains from the AfCFTA. This issue is relegated to future research because of the lack of empirical estimates of productivity-enhancing impacts on African economies.

IMPACT OF THE AFCFTA ON INCOME, TRADE, AND OUTPUT

Results of the AfCFTA trade scenario

Under the AfCFTA trade scenario, real income would increase by 7 percent by 2035 relative to the baseline for the Africa region, a sizable gain.5 The 2020 AfCFTA Report shows that the AfCFTA has the potential to boost income on the continent by 7 percent (above the baseline without the AfCFTA) by 2035, mainly by boosting intraregional trade in manufacturing goods. 6 In monetary terms, the gains amount to about US\$445 billion in 2035 (at 2014 prices and exchange rates). The results highlight that reaping these gains is not simply about reducing tariffs, however. In fact, the real income (equivalent variation) gains from tariff liberalization alone are small at the continent level, at 0.22 percent. The gains from tariff liberalization and reduction in NTBs (with the increased market access in non-African markets) would lead to an increase of 2.4 percent in 2035 for the continent. These gains increase by an additional 4.6 percentage points when implementing improvements in trade facilitation.⁷ In monetary terms, improvements in NTBs in goods and services, and improvements especially in trade facilitation measures, play a critical role, with the latter accounting for US\$292 billion of the US\$450 billion in potential income gains, again reflecting the high NTBs and trade facilitation bottlenecks that constrain trade in Africa and result in the pervasive, long delays across most of the continent's borders between countries. Finally, although the continent is by far the largest gainer in aggregate, the rest of the world also benefits: real income increases by US\$76 billion by 2035, which translates into a gain of 0.1 percent relative to the baseline scenario.

The gains are unevenly distributed across the region: At the high end is Côte d'Ivoire with gains of 14 percent, followed by Kenya, Namibia, Tanzania, and Zimbabwe, at more than 10 percent. At the lower end are a few countries clustered around a gain of 2 percent, including Madagascar, Malawi, and Mozambique (figure 4.1). The gains are very closely related to the initial level of trade barriers and trade costs. Countries that are already relatively open tend to benefit less from their own liberalization but tend to benefit more from improved market access in other economies. Countries that are heavily protected might see a larger reallocation of output across sectors because of increased import competition but are also likely to benefit more from lower imported input prices.

The potential for trade growth across the continent is substantial. Under the AfCFTA trade scenario, the volume of total exports increases by almost 29 percent by 2035 (relative to the baseline). Intracontinental exports rise by more than 81 percent, and exports to non-African countries increase by 19 percent. The growth of intra-AfCFTA exports is expected to be highest in the Arab Republic of Egypt, Ghana, Morocco, Senegal,

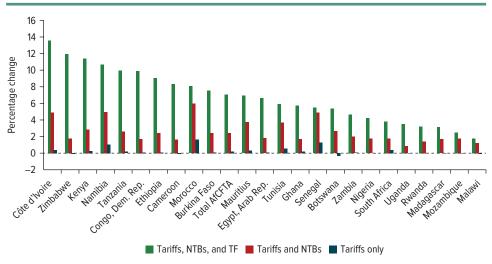


Figure 4.1 Real income gains under the AfCFTA trade scenario compared with the baseline, by country and type of policy reform, 2035

Source: World Bank 2020.

Note: AfCFTA = African Continental Free Trade Area; NTBs = nontariff barriers; TF = trade facilitation.

and Tunisia, with exports doubling or tripling with respect to the baseline. The smallest export expansions are expected in the Democratic Republic of Congo, Mozambique, and Zambia (10 to 30 percent). Under the AfCFTA trade scenario, manufacturing exports gain the most, 62 percent overall, with intra-Africa trade increasing by 110 percent and exports to the rest of the world rising by 46 percent (figure 4.2). The gains in agriculture are smaller, at 49 percent and 10 percent for intra- and extra-Africa trade, respectively. The gains in services trade are more modest—about 4 percent overall and 13 percent within Africa.⁸ In monetary terms, intracontinental trade grows from US\$294 billion in 2035 in the baseline scenario to US\$532 billion in 2035 with implementation of the AfCFTA. By 2035, under the AfCFTA trade scenario, the largest increases of the value of exports to regional partners are expected, in order of value, for Egypt, Morocco, South Africa, Nigeria, Kenya, and Côte d'Ivoire (between US\$48 billion and US\$11 billion). Similar to the welfare gains, the smallest export expansions are expected in the economies that are already relatively open, such as Madagascar, Malawi, Mauritius, and Rwanda, with export increases of less than US\$1 billion each.

Results of the AfCFTA FDI broad and the AfCFTA FDI deep scenarios: Capturing the dynamic gains

The AfCFTA could further boost growth and poverty reduction when trade gains are accompanied by investment expansion. Incorporating an increase in FDI inflows associated with the implementation of the AfCFTA FDI broad and AfCFTA FDI deep scenarios generates gains for all members, as presented in table 4.2. For the entire

160 137 140 120 110 103 Percentage change 100 82 80 63 ⁶⁶ 62 60 45 40 32 32 29 26 26 20 0 Manufacturing √otal senices √otal **Exports Imports** ■ AfCFTA ■ Non-AfCFTA ■ World

Figure 4.2 Impact of the AfCFTA trade scenario on trade compared with the baseline, by sector, 2035

Source: World Bank 2020.

Note: AfCFTA = African Continental Free Trade Area.

continent, accounting for FDI inflows increases real income by 0.8 percentage point in the AfCFTA FDI broad scenario compared with the AfCFTA trade scenario. Simulating the impact of the AfCFTA FDI deep scenario with additional trade cost reductions brought about by deeper commitments and accounting for FDI inflows, the analysis estimates a potential real income gain under the AfCFTA of 1.9 percentage points compared with the AfCFTA trade scenario, by 2035.

Accounting for the impact on FDI adds, on average, 20 percent to the gains generated by the AfCFTA trade scenario (the reduction of tariffs and NTBs and implementation of trade facilitation measures). The countries with the highest gains from the agreement without considering changes in FDI are also the ones with the highest gains when considering FDI inflows (table 4.2). However, some countries benefit more than others when it is assumed that FDI flows change because of the agreement. The countries that gain the most under the AfCFTA FDI broad scenario are the countries that receive relatively higher FDI inflows: Mauritius, South Africa, Mozambique, and the Democratic Republic of Congo (figure 4.3). In absolute terms, large countries such as Egypt, Nigeria, and South Africa gain the most. In the AfCFTA FDI deep scenario, Mozambique, Mauritius, Burkina Faso, and South Africa are among the countries with larger relative gains compared with the AfCFTA trade scenario, explained both by the relative size of the FDI shock (figure 4.4) and the average trade cost reduction (figure 4.5).

Table 4.2 Real income variation by country: Percentage change compared with the baseline, 2035

Country	AfCFTA trade scenario	AfCFTA FDI broad scenario	AfCFTA FDI deep scenario
Côte d'Ivoire	13.7	14.1	15.9
Zimbabwe	12.4	13.3	14.8
Namibia	10.8	11.7	13.7
Congo, Dem. Rep.	9.8	12.1	13.0
Central African Republic	11.4	11.5	12.8
Kenya	11.4	11.7	12.8
Burkina Faso	7.7	9.3	12.4
Tanzania	10.3	10.9	12.2
Mauritius	6.9	11.3	11.8
Morocco	8.1	9.0	10.7
Ethiopia	9.0	9.1	10.3
Cameroon	8.5	8.9	10.0
Senegal	5.8	7.0	9.6
South Africa	3.9	6.7	8.5
Tunisia	6.1	6.9	8.5
Egypt, Arab Rep.	6.8	7.7	8.4
Ghana	5.8	6.4	7.8
Botswana	5.4	6.2	7.7
Mozambique	2.5	5.3	7.4
Zambia	4.8	6.2	7.1
Uganda	3.6	5.3	6.2
Nigeria	4.1	4.8	5.6
Madagascar	3.1	4.3	5.1
Rwanda	3.3	3.8	4.3
Malawi	1.8	2.1	3.1
Total AfCFTA	7.1	7.9	9.0

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.

5 Mauritius Percentage point change in real income with respect to AfCFTA trade scenario 3 South Africa Mozambique Congo, Dem. Rep. Burkina Faso Uganda Egypt, Arab Rep. Senegal Zambia Morocco Zimbabwe Nigeria Madagascar Namibia Botswana Nigeria Rwanda Ghana Kenva Cameroon Côte d'Ivoire Ethiopia 0 2.0 2.5 3.0 3.5 0.5 1.0 15 Annual FDI shock as percentage of GDP

Figure 4.3 Real income variation and FDI shock, AfCFTA FDI broad scenario, 2035

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; GDP = gross domestic product.

The increase in trade resulting from the AfCFTA is boosted further as a result of the higher FDI flows. The increase in FDI and the reduction of trade costs have different impacts on trade. Exports increase by about 2.5 percentage points at the continental level compared with the AfCFTA trade scenario, reaching a growth rate of 31.5 percent in 2035 compared with the baseline without the AfCFTA. The increase of exports is faster in all countries under the AfCFTA FDI deep scenario (compared with the AfCFTA trade scenario), with the biggest winners in relative terms being Mauritius (an increase of 6.2 percentage points relative to the AfCFTA trade scenario), Senegal (4.7 percentage points), and Ethiopia (4.4 percentage points). Imports also increase (because real income increases in all countries in the agreement and integration in global and regional value chains is greater), with an increase of 10.7 percentage points at the continental level. Again, the findings show that the countries that receive larger FDI shocks increase imports the most compared with the AfCFTA trade scenario. The highest relative increases in imports under the AfCFTA FDI deep scenario are recorded in Mauritius (an increase of 21.3 percentage points relative to the AfCFTA FDI trade scenario), Nigeria (16.7 percentage points), and South Africa (15 percentage points). Figures 4.6 and 4.7 present the differentiated impacts on the volume of exports and imports from the AfCFTA trade, AfCFTA FDI broad, and AfCFTA FDI deep scenarios by country.

Intra-AfCFTA trade gets a further boost with higher FDI flows. Under the AfCFTA trade scenario, exports of manufacturing goods to the region expand the most (figure 4.8). When FDI shocks and additional trade cost reductions are

6 Mozambique Burkina Faso Percentage point change in real income South Africa with respect to AfCFTA trade scenaro Mauritius Senegal Congo, Dem. Rep Namibia Tunisia Zambia enya Cameroon Madagascar Nigeria Ethiopia Egypt, Arab Rep. Rwanda 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 Annual FDI shock as percentage of GDP

Figure 4.4 Real income variation and FDI shock, AfCFTA FDI deep scenario, 2035

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; GDP = gross domestic product.

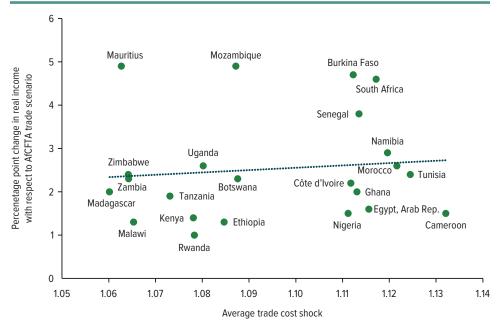
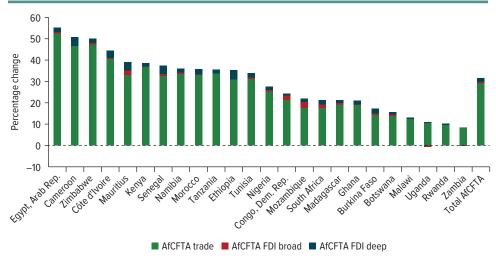


Figure 4.5 Real income variation and trade cost reduction, AfCFTA FDI deep scenario, 2035

Source: Original calculations for this publication.

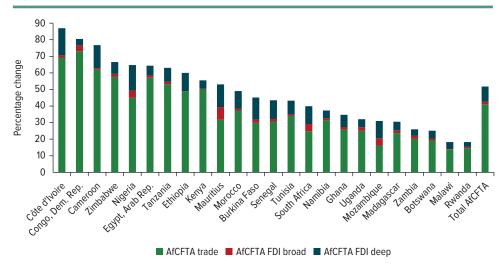
Note: Trade cost reduction is modeled in ENVISAGE as an increase in the parameter lambda, which is calibrated to 1 in the baseline. AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.

Figure 4.6 Impact on volume of exports compared with the baseline, 2035



Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.

Figure 4.7 Impact on volume of imports compared with the baseline, 2035



Source: Original calculations for this publication.

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.

considered in the AfCFTA FDI deep scenario, exports of manufacturing products expand the most in value terms, but agriculture exports to the region register the highest growth rate relative to the AfCFTA trade scenario, at 20.5 percent. Intra-AfCFTA exports of services register a small increase in the AfCFTA FDI deep scenario compared with the AfCFTA trade scenario, while exports of services to the rest

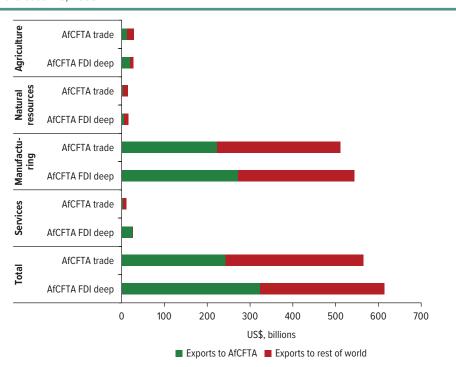


Figure 4.8 Exports from AfCFTA region, by sector and destination compared with the baseline, 2035

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.

of the world fall compared with the AfCFTA trade scenario. Imports of services from the rest of the world increase under the AfCFTA FDI deep scenario, whereas imports of manufacturing and agricultural goods increase mostly from AfCFTA partners (figure 4.9)—a mirror image of intra-AfCFTA total exports. Overall, intra-AfCFTA exports and intra-AfCFTA imports increase by 109 percent and by 154 percent, respectively (figure 4.10).

Sectoral patterns of trade and output change significantly under the AfCFTA FDI broad and AfCFTA FDI deep scenarios, with varying outcomes by country. Table 4.3 presents the sectoral impacts on exports, imports, and output. Exports of other manufactured goods (manufactures n.e.s. [not elsewhere specified]); chemical, rubber, and plastic products; wood and paper products; textiles and wearing apparel; and processed foods expand the most under the AfCFTA trade scenario. Under the AfCFTA FDI deep scenario, exports of selected sectors get an additional boost. For transport services; processed food; wood and paper products; chemicals, rubber, and plastic products; other manufactures; and petroleum and coal products, the additional increase in exports is related to the fall in trade costs brought about by deeper preferential trade agreement commitments. For energy-intensive manufactures, fossil fuels, and construction,

AfCFTA trade

AfCFTA FDI deep

400

US\$, billions

■ Imports from AfCFTA ■ Imports from rest of world

500

600

700

800

900

Figure 4.9 Imports into the AfCFTA region by sector and source compared with the baseline, 2035

Source: Original calculations for this publication.

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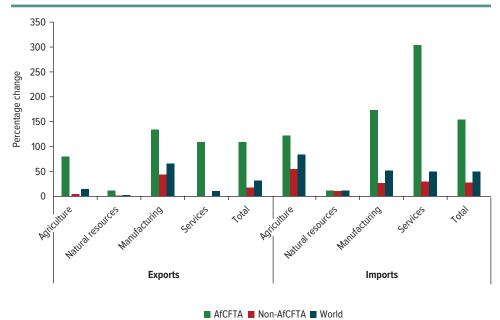
Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.

100

200

300

Figure 4.10 Impact of the AfCFTA FDI deep scenario on trade compared with the baseline, by sector, 2035



Source: Original calculations for this publication.

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.

Table 4.3 Changes in exports, imports, and output, by sector

		Exports			Imports			Output	
	AfCFTA trade scenario	AfCFTA FDI deep scenario	Baseline	AfCFTA trade scenario	AfCFTA FDI deep scenario	Baseline	AfCFTA trade scenario	AfCFTA FDI deep scenario	Baseline
Sector	Deviation fr in 200	eviation from baseline in 2035 (%)	value (2014 US\$, billions)	Deviation fi in 20	Deviation from baseline in 2035 (%)	value (2014 US\$, billions)	Deviation fi in 20	Deviation from baseline in 2035 (%)	(2014 US\$, billions)
Agriculture	15.1	15.0	185	66.5	84.1	99	-0.5	-0.3	1,927
Fossil fuels	2.5	2.7	618	7.5	11.3	70	1.9	2.4	882
Minerals n.e.s.	-0.8	-1.3	64	8.6	10.9	21	0.7	1.0	128
Processed foods	63.6	<i>L.</i> 77	92	68.1	85.8	118	1.1	2.2	1,392
Wood and paper products	80.5	91.5	21	53.8	65.0	37	-2.6	-0.9	243
Textiles and wearing apparel	65.7	58.3	96	70.3	73.7	06	-0.9	-2.2	583
Energy-intensive manufacturing	36.8	38.4	325	48.2	53.9	125	8.6	11.1	640
Petroleum, coal products	7.4	13.4	48	7.3	11.3	151	2.7	4.9	317
Chemical, rubber, plastic products	94.5	101.2	92	44.6	50.0	200	2.3	4.2	465
Manufactures n.e.s.	108.5	115.0	151	44.4	50.0	542	-2.0	1.0	1,020
Construction	19.1	19.0	9	10.7	12.1	25	3.4	9.7	1,055
Trade services	-7.2	-5.7	23	30.9	40.8	32	1.6	2.9	1,955
Road and rail transport services	12.6	17.0	43	45.9	64.3	24	3.0	4.6	418

(Table continues on next page)

Table 4.3 Changes in exports, imports, and output, by sector (continued)

		Exports			Imports			Output	
	AfCFTA trade scenario	AfCFTA FDI deep scenario	Baseline	AfCFTA trade scenario	AfCFTA FDI deep scenario	Baseline	AfCFTA trade scenario	AfCFTA FDI deep scenario	Baseline
Sector	Deviation fi in 20	Deviation from baseline in 2035 (%)	value (2014 US\$, billions)	Deviation f in 20	Deviation from baseline in 2035 (%)	value (2014 US\$, billions)	Deviation fi in 20	Deviation from baseline in 2035 (%)	(2014 US\$, billions)
Water transport services	32.5	41.0	2	17.8	27.8	7	4.1	5.8	44
Air transport services	29.3	92.2	25	29.9	178.7	27	5.4	16.6	100
Communication services	-11.8	-11.6	30	40.7	52.3	14	1.6	3.4	568
Other financial services	-4.3	-2.8	6	38.1	47.4	12	1.5	2.7	358
Insurance, real estate services	12.1	13.0	6	44.8	51.2	15	17	3.1	222
Other business services	17.2	14.3	25	39.4	43.1	94	-3.3	-2.1	583
Hospitality services	-6.4	-9.7	23	18.8	23.8	22	4.2	5.5	347
Other services	-4.8	-6.9	59	23.6	27.5	64	1.7	2.4	2,547
Total agriculture	15.1	15.0	185	66.5	84.1	99	-0.5	-0.3	1,927
Total natural resources	2.2	2.3	682	7.7	11.2	92	1.8	2.2	1010
Total manufacturing	62.1	0.99	824	44.7	51.3	1263	1.4	2.8	4659
Total services	4.2	10.4	256	31.6	49.5	337	1.7	3.4	8197
Total	29.0	31.5	1947	41.1	50.0	1757	1.4	2.7	15793

Source: Original calculations for this publication.

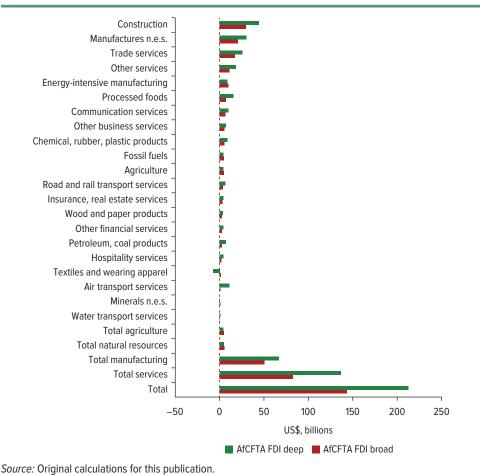
Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; n.e.s. = not elsewhere specified.

the additional increase in exports is related to the increase in the availability of capital in those capital-intensive sectors.

As countries shift toward capital-intensive exports, other sectoral exports—in particular, textiles and apparel and business services—grow more slowly than under the AfCFTA trade scenario. The reduction in minerals exports is mainly explained by the negative impact on the sector in South Africa, where currency appreciation hits exporting sectors. It should be noted that this sector was already contracting under the AfCFTA trade scenario, and the contraction is further reinforced under the AfCFTA FDI deep scenario.

Under the AfCFTA FDI deep scenario, the output of capital-intensive sectors and those sectors benefiting from the increase in domestic demand expands the most. The increase in FDI inflows leads to the greater expansion of output of construction, other manufactures, trade services, and other services under the AfCFTA FDI broad scenario (figure 4.11) compared with the AfCFTA trade scenario. Declining trade costs trigger

Figure 4.11 Sectoral change in output of the AfCFTA region under the AfCFTA FDI broad and AfCFTA FDI deep scenarios compared with the AfCFTA trade scenario, 2035



Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; n.e.s. = not elsewhere specified.

an expansion of air transport services under the AfCFTA FDI deep scenario. Overall, several services sectors expand under the AfCFTA FDI deep scenario, including air transport and hospitality, supporting the recovery of these sectors that have been badly hit by COVID-19.

Under the AfCFTA FDI deep scenario, the increase in output in the agriculture sector is concentrated in a few countries: Nigeria, South Africa, and the Democratic Republic of Congo. In some countries the agriculture sector contracts compared with the AfCFTA trade scenario, especially in Morocco, Côte d'Ivoire, and Kenya. In the natural resources sectors, the increase in output associated with the deepening of the agreement is significantly larger in Nigeria and Mozambique. Manufacturing and services increases in output are more distributed among the countries, but there is a larger increase in manufacturing sector output, compared with the AfCFTA trade scenario, in South Africa, Egypt, and Nigeria; in the services sectors the gains are largest in South Africa, Nigeria, and Egypt.

IMPACT OF THE AFCFTA ON POVERTY

As a result of the economic and health consequences of the COVID-19 pandemic, the number of people living in extreme poverty in Africa increased significantly. Africa's extreme poverty headcount ratio, measured with a poverty line of US\$1.90 per day in purchasing power parity terms, was 40.2 percent in 2010 and declined to 34.1 percent by 2019. Nevertheless, this percentage reduction in the poverty headcount was not sufficient to reduce the absolute number of people living in poverty. Considering the increase in the size of the population, the number of people living in extreme poverty on the African continent increased from 408 million to 442 million from 2010 to 2019 (figure 4.12). As a result of the economic and health consequences of the COVID-19 pandemic, it is projected that 27 million more people were pushed into extreme poverty on the continent with respect to 2019, and nearly 51 million with respect to a situation without COVID-19 in 2020.

The simulations under the baseline scenario suggest that 317 million Africans will live in extreme poverty by 2035. Assuming a sustained recovery in the global economy, under the baseline scenario it is projected that the recent increase in the number of people living in extreme poverty will be reversed. The number of people living on less than US\$1.90 a day in purchasing power parity terms is projected to decline from 469 million in 2020 to 317 million by 2035, a net decline of 152 million (figure 4.12). This decline would be equivalent to a reduction from 35.3 percent to 17.0 percent in the poverty headcount ratio over the 15-year period, considering the size of the population of Africa.

In a post-COVID-19 world, implementation of the AfCFTA trade scenario could help lift 40 million people from extreme poverty by 2035. The projections under the

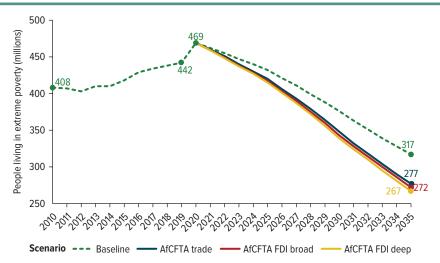


Figure 4.12 People living in extreme poverty, by scenario (AfCFTA members)

Source: Original work for this publication.

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.

AfCFTA trade scenario indicate that 277 million people will be living in extreme poverty by 2035 (equivalent to 14.8 percent in the poverty headcount ratio), that is, 40 million fewer than under the baseline scenario (figure 4.12). The 2020 AfCFTA Report estimated that the AfCFTA trade scenario (which entails a reduction in tariffs and nontariff barriers, and improvements in trade facilitation measures), could lift up to 30 million from extreme poverty, with 70 percent of the economic gains and poverty reduction coming from implementation of trade facilitation measures (World Bank 2020). The reason for the difference is that those estimates were conducted before the COVID-19 pandemic. Considering that the global pandemic saw a net increase of almost 51 million people in 2020 living in extreme poverty relative to the prepandemic level, the updated estimates presented in this study suggest that implementation of the AfCFTA trade scenario could lift 40 million from extreme poverty by 2035 (reflecting the higher initial incidence of poverty on the continent in 2020).

The AfCFTA FDI broad scenario and the AfCFTA FDI deep scenario could lift an additional 5 million and 10 million people, respectively, out of extreme poverty by 2035. For poverty reduction, the projections under the AfCFTA FDI broad scenario indicate that 272 million people will be living in extreme poverty by 2035, which is 5 million fewer than under the AfCFTA trade scenario (figure 4.12). Projections under the AfCFTA FDI deep scenario suggest that 10 million fewer people will be living in extreme poverty by 2035 compared with the AfCFTA trade scenario. The more ambitious AfCFTA FDI deep scenario would help reduce the extreme poverty headcount ratio to 14.3 by 2035 (compared with 14.8 percent under the AfCFTA trade scenario).

The AfCFTA FDI broad scenario and the AfCFTA FDI deep scenario could support lifting 6 million and 13 million people, respectively, out of moderate poverty (people living under the higher poverty line of US\$5.50 a day in purchasing power parity terms). The use of the higher-value poverty line is adequate for countries with higher per capita incomes. For upper-middle-income countries, the World Bank suggests use of this higher poverty line. Using this moderate poverty line and with respect to a baseline that incorporates COVID-19, the AfCFTA trade scenario would reduce the number of people living in moderate poverty by 62 million, the AfCFTA FDI broad scenario would reduce it by 68 million, and the AfCFTA FDI deep scenario would reduce it by 5 million, by 2035.

IMPACT OF THE AFCFTA ON JOBS AND WAGES

The AfCFTA FDI deep scenario would help create up to 17.9 million new jobs, with up to 2.45 percent of labor shifting to expanding sectors on the continent. The bigger the output changes in each AfCFTA scenario, the larger the resulting employment effects. In the simulated results, gains in employment that result from sectoral relocation of workers follow the same pattern. Job openings for workers moving from shrinking to expanding sectors represent 2.25 percent, 2.35 percent, and 2.45 percent of total employment for the AfCFTA trade, AfCFTA FDI broad, and AfCFTA FDI deep scenarios, respectively. Table 4.4 presents these results for the AfCFTA FDI deep scenario as of 2035. The first column shows the share of jobs that the AfCFTA FDI deep scenario would create by relocating workers across the 21 sectors included in the model. The second column presents, in percentage terms, the concentration level of employment gains across sectors—the Herfindahl-Hirschman index. Table 4.4 also presents the top-three gaining sectors in each country and the sector with the largest employment losses (as a share of total labor).

Under the AfCFTA FDI deep scenario, countries in North Africa would accelerate their shift toward manufacturing goods and services. In North Africa, the AfCFTA FDI deep scenario would shift workers out of agriculture and into manufacturing and services. In Egypt, 3.3 percent of labor would relocate from shrinking to expanding sectors. The sectors that would experience larger job creation because of sectoral shifts are trade (TRD) with 0.6 percent of total labor; manufactures n.e.s. (XMN) with 0.5 percent; and services n.e.s. (XSV) with 0.4 percent. The majority of workers would come from agriculture (–2.2 percent). Egypt and the North Africa region have relatively low Herfindahl-Hirschman indexes, indicating that sectoral relocation is more evenly distributed. Tunisia, Morocco, and to a lesser extent the rest of North Africa have similarities in job creation, such as growth in trade and in services n.e.s., alongside declining agricultural employment. Similarities in the North African region can be explained by similar economic structures, levels of development, culture, and language.

 Table 4.4
 AfCFTA deep scenario: Job creation in expanding sectors

Change with respect to baseline scenario by 2035

		Job creation from sectoral reallocation	ectoral reallocatior			
	s de la companya de l	Concentration	Top-t (job c	Top-three expanding sectors (job creation, % of total labor)	ctors labor)	
Region or country	new jobs (% of total labor)	пеглидалт-плеслилал index (%)	1	2	3	iob losses,% of total labor)
North Africa						
Egypt, Arab Rep.	3.3	12.0	TRD (0.6)	XMN (0.5)	XSV (0.4)	AGR (-2.2)
Tunisia	3.1	25.4	TWP (1.2)	XMN (0.7)	PFD (0.4)	AGR (-1.6)
Morocco	2.1	40.3	XMN (1.3)	TRD (0.4)	XSV (0.2)	AGR (-0.9)
Rest of North Africa	2.0	28.3	FFL (0.9)	TRD (0.4)	XSV (0.2)	AGR (-1.2)
West Africa						
Rest of West Africa	4.8	20.5	KE5 (1.6)	TRD (1.2)	CRP (0.5)	AGR (-3.3)
Côte d'Ivoire	3.0	27.6	AGR (1.5)	CNS (0.4)	PFD (0.3)	XMN (-1)
Ghana	1.8	21.6	KE5 (0.6)	AGR (0.4)	CNS (0.3)	TRD (-1)
Burkina Faso	1.5	33.1	AGR (0.8)	KE5 (0.2)	TRD (0.1)	XSV (-0.5)
Senegal	1.3	22.2	PFD (0.4)	CNS (0.3)	TRD (0.3)	AGR (-0.5)
Nigeria	1.1	41.5	TRD (0.7)	OFI (0.1)	ROS (0.1)	OBS (-0.3)

(Table continues on next page)

Table 4.4 AfCFTA deep scenario: Job creation in expanding sectors (continued) Change with respect to baseline scenario by 2035

		Job creation from sectoral reallocation	ectoral reallocatior			
	N Sign	Concentration	Top-t (job c	Top-three expanding sectors (job creation, % of total labor)	ctors labor)	M sie ist ist is a second of the second of t
Region or country	New Jobs (% of total labor)	nemindam-niisciimam index (%)	-	2	က	(job losses,% of total labor)
East Africa						
Ethiopia	3.1	56.9	AGR (2.3)	ATP (0.4)	XSV (0.2)	TRD (-1.5)
Kenya	2.6	68.8	AGR (2.2)	XSV (0.4)	TWP (0.1)	CMN (-0.2)
Rest of East Africa	2.0	22.4	KE5 (0.6)	TRD (0.5)	AGR (0.5)	FFL (-0.8)
Uganda	2.0	73.3	AGR (1.7)	PFD (0.2)	XSV (0.1)	FFL (-0.4)
Central Africa						
Congo, Dem. Rep.	4.6	8.86	KE5 (4.6)	ROS (0)	CNS (0)	AGR (-1)
Rest of Central Africa	2.6	26.6	FFL (1.1)	ROS (0.7)	XSV (0.2)	OBS (-0.5)
Cameroon	2.0	24.3	AGR (0.9)	XSV (0.3)	KE5 (0.2)	TRD (-1.4)
Rwanda	1.4	72.8	AGR (1.2)	CNS (0.1)	PFD (0.1)	TRD (-0.4)
Southern Africa						
Rest of Southern Africa	5.7	42.5	CRP (3.5)	TWP (1.1)	TRD (0.8)	FFL (-1.4)
Zimbabwe	4.2	20.4	AGR (1.2)	CNS (1.1)	TRD (0.8)	XMN (-1.7)
Mauritius	3.8	50.0	TWP (2.6)	ATP (0.6)	CNS (0.2)	CRP (-1)

(Table continues on next page)

Table 4.4 AfCFTA deep scenario: Job creation in expanding sectors (continued)

Change with respect to baseline scenario by 2035

		Job creation from sectoral reallocation	ectoral reallocation			
	M 2 1 1 2 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Concentration	Top-t (job cı	Top-three expanding sectors (job creation, % of total labor)	ctors abor)	
Region or country	(% of total labor)	neillidaili-niisciilidii index (%)	-	2	ဗ	job losses,% of total labor)
Namibia	3.0	40.2	KE5 (1.8)	PFD (0.5)	TRD (0.2)	AGR (-1.1)
Botswana	2.8	16.1	XMN (0.7)	CNS (0.5)	TRD (0.5)	KE5 (-3.6)
Mozambique	2.5	49.3	TRD (1.7)	CNS (0.4)	XMN (0.3)	AGR (-1.8)
Malawi	1.9	33.1	AGR (0.9)	PFD (0.5)	TRD (0.2)	FFL (-1.7)
Madagascar	1.8	29.4	TWP (0.7)	AGR (0.6)	CNS (0.1)	CRP (-0.4)
Zambia	1.2	42.4	CNS (0.7)	XSV (0.3)	AGR (0.1)	TRD (-1.1)
South Africa	1.1	17.3	CNS (0.3)	XMN (0.3)	TRD (0.2)	XSV (-0.3)
Tanzania	9.0	47.0	PFD (0.3)	CNS (0.2)	(0) XSX	AGR (-0.4)

Source: World Bank simulation results.

Industrial sectors: CNS = Construction; CRP = Chemical, rubber, plastic products; KE5 = Energy-intensive manufacturing; P_C = Petroleum, coal products; PED = Processed Service sectors: ATP = Air transport services; CMN = Communication services; INS = Insurance, real estate services; OBS = Other business services; OFI = Other financial services; OTP = Road and rail transport services; ROS = Hospitality services; TRD = Trade services; WTP = Water transport services; XSV = Other services. foods; TWP = Textiles and wearing apparel; WWP = Wood and paper products; XMN = Manufactures n.e.s. Note: Primary sectors: AGR = Agriculture; FFL = Fossil fuels; OXT = Minerals n.e.s. n.e.s. = not elsewhere specified. Sub-Saharan Africa offers a more diverse picture than North Africa of job creation because of sectoral shifts. On average, subregions within Sub-Saharan Africa exhibit labor reallocation of between 2.3 percent (West Africa) and 2.7 percent (Central Africa) of total labor. These aggregate figures mask much larger heterogeneity in sectoral reallocation within subregions, driven by country-specific characteristics such as the extent of trade liberalization, reduction in trade cost, and changes in comparative advantage. At the country level, larger labor movements are observed in the rest of Southern Africa (5.7 percent of total labor), the rest of West Africa (4.8 percent), the Democratic Republic of Congo (4.6 percent), Zimbabwe (4.2 percent), and Mauritius (3.8 percent). For some countries, job creation is concentrated in a few industries, as in the Democratic Republic of Congo's energy-intensive manufacturing sector (KE5), and Uganda's, Rwanda's, and Kenya's agricultural sectors. The construction and trade sectors frequently appear in the top-three job-creating sectors across Sub-Saharan Africa.

Under the AfCFTA FDI deep scenario, female- and skill-intensive sectors expand the most but with diverse impacts across regions. Under the assumption of a longterm fixed level of unemployment, workers can move freely across sectors, with workers moving to the more competitive sectors. Figures 4.13 and 4.14 show that, for the AfCFTA FDI deep scenario, energy-intensive manufacturing (steel and aluminum) records the highest increase in employment with 3.5 million more workers, followed by construction (0.9 million) and hospitality services (0.6 million). These aggregate sectoral shifts mask large heterogeneity across countries. For instance, agriculture, the largest employer of workers on the continent, sees a net reduction of employment and one of the smallest output expansions (US\$9 billion). Nevertheless, effects within countries are heterogeneous and agriculture will play an increasingly important role in a large number of countries in Sub-Saharan Africa, appearing in the topthree job-creating sectors in 13 countries and regions (Burkina Faso, Cameroon, Côte d'Ivoire, Ghana, Kenya, Madagascar, Malawi, Rwanda, Uganda, Ethiopia, the rest of East Africa, Zambia, and Zimbabwe). Other sectors with a high share of unskilled workers, such as fossil fuels and processed foods (figure 4.14), suffer a reduction of employment. This reduction is in contrast to sectors with the smallest share of unskilled workers that see their levels of employment increase, which results in wages growing faster for skilled workers.

Wages of female workers grow faster under the AfCFTA FDI deep scenario. At the continent level, wages for male and female workers grow significantly under the AfCFTA trade scenario and increase even more under the AfCFTA FDI broad scenario and the AfCFTA FDI deep scenario compared with the baseline by 2035 (figure 4.15). There is a more marked increase in wages for female workers, following the increases of about 10 percent already expected under implementation of the AfCFTA (with a difference of 1.21 percentage points between female and male

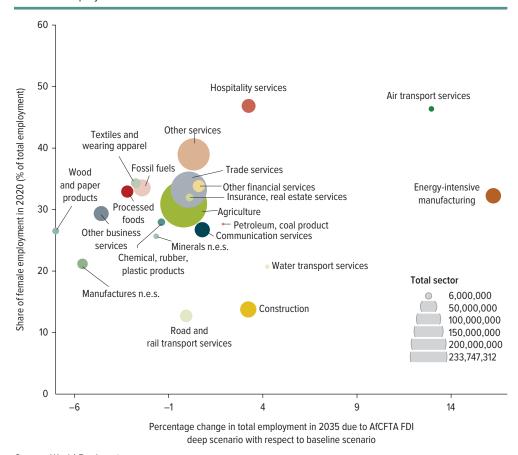


Figure 4.13 Employment changes by sector in 2035 under the AfCFTA FDI deep scenario and share of female employment

Source: World Bank estimates.

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; n.e.s. = not elsewhere specified.

workers' wages) but with some regional differences. Female workers' wages in Central Africa would grow faster than male workers' wages, with a difference of 3 percentage points between them by 2035 amid an expansion of energy-intensive manufacturing, a sector that employs a relatively high percentage of female workers (figures 4.16 and 4.17). However, not all regions follow the same trend. In Southern Africa, wages of male workers grow faster than wages of female workers. In Southern Africa, manufacturing and construction—with some of the lowest shares of female employment—expand the most.

Under the AfCFTA FDI deep scenario, skilled wages grow faster than unskilled wages. Under all three scenarios, the wages of skilled and unskilled workers grow in a

Agriculture 90 Wood and paper 80 Share of unskilled employment in 2020 (% of total employment) products Fossil fuels · Petroleum, coal products Minerals n.e.s. Processed 70 Energy-intensive Chemical, rubber, plastic products foods Hospitality services manufacturing Textiles and wearing apparel Construction 60 Manufactures n.e.s. Road and rail transport services Trade services 50 Communication services Other business services Insurance, real estate services Air transport services 40 Water transport services Other financial services 30 Other services Total sector 6,000,000 20 50,000,000 100.000.000 150,000,000 10 200,000,000 233,747,312 0 14 -6 Percentage change in total employment in 2035 due to AfCFTA FDI deep scenario with respect to baseline scenario

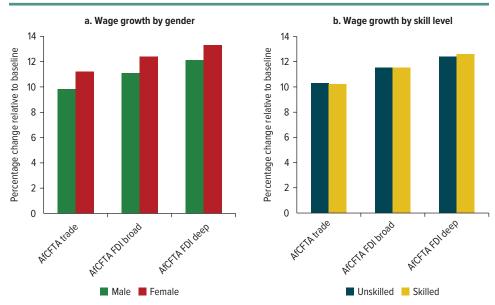
Figure 4.14 Employment changes by sector in 2035 under AfCFTA FDI deep scenario and share of unskilled employment

Source: World Bank estimates.

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; n.e.s. = not elsewhere specified.

similar manner, with a marginally higher increase in skilled workers' salaries under the AfCFTA FDI deep scenario (figure 4.15). In general, FDI would tend to flow into sectors that have a higher share of skilled workers or will create greater demand for skill-intensive sectors. For this reason, the FDI flows add pressure onto the wage skill premiums across the continent but with high heterogeneity at the regional level. North Africa, West Africa, and Central Africa register higher growth in wages for skilled workers than for unskilled workers (figure 4.17). In East Africa, where agriculture and construction expand production the most, and Southern Africa, with expansion in manufacturing and construction, unskilled workers' wages grow faster than skilled workers' wages (figure 4.17).

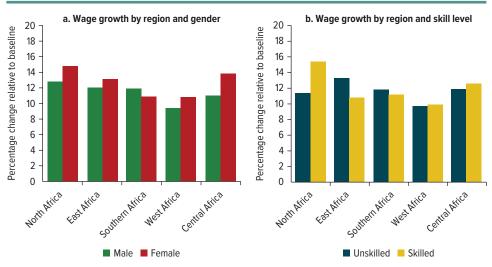
Figure 4.15 Impact on wages under AfCFTA trade, AfCFTA FDI broad, and AfCFTA FDI deep scenarios, by gender and skill level, 2035



Source: World Bank estimations.

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.

Figure 4.16 Impact on wages under AfCFTA FDI broad scenario, by region and by gender and skill level, 2035



Source: World Bank estimations.

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment.

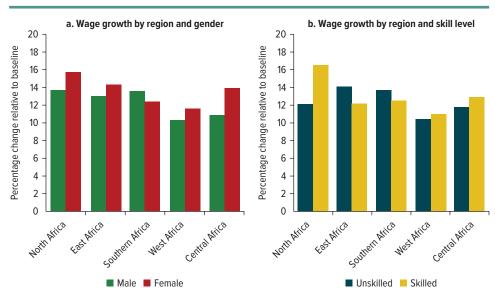


Figure 4.17 Impact on wages under AfCFTA FDI deep scenario, by region and by gender and skill level, 2035

Despite overall gains in wages for females and the unskilled, large heterogeneity is observed within countries. Table 4.5 shows that, under the AfCFTA FDI deep scenario, wages for unskilled females would grow faster than the national average in 18 of 29 countries and regions, most notably in the rest of Southern Africa, Ghana, and the rest of Central Africa. Similarly, wages for unskilled females would grow faster than wages for unskilled males in 16 out of 29 countries and regions. Faster-than-average growth in unskilled and female wages would not only reduce poverty but also reduce inequality. Nevertheless, there are large differences across the continent. The AfCFTA FDI deep scenario would also increase wage inequality in 9 countries by increasing wage growth for skilled workers, particularly in Egypt and Morocco, which will see an increase in demand in skill-intensive manufacturing and services.

Table 4.5 AfCFTA deep scenario: Wage gains by skill and gender, by country *Change with respect to baseline scenario by 2035*

		Wage (% change)			
	Total acco	Unskilled		Skilled	
Region or country	Total wage (% change)	Female	Male	Female	Male
North Africa	•	*			
Egypt, Arab Rep.	20.15	20.62	17.39	24.20	23.07
Tunisia	15.04	18.94	7.82	13.65	15.81
Morocco	11.24	10.02	9.97	13.07	12.83
Rest of North Africa	0.05	-1.76	-1.35	0.88	1.36
West Africa					
Rest of West Africa	24.06	19.31	21.81	26.05	28.98
Burkina Faso	13.16	12.83	17.05	8.02	8.81
Côte d'Ivoire	12.84	14.90	13.90	10.02	11.30
Senegal	11.97	8.96	11.89	12.36	12.54
Ghana	5.06	9.78	7.69	3.10	4.44
Nigeria	4.01	5.32	3.50	3.87	4.06
East Africa					
Kenya	22.88	24.55	24.68	20.69	22.77
Ethiopia	13.45	12.69	14.84	12.77	13.09
Uganda	11.38	14.79	13.21	7.98	10.09
Rest of East Africa	3.65	4.66	3.94	3.50	2.48
Central Africa					
Congo, Dem. Rep.	18.47	20.08	20.77	19.52	16.58
Cameroon	11.61	9.71	11.77	11.84	11.74
Rest of Central Africa	5.75	10.88	1.00	9.03	6.15
Rwanda	5.44	8.86	4.65	5.78	3.84

(Table continues on next page)

Table 4.5 AfCFTA deep scenario: Wage gains by skill and gender, by country *(continued)* Change with respect to baseline scenario by 2035

		Wage (% change)				
	Tatal	Unskilled		Skilled		
	Total wage (% change)	Female	Male	Female	Male	
Southern Africa						
Tanzania	19.98	19.30	19.81	20.14	20.18	
Namibia	18.21	16.82	21.27	13.29	19.41	
Zambia	14.88	14.75	16.82	13.93	14.86	
Zimbabwe	14.28	19.92	13.72	14.71	13.90	
South Africa	11.61	12.54	11.84	10.52	10.73	
Mauritius	11.02	15.72	14.43	6.79	10.14	
Rest of Southern Africa	10.51	20.13	8.44	12.47	8.42	
Mozambique	10.09	10.55	9.95	9.62	10.31	
Malawi	9.13	12.34	11.60	6.00	5.70	
Botswana	7.58	6.79	8.08	7.96	8.72	
Madagascar	6.35	6.97	7.47	5.55	4.93	

Source: World Bank simulation results.

Note: AfCFTA = African Continental Free Trade Area.

NOTES

- 1. The CGE-GIDD approach is discussed in detail in Maliszewska, Osorio-Rodarte, and Gupta (2020).
- 2. The 15-year phase in is to account for the fact that the econometric analysis in chapter 3 is a comparative static analysis that simulates the impacts of the AfCFTA on FDI after all adjustments would have taken place.
- 3. The impacts of COVID-19 on baseline growth have not been incorporated. The research for both chapters 3 and 4 was conducted before the full extent of COVID-19's impacts on growth was evident. The implications for growth and trade are becoming more apparent, but up-to-date information is not available for all African countries. Therefore, for the sake of consistency with the 2020 AfCFTA Report, baseline growth has not been adjusted. The study looks at the long-run implications of the AfCFTA up to 2035. The tools applied in this study—the gravity model and CGE analysis—are designed for scenario analysis and not projections, and the key findings from the report are likely to hold once the economies recover after COVID-19 and return to long-term growth trajectories and trends, even though some impacts of COVID-19 could have lasting effects on the comparative advantages of countries. Another limitation of the gravity approach used in chapter 3 is that, by being backward looking, it may be biased in highly unusual times such as the COVID-19 pandemic. On the one hand, no matter how deep the AfCFTA is, FDI might not flow to Africa under the current level of uncertainty (that is, the estimated elasticity is much higher than what would apply now under COVID-19). On the other hand, deepening trade agreements may be even more relevant for attracting FDI once the current uncertainty is resolved, and FDI

- will start flowing again after the last year of slowdown (that is, current elasticity would be higher than in normal times).
- 4. The use of gravity-based estimates of trade cost reductions from NTBs has become more standard in recent years. It is a response to academic criticism of standard CGE models, that is, that models should have better micro foundations based on recent trade theory, and the main parameters and trade costs in the model should be structurally estimated, where possible, using the same underlying data (see Bekkers, Francois, and Rojas-Romagosa 2018; Bekkers and Rojas-Romagosa 2019; Costinot and Rodríguez-Clare 2014). Egger et al. (2015) is an example of this approach. A full structural survey and decomposition of alternative approaches, for the case of transatlantic trade, is provided by Bekkers and Rojas-Romagosa (2019). In modeling trade cost reductions in preferential trade agreements, there is also a preference in practice for estimating the impact of observed trade agreements and varying ambition in liberalization under those agreements. This method contrasts with the earlier approach of assuming that some percentage of trade costs is reduced, with no country- and preferential trade agreement–specific empirical basis. Examples of the estimation in sustainability impact assessments include the recent Swiss study of the EFTA-MERCOSUR agreement (Francois et al. 2013; Francois et al. 2020) and CEPR (2013) impact assessments of transatlantic trade liberalization for the European Commission.
- 5. The impacts from the AfCFTA trade scenario are presented in more detail in the 2020 AfCFTA Report.
- 6. Real income is measured by equivalent variation, that is, the expenditure to attain utility in year *t* in any given simulation using base year prices. It is similar in magnitude to real private consumption.
- 7. It should be noted that the Trade Facilitation Agreement simulations do not include specific measures to improve trade facilitation. Some measures may have relatively low cost, but others may require investments in software, other logistical support, infrastructure, and so on. These costs could reduce the net gains from improvements in trade facilitation—depending in part on the source of financing.
- 8. Note that base year trade shares and volumes are relatively slight in services.
- 9. These estimates are based on a distribution-neutral simulation in which growth in private consumption per capita is superimposed on the latest household survey available in each country. A total of 164 household survey per capita income or consumption distributions were obtained from the global micro database and PovcalNet (Castaneda Aguilar et al. 2019). Private consumption was obtained from the World Bank's Macro Poverty Outlook forecast published in the round of Spring Meetings 2021. As in Lakner et al. (2020), this estimate assumes that only 85 percent of the growth observed in macroeconomic statistics is passed to household surveys and similarly acknowledges that the impact of COVID-19 on poverty in Africa can be larger because of increases in inequality.
- 10. The job creation estimates presented in this section are an approximation of the potential impacts of changing competitiveness on job reallocation across sectors. These estimates have three important caveats. First, results are derived from general equilibrium conditions under zero frictions. The CGE model assumes frictionless movement of workers across sectors, with workers not incurring any adjustment costs and firms having the ability to hire and fire freely. Second, the CGE operates under the assumption that unemployment is a fixed share of the labor force, which implies that a fixed number of workers find gainful employment in all simulations. In other words, the simulations focus on job reallocation but maintain total employment as a fixed number. Third, within-sector job creation is not captured because the model includes a representative worker with an average wage per sector.

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Maximizing the Potential Benefits of the AfCFTA for Inclusive Development

KEY MESSAGES

- The content, structure, and depth of commitments in the African Continental Free Trade Area (AfCFTA) are critical to turning aspiration into reality.
- The private sector must play a pivotal role in the negotiations and implementation of the AfCFTA for its potential to generate greater trade, investment, and jobs to be realized.
- Governments must promote favorable national trade and investment policies to maximize potential benefits across the continent.
- Potential distributional and social effects must be a priority alongside maximizing the benefits of trade through adequate rules and disciplines.
- Pairing the AfCFTA with a "complementary agenda" can ensure proper administration of the agreement and adequate implementation on the ground and provide ways to maximize opportunities and minimize risks during the transition toward an open market across Africa.

INTRODUCTION

This report demonstrates that establishment of the AfCFTA has the potential to be an important driver of economic growth and diversification. Significant challenges and risks must be overcome to turn this promise into reality. This is not the first time Africa has embarked on ambitious trade and liberalization policies. Progress on regional integration in Africa has been mixed (Akinkugbe 2021; Woolfrey and Byiers 2019). Recognizing the challenges is critical to overcoming them: first, to manage expectations; second, to learn

from the past; and, third, to guarantee that significant steps are taken to ensure the AfCFTA becomes a foundation for inclusive and sustainable development in Africa.

The challenges for inclusive and sustainable development in Africa are many. Although a full discussion of these challenges is beyond the scope and objective of this report, this chapter explores ways to maximize the potential benefits of the AfCFTA. As shown in figure 5.1, the chapter is organized around four major dimensions.

First, the AfCFTA negotiations should be concluded as planned, making it a deep trade agreement going beyond trade in goods and covering trade in services, investment, competition policy, trade-related intellectual property rights, and e-commerce. In this regard, the key aspiration would be that rules and disciplines negotiated in each of these areas promote—rather than prevent—growing flows of trade and investment in Africa.

Second, increasing the role of the African private sector and generating greater grassroots support for the AfCFTA, going beyond government leadership, is paramount.

Third, the AfCFTA can be used as a catalyst to shift traditional patterns of trade and investment in Africa. It can help shape domestic policies that promote wider integration of African economies in regional and global value chains for goods and services.

Fourth, the AfCFTA negotiations need to be underpinned by a series of practical steps to turn aspiration into reality. An AfCFTA complementary agenda can help ensure adequate administration of the treaty and its proper implementation across trade and investment agencies. It could also include initiatives to help different parts of the private sector prepare to maximize opportunities in an open continental market.

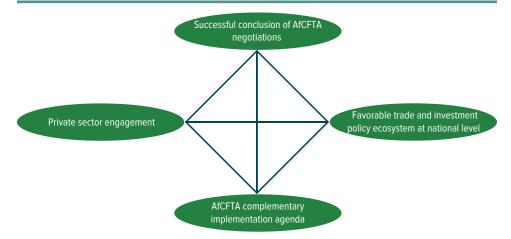


Figure 5.1 Maximizing the potential benefits of the AfCFTA: A multidimensional perspective

Source: Original figure for this publication.

Note: AfCFTA = African Continental Free Trade Area.

This chapter briefly explores these four fundamental dimensions, based on global good practices. The objective is to provide both government and nongovernment stakeholders with concrete recommendations to maximize the potential benefits of the AfCFTA agreement.

SUCCESSFUL CONCLUSION OF AFCFTA NEGOTIATIONS

The AfCFTA aims to cover a broad set of policy areas that would significantly deepen integration in Africa in two ways. First, the AfCFTA will go beyond simply reducing tariffs, covering many other policy areas. For trade in goods, additional disciplines include trade facilitation, customs procedures, sanitary and phytosanitary standards, technical barriers to trade, and trade defense mechanisms. Furthermore, the agreement will complement existing subregional economic communities and trade agreements in Africa by offering a continentwide regulatory framework covering other critical policy areas—such as trade in services, investment, intellectual property rights protection, competition policy, and e-commerce (as summarized in table 3.1). Most subregional African agreements do not cover these areas. Second, and equally important, the AfCFTA provides a significant benefit compared with previous regional trade agreements in Africa. It introduces a strong rules-oriented dispute settlement regime inspired by the World Trade Organization (WTO) Dispute Settlement Understanding. It also incorporates new provisions drawn from lessons learned from 25 years of the WTO dispute settlement system. This will make AfCFTA commitments enforceable by independent panels of experts interpreting the agreement rather than relying on political means of conflict resolution for trade issues.

What will a "successful" conclusion to the many phases of the AfCFTA negotiations look like? The first phase dealt with negotiations on trade in goods and services. The second phase will cover negotiations on investment, intellectual property, and competition policy. The third phase will focus on electronic commerce (e-commerce). As of early 2022, a significant part of the first phase of negotiations have been concluded.¹ Issues in the second phase have already been discussed with a view to progress by 2022. Rather than following a strict single-undertaking approach—not reaching any agreement until all issues are agreed upon—African leaders have followed a step-by-step, incremental approach to building the AfCFTA, which is the only way to reach a comprehensive agreement involving more than 50 countries with different levels of development. It is also crucial to combine regional economic communities in Africa into a consolidated free trade area. This gradual and incremental approach appears to be working.

By January 2022, 54 African countries had signed the umbrella agreement and 41 had ratified it. A successful conclusion is in sight if countries can resolve the remaining issues. Judging by results so far, it may simply be a matter of time for negotiators to wrap up an agreement.

The true test of success may be whether the agreement unlocks trade and investment growth through pro-competitive provisions—in practice, not just on paper. In addition, bad agreements, even if only on paper, can send confusing or incorrect signals to traders and investors. They can undermine certainty and predictability. Trade agreements may sometimes fail to address critical issues, or even include clauses that discourage the private sector from cross-border trade and investment. Clauses and provisions that are pro-competitive are vital for a successful conclusion to the negotiations. Evidence from World Bank Group research on deep trade agreements (DTAs; Fernandes, Rocha, and Ruta 2021) shows that not just the scope but also the depth of the commitments in DTAs really matter. The next section presents an overview of rulemaking for trade covered by the AfCFTA.

Trade in Goods

Three areas of trade in goods merit special attention: the tariff liberalization program, rules of origin, and trade facilitation commitments. It is not uncommon for free trade agreements to have a limited number of exclusions that reflect political pragmatism. Often, it is the price to be paid to make a free trade agreement politically viable. Under the AfCFTA, 3 percent of tariff lines will be excluded from the tariff liberalization program. In good trade theory, exclusions may perpetuate barriers to trade and investment. In principle, the smaller the number of products excluded—especially those that may be more likely to be traded regionally—the better. A notable aspect is that AfCFTA countries also agreed that this 3 percent of tariff lines may not account for an intra-Africa import value greater than 10 percent, and the exclusions may not be perpetual, but rather will be subject to negotiation and review every five years (AfCFTA Secretariat 2021).

It has been repeatedly stressed that the success of the AfCFTA will critically depend on rules of origin that are as clear, simple, and flexible as possible (UNCTAD 2019). Rules of origin can prevent trade if they force producers to source inputs that in fact cannot be found within AfCFTA Member States or, if they can be found, force producers to source inputs that are just too costly or of insufficient quality to enable them to compete when exporting. This risk is particularly high for negotiation of rules of origin in "sensitive" products for various countries, which are precisely the ones still to be agreed on in sectors such as wearing apparel and textiles, automotive, and sugar (Tralac 2021).

Another issue is the approach to origin certification. To receive preferential, duty-free treatment under any DTA, an exporting firm must prove that its exported products comply with the agreed-upon rules of origin. There are two distinct and mutually exclusive approaches regarding proof of origin. In some agreements, only a government authority can provide documentation that proves origin; in others, exporters can self-certify compliance with the rules of origin and assume financial responsibility if

verifications show otherwise. Recent research on the economic impacts of DTAs shows that, when an exporter must have a government authority provide the necessary documents to prove that it meets applicable rules of origin, the volume of exports is reduced by 19 percent. In contrast, permitting firms to self-certify the origin of their merchandise increases the volume of exports by 17 percent (Crowley, Han, and Prayer 2021). Annex 2 on Rules of Origin to the AfCFTA agreement in principle calls for a government authority to issue the certificate of origin, except any consignment consisting of one or more packages containing originating products whose total value does not exceed US\$5,000 (Article 19, Annex 2, Rules of Origin, AfCFTA).

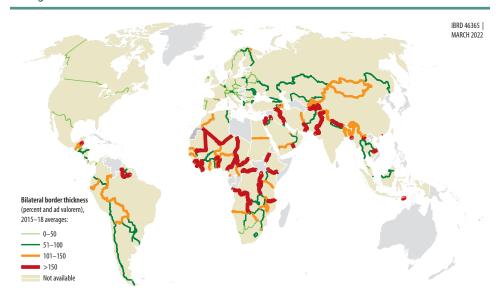
The importance of fully implementing commitments on trade facilitation cannot be overstated. The AfCFTA agreement already contains a specific annex on customs cooperation and administrative assistance (Annex 3 to the AfCFTA treaty) and a specific annex on trade facilitation (Annex 4 to the AfCFTA treaty). The objectives of the AfCFTA annex on trade facilitation are to "(a) simplify and harmonize international trade procedures and logistics to expedite the processes of importation, exportation and transit; and (b) expedite the movement, clearance and release of goods including goods in transit across borders within State Parties" (Article 2, Annex on Trade Facilitation).

The annex on trade facilitation is inspired by the WTO Trade Facilitation Agreement, which will de facto level the playing field among African countries that are members of the WTO. More important, agreeing on modern rules and disciplines for trade facilitation for goods is paramount for Africa to maximize potential gains from the AfCFTA, which is made clear by looking at the high trade costs of crossing borders on the African continent. As map 5.1 illustrates, many African countries have borders ranking at the top of the most restrictive in the world as measured by costs of cross-border trade.

For historic reasons, bilateral and regional trade in Africa has been hampered by trade routes designed for export away from the continent rather than for facilitating intra-Africa trade. Obstacles include long distances, inadequate transport services, and inefficient institutional and transit regimes.

In many landlocked African countries, economic centers are located several hundred kilometers away from the closest seaport. Overcoming geographic constraints or the lack of economies of scale caused be small transportation volumes is key for all countries but particularly for transit countries. A renewed focus on the efficiency of transport and logistics services is long overdue given that many countries retain policies that favor closed, small, and inefficient services markets.

Improved trade facilitation and connectivity are critical to making the most of the AfCFTA. Referencing AfCFTA provisions on trade facilitation, AfCFTA governments stressed in the Niamey Declaration their assurance to fully implement those commitments (box 5.1).



Map 5.1 The importance of trade facilitation in the AfCFTA: Bilateral border thickness, 2015–18 averages

Source: Calculations based on World Bank-UNESCAP bilateral trade costs database (https://www.unescap.org/resources/escape-world-bank-trade-costs-database).

Note: AfCFTA = African Continental Free Trade Area.

Box 5.1 The Niamey Declaration on trade facilitation implementation

The African Union launched the operational phase of the African Continental Free Trade Area (AfCFTA) in July 2019 in Niamey, Niger. The Niamey Declaration commits all member states to the following:

"[T]o leverage Trade Facilitation to promote efficient and increased trade flows across the Continent. In this connection, URGE all Member States to:

- a) put in place statutory, regulatory, and other measures to guarantee that goods can be traded under the AfCFTA trade regime.
- b) facilitate transit and other formalities for goods passing through their territories.
- c) align their national development and reform strategies to the AfCFTA so that the AfCFTA delivers to the expectations of African citizens.
- d) undertake stakeholder sensitisation and capacity building at national level as part of operationalising the AfCFTA Agreement."

The declaration further states that it urges all member states to "[c]ommit to broaden inclusiveness in the operation of the AfCFTA by catering for the Small to Medium cross border traders. To this end, will collaborate with the Regional Economic Communities to develop a simplified trade regime fully meeting the needs of our hardworking people."

Trade in Services

Research shows that ambition and accountability matter for trade in services agreements. Borchert and Di Ubaldo (2021) examine policy information from 143 agreements with services chapters and find that the mere inclusion of services in a trade agreement is not associated with significant effects on services trade or value added. Only agreements with ambitious structures, meaningful disciplines, and accountability affect services exports significantly, increasing services trade by 15 to 65 percent. Ambitious policy configurations are associated with the structure of the agreements, rules of origin, and provisions to ensure accountability. "Agreement structure" refers, for example, to the liberalization approach (positive or negative list), whereas "rules of origin" define criteria for firms and natural persons to belong to a free trade area partner.

The AfCFTA can unlock the potential for increased trade in services in Africa if it tackles two fundamental and related challenges.

The first challenge is the lack of transparency—and associated limited data—on the specific restrictions affecting trade in services on the continent. Despite their widely acknowledged contribution to economywide performance, services remain shackled by a host of restrictive policies maintained by countries that impede cross-border trade, investment activity, and consumer and labor mobility. Part of the problem is that these restrictions on trade in services are embedded in domestic laws and regulations that pursue legitimate public policy objectives. Thus, contrary to trade in goods, for which tariffs and most nontariff barriers can be easily quantified, addressing barriers to trade in services requires that they be made transparent in the first place. Such endeavors are not easy, given that carrying out a detailed services regulatory audit in each country is a prerequisite to identifying those barriers. At the beginning of the AfCFTA negotiations, only a handful of countries had undertaken such an exercise; for those that had, data were available for only a few sectors and up to 2012. This lack of data is precisely the reason why most African countries do not appear in widely used indexes measuring the level of openness of trade in services and investment. The World Bank Group, in cooperation with the WTO and other European partners, has been working with the AfCFTA Secretariat to prepare services regulatory audits aiming to cover all AfCFTA countries. Such regulatory audits will enable African countries not only to identify the specific laws and regulations in which the barriers to trade in services are embedded but also to measure their level of restrictiveness using the World Bank/ WTO Services Trade Restrictiveness Index. On this basis, such data will, for the first time, enable African countries to undertake a sector- and measure-specific dialogue with their stakeholders and examine whether there may be less trade-distortive means by which to pursue legitimate public policy objectives, and to be able to foster gradual trade liberalization in the future.

A second fundamental challenge is removing the uncertainty that traders and investors face regarding the potential introduction of new barriers. On the one hand, AfCFTA countries have not yet made commitments not to introduce new trade barriers. On the

other hand, in regional economic communities such as the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC), and the Southern African Development Community (SADC), members have agreed not to introduce new and more discriminatory barriers to trade in services during the negotiation process.

Despite the increasing importance of trade in services for African economies, the AfCFTA parties have not yet agreed on a cross-sector standstill commitment. Thus, governments are free to introduce new discriminatory or market access restrictions in any sector despite the aspirational commitment to foster gradual liberalization. The only limitations are the specific terms and conditions that each AfCFTA member includes in its respective schedule of specific commitments to the Protocol on Trade in Services. The absence of a standstill commitment on new discriminatory and market access restrictions, beyond those currently existing in Africa, seems contrary to the spirit of Article 18 of the AfCFTA Protocol on Trade in Services, which states that the trade in services liberalization process shall reflect the "best practices and acquis from the RECs [regional economic communities]" and that the "liberalization process shall focus on the progressive elimination of the adverse effects of measures on trade in services as a means of providing effective market access with a view to boosting intra-African trade in services" (AfCFTA Protocol on Trade in Services Article 18:3).

Member States could foster a minimum degree of certainty and predictability for trade in services in Africa by committing not to introduce new restrictions to trade in services in any sector beyond those already in place. This action would reflect existing commitments by most African countries in regional economic communities, such as COMESA, EAC, or SADC. If any countries consider that undertaking a horizontal standstill is too ambitious, binding the existing status quo in at least the five priority sectors identified by the AfCFTA parties (business, communication, financial, transport, and tourism services) would be a minimum step to show the effective commitment of the AfCFTA parties to the progressive liberalization objectives of the AfCFTA Protocol on Trade in Services.

Investment

In addition to the negotiations on trade in services, the negotiation of the AfCFTA investment protocol will also be crucial to ensuring that the AfCFTA culminates in a modern DTA with rules and disciplines favoring, rather than discouraging, trade and investment.

Attracting, expanding, and linking foreign direct investment (FDI) to domestic investment is critical for the industrialization and economic diversification of Africa. Kusek and Silve (2018) show that political stability and a business-friendly regulatory environment are the top two factors influencing multinational corporations' investment decisions in developing countries. Africa is no exception.

Investors seek predictable, transparent, and efficient conduct of public agencies. Echandi, Nimac, and Chun (2019) also show that, even though governments of

developing countries compete in costly promotion campaigns and incentives to attract FDI, every year about one-quarter of all investors investing in developing countries discontinue their FDI projects because of unresolved grievances with subnational or specialized regulatory agencies. Figure 5.2 shows the impact of different regulatory problems on FDI. Most conflicts leading to FDI withdrawals stem from alleged adverse regulatory changes, breach of contract, de facto expropriation, and transfer and convertibility restrictions. The frequency of expropriation and breach of contract has declined since the early 2000s, though they remain the most harmful—and sudden—adverse regulatory changes. A lack of transparency and predictability in dealing with public agencies, and delays in obtaining the necessary government permits to start or operate businesses, have significantly increased as factors causing FDI projects to be discontinued (Echandi, Nimac, and Chun 2019).

The AfCFTA Protocol on Investment should aim to include enforceable rules and disciplines that can increase the credibility and predictability of administrative action in African countries, which is often the main purpose of most investment agreements. However, given the increased activism in international investor-state arbitration (Echandi 2019) over the past three decades, there has been a worldwide trend in investment rulemaking adjusting the text of international investment agreements

Impact of transparency and predictability in dealing with public 23 agencies (50%) Sudden change in the laws and 27 25 25 regulations with a negative impact on the company (49%) Delays in obtaining necessary government permits and approvals 20 to start or operate a business (47%) Restrictions in the ability to transfer 26 20 29 and convert currency (45%) Breach of contract by the 23 26 government (13%) Expropriation of property or assets 33 10 36 by the government (5%) 0 20 40 100 80 ■ Don't know ■ None Consider delay or cancellation

Figure 5.2 Impact on foreign direct investment of political risks derived from government conduct, 2017

Source: World Bank 2018.

Note: The numbers in parentheses show how frequently each problem occurs and the bar shows the impact that each type of regulatory problem has on the retention of foreign direct investment.

Withdraw existing investment

■ Significantly delay investment ■ Cancel planned investment

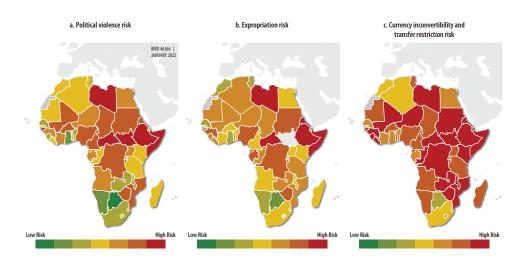
to make their obligations clearer and more precise (Echandi 2018; UNCTAD 2007). Some governments have gone further and called for a "rebalancing" of the rights and obligations included in international investment agreements, or have even denounced them (Carim 2015; Sornarajah 2018).

Many African countries have been reviewing their stances on international investment agreements, not necessarily aiming to ensure greater precision, predictability and certainty on investment protection guarantees. These developments have created a new challenge—African countries are reforming their existing investment treaties unilaterally, without conferring among themselves (El-Kady 2020). Some countries have opted for termination or a moratorium on the conclusion of new treaties, and others are engaging in the renegotiation of existing treaties or favoring regional approaches to investment treatymaking. There is little or no consultation among African countries on how best to approach individual provisions of international investment agreements (El-Kady 2020). The text of the AfCFTA agreement provides that, for the purposes of fulfilling the AfCFTA's general objectives, the State Parties shall "cooperate on investment, intellectual property rights and competition policy" (Article 4 of the AfCFTA Agreement). Some experts have rightly cautioned that, if negotiators opt to focus exclusively on cooperation on investment policies and laws to safeguard policy space and national powers on investment policies, a fragmented outcome may result.

The AfCFTA Investment Protocol will have implications for how investors will view investment and deal-making opportunities on the continent. It will also have a direct impact on the ability of the AfCFTA to function as an all-inclusive instrument that will attract investments and promote economic development in a holistic manner. It would be an opportunity lost if these negotiations fail to address critical linkages to services, industrialization and economic integration issues and challenges. If the AfCFTA Investment Protocol would only become an umbrella for national investment related policies and laws based on local goals and preserving national regulatory space, problems that have been around for a long time will remain with us. (Erasmus 2021)

It is important for the AfCFTA to include an investment protocol that provides a minimum level of coherence, predictability, and certainty for investment protection guarantees. Such a protocol would recognize investors' historical concerns about regulatory risks in the region. Map 5.2 shows private investors' perceptions about the potential risks of political violence,² risks related to expropriation and fair administrative conduct,³ and risks related to transfers and currency convertibility of payments related to investments⁴ in the African continent.

Perceptions of political risks in Africa have improved over the past decade among investors. "African countries are now more stable and predictable places to live, work and build businesses," according to one private consulting firm. "All this is happening in the last region of the world offering a demographic dividend: sub-Saharan Africa will soon be the only place with birth rates at replacement level or higher. New value chains based on telecommunications platforms, agribusiness, and energy are now developing"



Map 5.2 Africa: Examples of private sector investors' perceptions of risks, August 2021

Source: Credendo (http://credendo.com/en/country-risk/afrixa#focus=&focusContinent=africa&filter=TransferRisk&min=0&max=7&tab=-1).

(Ernst & Young 2021). This optimistic view seems to be clearly summarized by another private sector representative speaking to fellow investors: "Investors shouldn't come to Africa because of what it is now. You want to be here for what it's becoming" (Ernst & Young 2021). Given such sentiments, the AfCFTA Protocol on Investment should become a key tool for investment promotion for the region. The region can capitalize on its potential if the AfCFTA investment protocol includes clear and precise investment protection guarantees that could mitigate investors' perceptions of regulatory risks, such as expropriation, arbitrary regulatory changes, discriminatory treatment of investors, and currency convertibility and transfer restrictions. Rapid, clear, and low-cost mechanisms to address conflicts related to investments, not necessarily involving investor-state arbitration, should also be a priority for the negotiators of the investment protocol.

Trade-Related Intellectual Property Rights

As is widely recognized, a strong intellectual property regime across the continent, incorporating key aspects of protection particularly relevant for Africa, could facilitate the growth of sectors producing goods and services. It could also lead to significant welfare gains, including for micro and small enterprises, and increased job creation, especially for women and youth (Mbatia and Vilita 2021; Songwe 2020).

There are three fundamental aspects that the AfCFTA negotiations on trade-related aspects of intellectual property rights should strive to address.

First, the negotiations should help level the playing field in intellectual property protection across the African continent. Given the number of AfCFTA signatories, it is

not surprising that the breadth and depth of domestic legislation on intellectual property are far from homogeneous. These differences are exacerbated by varying participation of African countries in different multilateral and bilateral intellectual property treaties and conventions. Various AfCFTA countries are not WTO members and are not bound by the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights. Not all countries are parties to the same subject-specific multilateral intellectual property protection conventions. Furthermore, the continent has two regional intellectual property regimes with different membership and features, the African Regional Intellectual Property Organization and the Organisation Africaine de la Propriété Intellectuelle. Even though the larger African economies of the Arab Republic of Egypt, Nigeria, and South Africa are not part of the regional systems, the two regimes provide a relatively cheap, easy, and effective way of extending intellectual property protection to 35 African countries with a combined nominal GDP of US\$420 billion (Mbatia and Vilita 2021). A key goal of the AfCFTA Protocol on Intellectual Property Rights should be to eliminate to the extent possible the differential treatment and protection guarantees within AfCFTA countries and with the outside world.

Second, beyond promoting similar levels of protection across countries, African negotiators should explore creative ways to facilitate regional protection in Africa. Intellectual property is typically governed by national legislation. Therefore, avenues need to be explored to prevent an owner of an intellectual property right from having to apply in each of the jurisdictions of the 54 African countries to receive regional protection. Experts have mentioned that such an outcome could be achieved by reviewing member states' laws and policies regarding exhaustion of intellectual property rights (Mbatia and Vilita 2021).

Third, it is important to explore more effective ways of applying existing types of intellectual property protection and continuing to pioneer new types of protection in areas and for products for which the potential of intellectual property protection has yet to be tapped. This protection includes geographical indication for products beyond African wines, copyrights, and other forms of protection for cultural industries, in particular the audiovisual sector, and continuing the pioneering work under way to protect traditional knowledge. Geographical indication is a sign used on goods that have a specific geographical origin and possess qualities or a reputation attributable to that place of origin. In Africa, this type of protection is important because Africa's agricultural products typically have qualities that derive from their places of production and are influenced by specific local geographic factors. Consequently, communities will be able to economically leverage the unique qualities of agricultural products on the basis of their geographic areas of production. The exploitation of benefits associated with geographical indications by local communities is expected to result in economic development, especially for women and youth.

Cultural industries are another example of significant untapped potential for harnessing intellectual property protection. Cultural industries could entail important opportunities for inclusive development. One example is the potential gains for many African countries of increased protection for the audiovisual sector. Nigeria is a case in point.

The Nigerian film industry, also known as Nollywood, produces about 50 movies per week, second only to India's Bollywood and more than Hollywood in the United States. Although its revenues are not on par with Bollywood's and Hollywood's, Nollywood still generates an impressive US\$590 million annually (Moudio 2013). The United Nations Educational, Scientific and Cultural Organization has estimated that US\$5 billion is generated annually by the African film and audiovisual sector (UNESCO 2021). One of the main challenges limiting the potential of these industries has been the prevalence of informal trade and piracy. It has been estimated that in Nigeria, for every legitimate copy of a movie sold, nine others are pirated. Further, because there are few legal channels for exporting movies, few or no returns go to the filmmakers, and practically no revenue goes to the government (Moudio 2013).

A second opportunity for tapping growth through the AfCFTA is by establishing an Africa-wide regime for the protection of traditional knowledge. Although no precise and universally accepted definition of traditional knowledge exists, it has been conceptualized as the know-how, skills, and practices developed within a community, forming part of its cultural identity, that are passed on through generations (Monteiro Alvez 2019). Traditional knowledge may be found in several contexts, including in agricultural practices, science, or even medicine; and Africa, where it has been the subject of numerous studies (Ezeanya-Esiobu 2019), contains a wealth of examples.

Innovations based on traditional knowledge may benefit from patent and trademark protection, and from geographical indications. Such knowledge may also be protected as a trade secret or confidential information. However, traditional knowledge is not yet fully protected by any international intellectual property regime. It is, however, the subject of wide international debate at the World Intellectual Property Organization where discussions are ongoing for an international legal instrument for the protection of traditional knowledge (Robinson, Abdel-Latif, and Roffe 2017).

Several African countries are striving to protect traditional knowledge where there is an obvious need to protect a country's inheritance. For instance, South Africa has amended its Intellectual Property Law to provide for the recognition and protection of certain traditional and indigenous terms or expressions. The African Regional Intellectual Property Organization has also addressed the protection of traditional knowledge through the Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore by creating unique indigenous protection (Mbatia and Vilita 2021).

Competition Policy

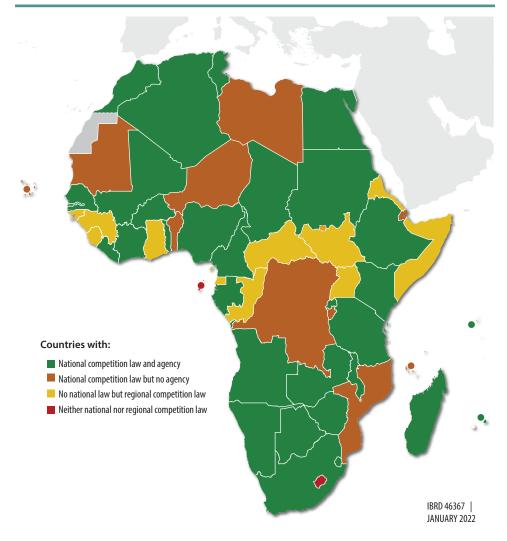
Competition policy is another key area for the AfCFTA. Elimination of public barriers to trade in the form of tariffs, nontariff barriers, and restrictions on services and investment is only part of creating an open continental market. The other part is setting rules,

disciplines, and international cooperation mechanisms to address other types of barriers to competition and trade that can be established by private or state-owned firms. Such barriers result in or are caused by de jure or de facto monopolies, oligopolies, abuse of a dominant position by a firm, cartels, state aid, and other noncompetitive practices. The economic impact of including provisions on competition policy in DTAs has been studied by the World Bank. Crowley, Han, and Prayer (2021) have found that substantive commitments that prohibit or regulate anticompetitive behaviors are associated with higher trade volumes. The analysis focuses on commitments on competition policy capturing whether an agreement prohibits or regulates (1) cartels or concerted practices and (2) the abuse of market dominance. The research finds that inclusion of these commitments in a free trade agreement increases the volume of trade by 22 percent and 21 percent, respectively. Furthermore, research finds that the general practice of making a substantive commitment to competition policies is associated with higher trade volumes, both within the region and with the rest of the world. The benefits relate not only to trade growth but also to consumers. The same research shows that the inclusion of substantial commitments to prohibit or regulate anticompetitive practices yields real reductions in markups of 4 percent regardless of whether the commitment is to limit cartels or market dominance (Crowley, Han, and Prayer 2021).

In the late 1980s through the 1990s, many African countries enacted specific laws and set up institutions on competition. Today, most AfCFTA members have some sort of framework in place, although some still lack a specific implementing agency. By 2020, only 13 countries had no competition laws, but 11 of them were covered by regional supranational competition frameworks. As shown in map 5.3, only a very limited number of African countries neither have national laws nor are party to any regional competition policy frameworks (Büthe and Kigwiru 2020).

African countries have established five regional competition regimes with supranational competition laws: the Central African Economic and Monetary Union, COMESA, EAC, the Economic Community for the West African States, and the West African Economic and Monetary Union. However, not all the regimes have the same coverage. For instance, the COMESA Competition Commission, which became operational in 2013, at first concentrated on reviews of mergers that had cross-border impacts. It has recently started investigating restrictive practices, but has yet to decide whether to agree on a regime to deal with cartels and abuse of dominance cases. The EAC Competition Authority commenced its work early in 2018. It has jurisdiction over competition matters, consumer welfare, state subsidies, and public procurement (Hartzenberg 2019). In addition, two regional competition regimes, the Southern African Customs Union and SADC, commit their member states to adopting a national competition law and promote enforcement cooperation without establishing a common set of competition rules.

Within this context, the main challenge for the AfCFTA negotiations on competition will be to find a pragmatic way to constructively weave these fragmented and overlapping national and regional frameworks into a coherent normative umbrella. It has



Map 5.3 Status of African countries' competition regimes, July 2020

Source: Büthe and Kigwiru 2020.

been pointed out that the coexistence of regional and national legal regimes along with the multiple and, in more than once case, overlapping regional regimes, creates the potential for many types of conflicts between laws (Basedow, Franq, and Idot 2012; Büthe and Kigwiru 2020).

Some African experts have examined other parts of the world with mixed and complex sets of laws and regulations. Chapter 16 of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership has been proposed by some experts as a good experience to consider (Hartzenberg 2019). The framework for cooperation on competition among this diverse group provides that all parties shall have national competition

laws, and an annex provides a time frame and specific support for those that do not have a competition law in place. Parties take account of a regional set of principles they agreed to as members of Asia-Pacific Economic Cooperation and ensure procedural fairness in competition law enforcement. Several provisions set out the details for cooperation in technical areas, such as exchange of information, notifications, and training. Consumer protection enjoys specific focus: parties agree to have national consumer protection laws and regulations and to cooperate to protect consumer interests (Hartzenberg 2019).

Electronic Commerce

E-commerce is another promising area for the AfCFTA negotiations, particularly given the COVID-19 (coronavirus) pandemic. There is no universally accepted and precise definition of e-commerce. For purposes of the working program at the WTO, "electronic commerce" has been understood "to mean the production, distribution, marketing, sale or delivery of goods and services by electronic means" (WTO 1998). More than 20 years later, with high technology being more and more mainstream in productive processes, the term "digital trade" has begun to be used. It has a broader scope and captures not just the sale of consumer products on the internet and the supply of online services, but also data flows that enable global value chains, services that enable smart manufacturing, and myriad other platforms and applications (USTR 2017).5 Africa is not isolated from these trends. The importance of including e-commerce or digital trade within the AfCFTA agenda resides in the fact that it is presenting a unique opportunity for African countries to collectively establish common positions, ensure that digital economy regulations converge, and leverage the benefits of this type of commerce for development. Following the outbreak of the COVID-19 pandemic and the increasing reliance on e-commerce channels in a range of sectors, there have been calls for the AfCFTA e-commerce negotiations to be brought forward. Despite being placed in the third phase of the negotiations, e-commerce will be addressed at the same time as investment and competition policy, originally included in the second phase (Ogo 2020).

There is currently no comprehensive global framework at the WTO on e-commerce. In 1998, countries agreed to launch a working program and agreed on a temporary moratorium on duties levied on international e-commerce transactions. This approach has enabled WTO members to take time to assess and study this innovative area while preventing the risks of increased protectionism. This moratorium has remained in place and will be revised at the next WTO Ministerial Meeting, originally scheduled to take place in Geneva at the end of 2021 but postponed because of the COVID-19 pandemic. As of early 2022, no date had been set for the rescheduling of the Ministerial Conference.

Efforts toward global negotiations have been revived since 2017. However, the African group at the WTO has been opposed to the introduction of e-commerce within

the agreements at the WTO on the grounds that the key definitional issues have not yet been settled. Further, the African group has argued that African micro, small, and medium enterprises are not yet ready to compete with global technology giants, and e-commerce negotiations might serve as a pathway to a deeper liberalization agenda, which would have negative implications for African governments' policy space. Within this context, the decision of African leaders to bring e-commerce under the aegis of the AfCFTA is a key step toward allowing a continental African approach. Given the absence of a WTO agreement, or a comprehensive regional framework in Africa, there are not many regulatory examples that can serve as points of reference for a comprehensive framework on e-commerce or digital trade. Typically, four main categories of issues tend to be covered by DTAs: (1) market access, including issues such as customs duties, digital products, nondiscrimination for electronic and digital products, and cross-border flows; (2) rules and regulations, including consumer protection, protection of personal information, electronic supply of information, and domestic electronic transaction frameworks; (3) facilitation, covering issues such as paperless trade administration, cooperation, transparency, and electronic authentication; and (4) enabling issues, covering technology infrastructure and related matters (Ogo 2020).

The importance of e-commerce to Africa has grown significantly. A recent study by Banga et al. (2021), supported by the African Trade Policy Center, the UK Overseas Development Institute, and the United Nations Economic Commission for Africa, attempted to assess the perceptions of and main challenges for African firms with regard to e-commerce. Some of the key findings of the survey were the following. First, in the context of the COVID-19 pandemic, e-commerce has grown significantly. The average share in all sales of online sales since COVID-19 is 43 percent, up from 31 percent in 2019. Some firms report diversification into new markets through e-commerce during the pandemic. Second, commission fees charged by third-party e-commerce platforms are a key obstacle to selling on cross-border platforms. The overwhelming majority of firms reported selling online through their own e-commerce-enabled websites. Third-party platforms tend to charge between 10 and 15 percent commission on product sales, in addition to transport and taxes, pushing up the price of African sellers' products, making them uncompetitive. Third, when asked about the top challenges for undertaking cross-border e-commerce in Africa, private firms referred to the following: postal competence and delivery and transport costs; issues of taxation, including foreign taxation, double taxation, and value added tax regulations; lack of reliable payment solutions; lack of awareness of national and regional rules; customs duties and customs procedures; and the requirement imposed by many countries in Africa for a local presence to provide services, forcing small firms to incur high costs to incorporate and set up offices in each country in which they want to operate, suggesting that only businesses with significant capital can scale up e-commerce across the continent.

Fourth, on data collection and storage, Banga et al. (2021) reveal that most African firms collect online sales data, with 61 percent of respondents storing their data in the

cloud and 38 percent on local data servers within their country. This means that issues such as data localization.⁶ privacy, source code sharing, and the free flow of data, which are often contentious issues in e-commerce negotiations, will need to be addressed by the AfCFTA negotiators.

E-commerce must be factored into trade negotiations in Africa. The findings summarized here show not only the importance of incorporating e-commerce into the AfCFTA negotiations but also the close interrelationship between this form of trade and the different AfCFTA protocols governing trade in goods, trade in services, and investment. In sum, the quality of commitments and the effective implementation undertaken in areas such as trade facilitation and services will also affect the potential to expand e-commerce (Banga et al. 2021).

PRIVATE SECTOR ENGAGEMENT: INCREASING OWNERSHIP OF THE AFCFTA BY AFRICAN BUSINESSES

Both the private and public sectors have crucial roles to play in turning the vision of the AfCFTA into reality. The AfCFTA was envisioned by African heads of state (Kyerematen 2021). It has taken just a few years to create a treaty with 54 signatories, 41 of which have already ratified the agreement in their respective parliaments. This progress shows the strong commitment by African governments to this ambitious endeavor. However, more than governments, the private sector will play a central role in generating trade, investment, and jobs. In Africa, the private sector accounts for 80 percent of total production, more than 66 percent of investment, and 75 percent of credit, and employs 90 percent of the working-age population (Andriamahatana and Chidede 2018). The private sector's central role has been recognized from the outset. Even before the AfCFTA treaty was signed in March 2018, the keynote address at the AfCFTA Business Forum by Rwandan President Paul Kagame, then Chairperson of the African Union, stated the following:

The creation of one African market necessarily entails a metamorphosis in how we think and act. The full involvement of the private sector is needed more than ever before. The purpose of today's forum is to discuss how to make the most of the new opportunities we are creating for ourselves. From now on, the clear wish of everyone is that consultation between business and political leadership, at all levels, becomes a continuous feature of continental deliberations. (Kagame 2018)

Challenges related to private sector engagement in the AfCFTA process have little to do with convincing governments and institutions of how important it is. In fact, the African Business Council has been constituted as an independent private sector institution within the African Union to be the top body for promotion and lobbying for pan-African business interests. Membership in the African Business Council is open to national, regional, and continental private sector organizations and associations (African Union 2021). Further, since the launch of the AfCFTA negotiation process

under the leadership of the AfCFTA Secretariat, the African Export-Import Bank, and other organizations, there have been countless events and activities geared toward private sector stakeholders, reiterating the importance of their engagement. These initiatives are extremely important, especially given the limited participation of the private sector in the initial design of the AfCFTA (Kyerematen 2021). These activities have contributed to positioning the AfCFTA process in private sector discussions, generating positive political momentum in many African countries (Kottoh 2021). Despite these promising steps, the political economy of negotiation and implementation of international trade agreements is complex, and even more so for a trade agreement on the scale of the AfCFTA. For this initiative to be a game changer and have an impact on the ground, a more granular and sector-targeted approach toward private sector engagement will be required, at the national, regional, and continental levels. Success will entail going beyond top-down strategies (Makokera Grant and Byiers 2021).

African private sector representatives have recognized that, within Africa, attitudes toward the AfCFTA vary among three categories of businesses (Kottoh 2021).

First, a group consisting mostly of African multinationals is highly enthusiastic about the prospects of establishing a continentwide market. Many of these companies are even participating in the Afro-Champions Initiative, a project that seeks to mobilize US\$1 trillion in investment funds by 2030 to support African economic champions (Drugeon 2020). Since its inception, the Afro-Champions Initiative has worked with the African Union to finance awareness-raising actions (African Union 2018).

A second group comprises African enterprises that, for many reasons, are skeptical of and averse to the notion of the open competitive environment that the AfCFTA intends to promote. This segment of the private sector perceives the AfCFTA as a threat to their interests and does not necessarily want to see it succeed (Kottoh 2021). Most of the enterprises within this category are oriented toward serving domestic markets. Many of them are associated with strong interest groups that benefit from protectionist trade policies that they fear will be eroded by continental free trade. This sentiment tends to prevail in those African countries where the domestic political economy has traditionally been less favorable to regional trade integration (Woolfrey, Apiko, and Pharatlhatlhe 2019). In these cases, the AfCFTA's potential for supporting industrialization will depend heavily on whether it can alter the interests and incentives of business and political elites, either by creating new opportunities for commercial benefit or by facilitating the formation of new coalitions of actors with more to gain from the AfCFTA (Woolfrey and Byiers 2019).

Finally, a third segment of the African private sector is indifferent toward the AfCFTA (Kottoh 2021). Many reasons can explain such attitudes. The need for further information may be one factor. Perceptions that the AfCFTA may just be another grand political gesture calling for African integration, but failing to lead to concrete implementation, is another source of skepticism (Kyerematen 2021). This segment's indifference toward the AfCFTA could also stem from the fact that many of them are small businesses focused on domestic markets. Although these segments of the private sector

may not be strong domestic powerbrokers profiting from protectionist policies, many of them may think that their potential to become directly involved in cross-border trade, although theoretically possible, is still a long way from their current capacity. Small and medium enterprises make up more than 90 percent of the firms in Africa's private sector. Many tend to focus exclusively on domestic markets. And this figure does not reflect the many informal firms (Andriamahatana and Chidede 2018).

The lion's share of the African private sector consists of small and medium enterprises, highlighting the critical importance of focused, pragmatic, and effective assistance for these types of firms. The AfCFTA can help businesses gradually enter export markets, either directly by becoming exporters, or indirectly by supplying African firms already involved in cross-border trade and investment. This is one of the reasons why AfCFTA signatories should be preparing an AfCFTA domestic complementary agenda. Governments and the private sector can together clear bottlenecks preventing these types of business from expanding into the continental African market.

More details on the potential contents of AfCFTA domestic complementary agendas are presented later in this chapter. Clearly, however, governments must deepen their engagement with different segments of the private sector. This engagement may require a titanic effort from some low-income countries in Africa, and they may need support from the AfCFTA Permanent Secretariat, regional economic communities, and international partners. Private sector information and consultation must be as inclusive as possible with regard to both sector coverage and types of business consulted, given that the private sector is heterogeneous in every country. Private sector inclusion is necessary for more than just political legitimacy. It is also vital to fulfilling two concrete objectives.

First, the private sector is a valuable source of intelligence that policy makers need to better understand opportunities and difficulties for firms. Such information should ideally be gathered for each goods and services sector and with respect to each of the items on the AfCFTA negotiation agenda. This information would be very useful for governments and could help shape their positions at the negotiating table. Further, such intelligence is also pivotal to understanding the specific and practical challenges that different segments of the private sector will face when implementing the resulting commitments under the AfCFTA. As explained below, practice in other developing countries shows how critical it is for governments engaged in international free trade negotiations to pair such a process with parallel negotiations of a domestic complementary agenda. Such complementary agendas include steps to support the competitiveness of the private sector, which helps ensure a smooth transition to free trade during gradual liberalization and maximizes the potential benefits of trade agreements (COMEX 2004).

Second, and equally important, private sector consultation is an excellent way for governments to explain how the AfCFTA will operate in practice. They can explain how exporters, importers, and investors can leverage the provisions of the agreement.

Some observers believe this is an area in which the AfCFTA could be improved and where international partners could provide support:

[T]o date there has been limited direct involvement of the private sector in the negotiations of the AfCFTA. It has largely been left up to individual countries to consult with national stakeholders through already established mechanisms that vary greatly in terms of effectiveness and inclusion.... For the AfCFTA to have the intended impact, it will require businesses to know about it and be able to use it. That means improving the information available to the private sector, which goes beyond the high-level presentations seen in most webinars to include details on the agreed rules of origin and tariff offers relevant to their markets. (ECDPM 2021)

In short, informing and consulting the private sector is a crucial part of successful international trade agreements and negotiations. It creates backing from the private sector and unlocks opportunities. The support of international development institutions can be particularly useful during these efforts. A final group to consider is extraregional enterprises, which, although not yet doing business in Africa, have already started to pay attention to the prospects of the market of 1.3 billion people that the AfCFTA will create. In fact, a significant part of the AfCFTA's potential may lie in the prospective investors that have not yet invested in Africa because of the segmentation of the regional market.

As this report clearly shows, and as explained in greater detail in the next section, the AfCFTA's real potential resides in the opportunity to catalyze a shift in the patterns of trade and FDI in Africa. The highest transformational potential for Africa's industrialization and "servicification" of trade lies in migrating away from dependence on natural resource and domestic market–seeking FDI and toward efficiency-seeking FDI that integrates the African private sector into regional and global value chains.

Both investment promotion agencies in the region and high-level African government and business contacts need to be leveraged to lure greenfield investment into transformational investment projects. Most of the promise of the AfCFTA resides in attracting the type of FDI that the continent has not yet been able to attract, retain, expand, and link with the domestic private sector.

EMBEDDING THE AFCFTA IN A DOMESTIC ECOSYSTEM FAVORABLE FOR DIVERSIFYING TRADE AND INVESTMENT PATTERNS

More private sector opportunities and integration into global and regional value chains are vital to shifting from lower- to higher-value-added jobs. Foreign and African investors introducing newer technologies and business practices can create new jobs, inject fresh capital, and create knowledge spillovers. But these benefits are not automatic. Some countries attract large quantities of foreign investment and never move up the value chain. A suitable policy framework is needed to make the most of potential development benefits from trade and FDI and link it with the domestic economy.

Many African countries' policies have been shaped by their historical experiences of dealing with trade and investment around natural resource extraction. Despite the potential benefits, for such trade and investment patterns to be properly leveraged for sustainable development, several challenges must be overcome that are inherently different from trade and investment approaches promoting development of regional or global value chains in goods or services. As explained in this report, African countries need to use an approach different from the traditional pattern of natural resource–seeking investment when attempting to insert their economies into regional and global value chains. The main focus is export-oriented efficiency-seeking FDI and FDI in services, which, although it may in principle be domestic market–seeking, may nevertheless be critical to ensuring the competitiveness of the host country. This distinction is important because many of the existing policies that may make sense for dealing with FDI in natural resources may in fact be counterproductive when trying to attract and properly manage the efficiency-seeking FDI required to connect host countries to regional and global value chains.

In an increasingly globalized world characterized by rising levels of international production, trade, and competition, connecting the dots between international rulemaking, domestic reforms, and green and inclusive development becomes increasingly important. Trade and investment activity entails relationships among domestic and foreign private sectors, host governments, and civil society. Such relationships have multiple dimensions (Echandi 2021). A useful way to discuss the different dimensions that need to be taken into consideration to generate a favorable domestic ecosystem aimed at maximizing the potential benefits of FDI is to visualize the different stages in the life of an investment project (World Bank 2021). It starts with the efforts of host countries endeavoring to attract FDI, mainly through investment promotion services and incentives. Once the investor opts to invest, the second stage is the process of investment entry and establishment, comprising all requisites necessary to start FDI project operations. Once the FDI project is established, the next stage of the "FDI cycle" is to initiate and expand operations, a process that requires time and that requires host countries to apply policies to enable the long-term permanence of investors. Such a process culminates in the phase during which FDI leads to links with the domestic economy to maximize potential spillovers. Indeed, the main objective of maximizing the potential benefits of trade and FDI is to promote economic activity that will generate links and spillovers and more and better-paid jobs (World Bank 2021).

An export-oriented international firm that chooses to invest abroad and the government that hosts that firm create an ongoing relationship. Too often, states focus only on promotion and attracting new export-oriented investors to their country. This objective is important, but it is only one small part of the story. The real benefits to the state come later in the relationship, because the foreign firm will not only generate more trade but also bring in capital, employ local staff, transfer technology and know-how to nationals, source from local suppliers, and help diversify and upgrade the economy.

The AfCFTA is being negotiated in an international context in which world trade and international production are being affected by a series of economic and noneconomic factors. The world is living through uncertain times, and such uncertainty is affecting economic recovery. However, as the evidence shows, those countries that are more integrated through global value chains have proven to be much more resilient to external shocks and quicker to bounce back from the crisis. This fact has two key implications for Africa.

First, contrary to some protectionist arguments, evidence shows that trade is far from a problem, but rather a key part of the solution for economic recovery and development. Second, the more predictable an environment African countries can forge for traders and investors alike, the greater the opportunities for economic recovery. This is where the AfCFTA is called upon to play a key function, that is, by providing a set of rules and disciplines in a wide scope of areas covering trade in goods, services, investment, digital trade, and intellectual property. The AfCFTA is the first-ever continentwide trade agreement in Africa. By providing enforceable rules and disciplines, including dispute settlement provisions, the AfCFTA is attempting to establish a coherent rules-oriented regime guiding domestic policies in all the countries of the African continent.

The more effective this rules-oriented regime is, the greater the degree of certainty and predictability that the AfCFTA will provide, unlocking the potential dynamic effects of economic integration. A more detailed explanation of how to properly implement this rules-oriented regime is developed in the sub-section titled "The Different Levels of AfCFTA Implementation." At this stage, a key point to stress is that, with their wide scope, the different chapters of the AfCFTA agreement set forth a comprehensive agenda for the types of domestic reforms African countries may undertake to generate greater trade and the kinds of FDI necessary to forge regional and global value chains on the continent. Eliminating tariffs and nontariff barriers, facilitating trade in goods across and within borders, fostering greater competition on trade in services—given that services are not only economic sectors but also crucial determinants of the final cost of traded goods—are key elements that investors will look at in the AfCFTA agreement.

Investment Attraction through Promotion

If properly implemented, the AfCFTA can become a significant investment promotion tool for African countries. In fact, the AfCFTA process is already placing Africa more firmly on the world map. Investors worldwide are observing the process with great expectations. The key now will be for countries to learn how to ensure and measure effective implementation and advertise and publicize it to generate credibility (see the section titled "The Different Levels of AfCFTA Implementation"). However, a critical aspect would be to ensure that African investment promotion agencies become familiar with the contents of the AfCFTA and become involved in its implementation, especially in the specific areas, such as trade facilitation, that will make export-oriented investors enthusiastic about locating their new businesses in the region.

Equally important, foreign investors will likely look for local partners given that Africa may still be an unfamiliar market for many of them. It would be shortsighted to view extraregional FDI as undesirable for Africa. On the contrary, extraregional FDI, with its sophisticated technology and business practices, must flow into the region and get connected with African businesses to ensure spillovers and linkages. Investment promotion agencies can play a significant role in connecting extraregional investors with regional ones so they can explore how to develop business together. Such information sharing is critical and could easily be accomplished by connecting African investment promotion agencies with regional and extraregional business associations and institutions.

Investment Attraction through Incentives

Incentives have become pervasive in global competition for FDI in the past three decades (Jedlicka and Sabha 2017). However, despite the growing popularity of incentives in developed and developing countries, confusion about the role incentives play in generating investment and fostering different policy objectives is still marked. Evidence from both surveys and econometric studies indicates that the key determinants of investors' decisions about where to locate rarely depend on investment incentives but are based on broad economic and investment climate factors, such as market size, trade and investment policies, infrastructure, and human capital availability.

Investment incentives tend to be relevant only at the margins of investor decision-making (James 2009). They are likely to be most influential when investors are wavering between similar options, and when a country already has a favorable investment climate. Further, because incentives have implications relating to political economy, competition policy (potentially spurring a "race to the bottom" at the regional, national, and subnational levels), and sustainability (often putting a significant burden on budgets), it is especially critical for policy makers and practitioners to adopt a holistic approach to rationalizing a country's incentives regime on the basis of good practices. Many African governments provide costly incentives to types of FDI, such as natural resource–seeking FDI, that tend to be unresponsive to them, entailing significant fiscal costs for attracting FDI that may have gone to the country anyway.

Key recommendations for investment incentives would be to prepare and publicize inventories of existing incentives, conduct a cost-benefit analysis of existing programs, and undertake an internal policy dialogue to rationalize the use of incentives (Jedlicka and Sabha 2017). It is critical to be aware that FDI engaged in regional and global value chains may focus on assessing the real level of competitiveness a host country can provide for their operations, rather than on the size of the tax or financial incentives that in the end may not be able to compensate for high production costs. Rather than providing nontargeted incentives, African governments may be much better off using scarce fiscal resources to invest in public goods, such as human capital formation

and programs to adjust availability of human resources to enterprises' needs, as well as investing in hard infrastructure to facilitate trade and investment.

Investment Entry and Establishment

Over the past two decades, many governments in developing countries have become interested in how to leverage trade and FDI to insert their economies into regional and global value chains. However, and somewhat paradoxically, very few maintain an entirely open trade and investment regime. Most African countries are relatively open to FDI, having few formal legal discriminatory restrictions based on nationality that affect investment in manufacturing or agribusiness (IFC, MIGA, and World Bank 2010). The situation is much less clear, however, with respect to FDI in services and with procedural requirements across the sectors.

Services—ranging from transport and telecommunications to health and education—are a major part of the global economy, generating more than two-thirds of GDP, representing more than three-quarters of FDI, employing the most workers, and creating the most new jobs globally. Consequently, services are central to growth and poverty reduction, and international trade and investment in services is critical to the performance of services. Further, services are important for economic development, not only as a source of jobs, output, and exports in themselves, but also as inputs into the production of other services and goods. Not surprisingly, the cost and quality of services have far-reaching consequences for economywide performance. In addition to being important intermediate inputs into production, services also perform an important function in coordinating production processes both within and, increasingly, across countries in the context of regional and global value chains. Modern manufacturing is a heavy user of services inputs, and its competitiveness relies on access to state-of-the-art suppliers at the best price. For example, although services account for approximately one-fifth of global trade, recent research has shown that services account for more than 50 percent of the value added in gross exports and more than 30 percent of the value added in exports of manufacturing goods (WTO 2019).

Releasing services from constraints is critical to success. As explained earlier in this chapter, despite their acknowledged contribution to economywide performance, services remain shackled by a host of restrictive policies that impede cross-border trade, investment activity, and consumer and labor mobility. Part of the problem has to do with the lack of transparency, given that most restrictions on trade in services have been hidden within laws and regulations that pursue legitimate policy objectives, the pursuit of which does not require restricted services trade. This difficulty will be overcome as a result of cooperation between the AfCFTA Secretariat, the World Bank Group, the WTO, and other European partners in preparing services regulatory audits for all AfCFTA countries. Such data will enable African countries to undertake sectorand measure-specific dialogues with their stakeholders. They can examine whether

there may be less trade-distortive means for pursuing legitimate public policy objectives while fostering gradual trade liberalization in the future.

Simpler rules and regulations would help export-oriented investors in Africa. Facilitating FDI entry and establishment is required to lure new potential investors into the region. Indeed, it would not make sense that, after significant efforts promoting African countries abroad, prospective investors could not travel easily within the region because of difficulties obtaining visas. Rather than eliminating visa requirements, AfCFTA countries could follow the example of many low-income countries in Africa and Asia, where visas can be easily obtained on the internet. Further, in those African countries where discriminatory screening procedures still exist—that is, discretionary preapproval of FDI projects to enable foreign investors to request permits and licenses to start operations in the domestic markets—their elimination would be an important step in facilitating the establishment of FDI in Africa.

Investment Retention and Expansion

It is critical that African countries provide certainty and predictability for new firms that want to expand their operations in a host country. At this stage, political risks such as expropriation, instability, and uncertainty might discourage investors from expanding their existing businesses, or even cause them to relocate or close their businesses. Although developing-country governments compete in costly promotion campaigns and incentives to attract FDI, recent data show that, every year, about one-quarter of all investors investing in developing countries—many in Africa—discontinue their FDI projects because of unresolved grievances with subnational or specialized regulatory agencies (Echandi, Nimac, and Chun 2019; MIGA 2009–13).

Adverse regulatory changes, breaches of contract, de facto expropriation, and transfer and convertibility restrictions prompt firms to withdraw. The frequency of expropriation and breaches of contract have declined over the past decade, though they remain the most serious—and sudden—adverse regulatory changes. A lack of transparency and predictability in dealing with public agencies and delays in obtaining the necessary government permits to start or operate businesses have significantly increased as factors driving FDI projects to end. Recent good practices undertaken in various peer countries could serve as a useful guide to African countries wishing to explore the use of investor-state conflict-management mechanisms. Conflictmanagement mechanisms are a set of protocols for coordination among public agencies that involve the use of problem-solving techniques allowing host countries and private traders and investors to address grievances at a very early stage, preventing conflicts from escalating into serious problems that may lead a business to withdraw. As part of implementation of the AfCFTA treaty, African countries could consider setting up investor-state conflict-management mechanisms to tackle such problems promptly.

FDI Links with the Domestic Economy and Local Value Added

Integration in regional and global value chains can contribute to the domestic economy through technology transfer, employment, and skills transfer and spillovers, and more broadly through diversifying and upgrading the local economy. However, many policy makers struggle with how to secure these benefits. Attempts to "force" transfers of technology, local sourcing, or local employment may backfire if firms are unwilling or unable to comply with the regulations, or if local staff and firms do not yet produce the quality and quantity of inputs or skills needed.

Evidence on positive spillovers of FDI—including on innovation—varies significantly by country, sector, and enterprise (Hufbauer et al. 2013). Essentially, technology and know-how can be diffused from foreign investors through various mechanisms, including, among others, supplier development and sourcing specification manuals, assistance enhancing quality accreditation, provision of access to international marketing networks, and enabling mobility of workers, technical specialists, and managers. However, innovation- and technology-related benefits from FDI will not flow automatically. Positive spillover effects cannot be taken for granted. Much depends on the motivation and capacity of local firms to harness the innovation and capitalize on the new technologies and the capacity of intermediary agencies, such as investment promotion agencies, to undertake matchmaking between foreign and local investors.

Many developing and transition economies introduce local content policies to foster spillovers to the local economy from foreign investments and to help integrate local industries into global supply chains. However, different types of policies attempting to foster domestic value addition can have vastly different impacts on both domestic and foreign trade and investment. Table 5.1 offers a general typology of those policies. Some of these policies (shaded in blue) are highly competition and trade distortive and can deter FDI inflows. Others (red) may work provided the host country market has certain characteristics, and still others (amber) tend to be less trade—and competition—distortive.

The design and implementation of policies fostering domestic value addition suffer from a number of misconceptions. Several examples are set out in table 5.2. Many issues arise because policies that are designed with one type of investment in mind (for example, investment in extractive industries) can have adverse impacts on other types of investment (for example, export manufacturing investments). Within the AfCFTA context (considering that the type of FDI more suitable to facilitating regional and global value chains in the region will be efficiency-seeking investment), African countries should consider assessing their local content policies. Many existing local content requirements were designed with natural resource–seeking FDI in mind and may be counterproductive for the new types of FDI being sought through the AfCFTA. International experience shows that exploring nondistortive policies to foster domestic

Table 5.1 Typology of policies aiming to foster domestic value addition

Policies and Impact	Examples		
Impose mandatory local content policies: Competition and trade distortive May deter foreign direct investment inflows	Local content performance requirements for the establishment of a foreign investment		
	Local content requirements to access public procurement by foreign investors		
Promote value addition through incentives:	Incentives to promote domestic value addition		
May distort competition and trade Have shown positive effects on local content in some cases (large markets, suffcient capacity)			
Other (desirable) nondiscriminatory domestic value addition policies: Naturally promote domestic value addition in a sustained manner by increasing investment and domestic firms' competitiveness	Corporate social responsibility programs		
	Capacity building including skills development and research and development		
	Improving logistics		
	Investing in infrastructure		
	Improving other aspects of a business-friendly environment (for example, regulatory transparency)		
	Other aspects of private sector development, for example, capacity-building programs for small and medium enterprises		

Source: Based on Echandi 2015.

Table 5.2 Myths and realities about local content

Myth	Reality
Mandatory local content: "Mandate quotas for local content and it will happen."	Market mechanisms: Local content must make sense within the market—the right business climate and the right potential suppliers.
Local equity: "Domestic ownership of assets is essential."	Meaningful participation: Companies with any ownership can create local value added and jobs.
Targeting SMEs: "Local content is an SME development program."	All sizes of companies: Suppliers of all sizes engage in local content; focus on promising suppliers.
Discrimination: "Foreign firms discriminate against local firms even if the price is lower!"	Capacity building: To become sustainable suppliers, local firms need to meet global standards of price, quality, and service.
Punitive approach: "Investors must meet local content requirements now or else pay a fine."	Local content is a joint process: Plan and collaborate with stakeholders to enable local content.

Source: Echandi 2015.

Note: SMEs = small and medium enterprises.

value addition (that is, the policies shaded in amber in table 5.1) is the most promising way to balance the legitimate interests of host countries for generating value addition and effectively attracting FDI.

TOWARD AN AFCFTA COMPLEMENTARY AGENDA

This report highlights the significant opportunities the AfCFTA can generate for Africa. Maximization of the potential benefits of the AfCFTA is far from automatic; it will require mechanisms to translate the AfCFTA commitments into concrete actions. To a great extent, whether the AfCFTA becomes a milestone for development in the region will depend on (1) the depth and breadth of detailed commitments (to be negotiated) to remove trade barriers, (2) the buy-in to and effective use of the AfCFTA by a critical mass of the private sector, (3) the extent to which the AfCFTA commitments are effectively implemented, and (4) specific complementary initiatives ensuring a smooth transition to free trade and inducing greater flows of productive investment in nontraditional sectors, leading to more and better jobs. There will also be challenges to monitoring the implementation of the AfCFTA to ensure fairness and a level playing field.

Realizing the AfCFTA's potential will require effectively implementing the obligations of the trade agreement. A key issue is whether and how the AfCFTA institutions and Member States might address the weaknesses that have limited the impact of previous regional trade agreements in Africa. Consultation and support will be crucial among consumers, traders, and firms. Positive trader and private sector engagement has proved to be important in national and regional trade agreements elsewhere, including in Southeast Asia.

Effective regional market integration goes well beyond simply removing tariffs. It means effectively addressing on-the-ground constraints that may paralyze the daily operations of ordinary producers and traders. Addressing these constraints requires regulatory reform and, equally important, capacity building in institutions that are charged with enforcing the regulations.

Trade reforms at the domestic level must cover services as well as goods (even if services are not covered by the AfCFTA until the agreement's next phase of negotiations). Services are critical, job-creating inputs into almost all other activities; for example, transport plays a crucial role in manufacturing.

The Different Levels of AfCFTA Implementation

Action is needed simultaneously at the supranational and national levels. Regional communities can provide the framework for reform, for example, by bringing together regulators to define harmonized standards or to agree on mutual recognition of the qualifications of professionals. Still, the responsibility for the agreement's

Box 5.2 Successful regional integration secretariats: Key lessons from experience

- A secretariat's legitimacy, relevance, and political support depend on its capacity to efficiently deliver relevant services to its stakeholders.
- The quality of technical staff rather than quantity is what really matters.
- Costly physical infrastructure of secretariat buildings does not ensure success—human capital
 does (the "software" is more important that the "hardware").
- Avoiding "politicization" of technical staff, including appointments, is critical.

implementation ultimately lies with each country. However, the role of the AfCFTA Permanent Secretariat will be critical. The AfCFTA Permanent Secretariat, established in 2020 in Accra, Ghana, is equipped with competent technical staff (AfCFTA Secretariat 2021). The more efficient and relevant the secretariat becomes in practice, the more likely an appropriate articulation between national, subregional, and continental actions and initiatives may in fact contribute to the effective implementation of the AfCFTA. For several decades, the World Bank Group has been providing various types of technical assistance to secretariats in charge of administering economic integration agreements around the world, including most of the regional economic communities in Africa, such as COMESA, EAC, the Economic Community for the West African States, SADC, and the West African Economic and Monetary Union. Although each regional integration process has its unique features, experience in many continents has enabled the World Bank Group to identify good practices, shown in box 5.2, on what works (and what does not) to ensure that trade agreements catalyze greater trade, investment, and jobs, rather than ending as merely aspirational texts. Further, box 5.3 illustrates the types of services that regional secretariats in many parts of the world provide, and that the recently established AfCFTA Permanent Secretariat has started to deliver.

The relevance of any free trade agreement depends on its effective implementation. In the African context, effective implementation will require the AfCFTA Secretariat to play a key role facilitating the concerted efforts of regional economic communities and Member States—many of which do not have good track records for implementing trade agreements they have signed. This endeavor will require governments to establish or strengthen domestic institutions to administer, monitor, and enforce the AfCFTA.

The AfCFTA Secretariat will also need to support its Member States on convergent and effective means by which to engage the private sector and civil society to ensure they also fully grasp how the AfCFTA can contribute to diversifying exports, attracting investment, and generating more and better jobs. Although the effective implementation of international trade agreements is ultimately the responsibility of national governments, experience shows that successful regional secretariats can significantly facilitate and support member states by providing the services described in box 5.3.

Box 5.3 Services provided by regional secretariats

- Serve as an observatory of regional economic intelligence, acting as a depository of trade and investment data and statistics, market analysis, economic indicators, studies, and relevant documents
- Assist member states in administering the trade agreement, including serving as a venue for committees, working groups, and political decision-making bodies following up on plans to comply with regional instruments and projects.
- Serve as a venue for bringing member states and other stakeholders together to solve issues
 related to the application or interpretation of the applicable trade agreement.
- Act as a platform to undertake regional information and consultation activities for the private sector and civil society.
- Provide capacity-building services to officials as well as to relevant stakeholders from the private sector and civil society.
- Serve as a gateway to administer and coordinate regional trade-related cooperation projects.

Key Elements of the AfCFTA Complementary Agenda

Based on the experience of negotiations in different parts of the developing world, there are three topics that must be addressed to maximize the potential benefits of AfCFTA: treaty administration, cross-agency trade-related implementation support, and transition to free trade (box 5.4). Each area is developed in more detail below.

Box 5.4 Key elements of a potential AfCFTA complementary agenda

Drawing on the experience of similar negotiations in other developing countries, designing a "complementary agenda" to maximize the potential benefits of the African Continental Free Trade Area (AfCFTA) would entail concrete actions on at least three fundamental fronts:

1. Administration of the AfCFTA agreement

Capacity building in the form of training, direct advice, and implementation support to ministries of trade to enable the compliance, administration and problem-solving, economic monitoring, and "socialization" of the AfCFTA will be necessary.

2. Trade-related institutional support

Providing capacity building in the form of training, advice, and infrastructure to border management agencies, particularly those tasked with regulating customs, sanitary and phytosanitary measures, technical barriers to trade, and services is important. These agencies may not have been involved in negotiations but will need to apply the AfCFTA on a regular basis. It is essential to enable compliance and administration and problem-solving in each subject area.

3. Transition to free trade

Sector-specific initiatives aimed at supporting business expansion as well as enabling domestic firms (particularly small and medium enterprises) to address economic distortions affecting their competitiveness in a free trade environment also constitute good practice.

Good practices on treaty administration

Relevant country authorities should be able to undertake the following four key functions:

- Compliance and execution. Authorities should undertake gap analysis between disciplines and commitments included in the AfCFTA and domestic legislation and regulations, as well as follow up on liberalization and other commitments.
- 2. Committee follow-up, problem-solving, and dispute settlement. The operations of the different committees and mechanisms included within the institutional framework of the AfCFTA can be leveraged. Problems affecting traders and investors can be tackled. Promoting low-cost, efficient, and transparent means of identifying ways to solve problems for traders and investors is critical. This work could, for example, mirror the requirements under the WTO's Trade Facilitation Agreement for National Trade Facilitation Committees; a similar group of stakeholders could do the same under the AfCFTA. It may also mean using other regional and international agreements, such as the WTO's Trade Facilitation Agreement, to address, resolve, and document concerns.
- 3. Information and consultation with private sector stakeholders and communication strategy for civil society. Data obtained from economic analysis and monitoring can be leveraged to (1) facilitate dialogue between the private sector and governments to reach agreement on parallel initiatives enabling domestic businesses to properly move toward free trade in the AfCFTA's implementation, and (2) to communicate simple, clear, and attractive messages explaining to civil society in Member States the impacts of the AfCFTA on the different dimensions of citizen's lives, in particular the generation of new and better jobs.
- 4. Economic analysis and monitoring. Techniques are needed to identify and gather data necessary to measure and monitor the economic and distributional impacts of the AfCFTA on key economic variables in the Member State (income, trade and investment flows, jobs, poverty and inequality), with specific attention to sectoral composition, gender, and geographic distribution.

AfCFTA cross-agency implementation support

Effective implementation of the AfCFTA will require providing support to several additional agencies beyond those directly responsible for administering the agreement. Several authorities usually regulate and administer procedures on various matters

that directly affect the operation of the norms and disciplines of the trade agreement. Countries should, with the support of partner institutions such as the World Bank Group, deploy a series of analytical tools and specialized expertise to support those agencies whose mandate directly relates to AfCFTA commitments. Concrete activities under trade-related implementation support will include benchmarking, regulatory gap analysis, economic impact assessments, economic modeling, procedural streamlining process maps, regulatory transparency assessments, and stakeholder consultations. These activities are necessary to provide specific policy and regulatory reform recommendations to fully implement the norm and spirit of the AfCFTA agreement in the following areas:

- Market access: Tariff liberalization and elimination of nontariff barriers
- Trade facilitation and border management procedures
- Sanitary and phytosanitary measures
- Technical barriers to trade
- Trade remedies: Safeguards, antidumping, and countervailing duties
- Trade in services
- Investment
- Competition policy

Transition to free trade

Technical assistance would be geared toward assisting with the identification of concrete complementary policies and actions aimed at maximizing the potential benefits of the AfCFTA, as well as at facilitating a smooth transition to free trade. Support under this item would entail activities such as the following:

- Identification of specific sectors that may potentially benefit from greater expansion opportunities, as well as those that may be vulnerable during the transition to free trade, and estimates of the impact that specific AfCFTA commitments may have on domestic firms and jobs, gender, and other relevant variables
- Diagnosis of specific economic and regulatory distortions affecting the competitiveness of selected types of firms (such as small and medium enterprises in selected sectors) and successful lessons learned from relevant countries in addressing similar challenges
- Good practices on planning, executing, and following up on processes of information and consultation between the state and the private sector in designing specific agendas for a transition to free trade in the context of the AfCFTA
- Leveraging and improving export promotion programs and foreign investment promotion services to link the domestic and international private sectors

NOTES

- 1. AfCFTA market access negotiations for trade in tangible goods are practically concluded. Currently, trade under the AfCFTA is possible for about 81 percent of tradable goods given that they already have agreed-on rules of origin in place (ECDPM 2021). Only the most sensitive aspects of the market access negotiations remain to be agreed on, such as the final list of the 3 percent of tariff lines that will be excluded from liberalization and the rules of origin for a few remaining products, including clothing and textiles, automotive, and sugar (Tralac 2021). Further, the general framework applying to trade in services is already complete. By December 2021, AfCFTA services negotiators were focused on two additional steps: The first step is to foster progressive liberalization based on "WTO plus" positive lists and exchange of offers by Member States. The process has already begun. AfCFTA parties aim to conclude it no later than the first half of 2022. Second, negotiators have to develop sectoral disciplines in all services sectors, based on best practices in the regional economic communities, starting with five key priority sectors: business services, communication services, financial services, transport services, and tourism. Initial discussions have begun but are awaiting progress on the exchange of offers on sector-specific commitments.
- 2. Credendo states (https://credendo.com/en/credendos-country-risk-assessment):

Political Violence includes all violent act(s) undertaken with a political objective; this concept is broader than 'war' and includes i) 'terrorism' (political, religious and ideological objectives) and ii) political violence damage (damage to material assets as a result of political violence); for the purposes of analyzing the political violence risk, types of business interruption as a result of political violence damage are included.

In order to assess the political violence risk, Credendo looks at the actual levels of internal violence in and external conflict with a country, but also at the conflict potential that arises from (lingering) internal and external tensions, frustration and dissatisfaction.

3. Credendo states (https://credendo.com/en/credendos-country-risk-assessment#riskofexpropriat ion):

The risk of expropriation encompasses all discriminatory measures taken by a host government which deprive the investor of its investment without any adequate compensation; for the purpose of analyzing the expropriation risk, events of embargo, change of (legal) regime and denial of justice are included.

In order to assess the expropriation risk Credendo not only assesses the risk attached to expropriation as such, but also the functioning of legal institutions in the host country and the probability of a negative change in attitude towards foreign investments.

- 4. Credendo states (https://credendo.com/en/credendos-country-risk-assessment#transferrisk):

 The currency inconvertibility and transfer restriction risk refers to the inability to convert and transfer out of the host country any funds related to the investment.

 The assessment of the currency inconvertibility and transfer restriction risk is based on the same risk drivers as the assessment of political and assimilated risks related to medium-/ long-term trade transactions.
- 5. Including flows of data in the definition of digital trade has huge implications. Given today's current level of technology, some portion of nearly every type of business is digitally enabled. Thus, in one way or another, every industry leverages digital technology to compete in the international market. The interconnection via the internet of computing devices embedded in everyday objects, enabling them to send and receive data—that is, the "internet of things"—already ties together more than 5 billion types of objects, including cars, various types of home appliances, trains, planes, and even entire buildings. It has been estimated that, by 2024, 27 billion devices will be constantly generating data and sending it across the room or across borders (USTR 2017). The manufacturing sector creates more data than any other sector of the economy. These data are generated at every link in the value chain, from research and development, to factory operations, to services—and enterprises use these data to increase productivity.

- 6. Data localization refers to a set of requirements imposed on digital traders to store data within a particular jurisdiction or locate computing facilities locally, as well as bans on cross-border data flows (USTR 2017). Although some argue that data localization requirements are necessary for governments to ensure they have access to data for law enforcement, or to best protect their citizens' privacy, or to promote domestic industries, others argue not only that localization is not the best policy answer for those concerns but also that data localization's costs can be considerable, both to firms and economies as whole (Ankeny 2016). For instance, it has been estimated that data localization policies in China would cost as much as 1.1 percent of its GDP, reducing domestic investment by 1.8 percent, exports by 1.7 percent, and welfare by the equivalent of 13 percent of each citizen's salary. In the European Union, the costs would add up to 0.4 percent of its GDP, reduce investment by 3.9 percent, and result in welfare costs of up to US\$193 billion. At the firm level, studies have shown that data localization measures raise the cost of hosting data by 30 to 60 percent. These results occur because the internet enables centralized data storage and processing, taking advantage of economies of scale in cloud computing and a seamless, global internet. When governments break apart these efficiencies they exponentially raise the cost of doing business (Ankeny 2016).
- 7. Findings based on data from the African Development Bank, the World Bank, the International Monetary Fund, the United Nations Conference on Trade and Development, and the Pan-African Chamber of Commerce and Industry.

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Appendix A Gravity Model Estimates of Potential FDI Flows

The econometric model is designed to estimate the foreign direct investment (FDI) effects of the African Continental Free Trade Area (AfCFTA). These FDI effects will enter the computable general equilibrium model to address the general equilibrium effects of the AfCFTA through an FDI channel. Of special interest is estimating the direct effects of the AfCFTA, which take place between pairs of members of the AfCFTA, as well as third-country effects, which include indirect effects related to other countries. The econometric model assumes that the FDI stock from origin country i to destination country j in period t, y_{ijt} , is generated from the following gravity specification:

$$y_{ijt} = \text{EXP}[\delta POL_{ijt} + \theta_1 POL1_{it} + \theta_2 POL1_{jt} + \phi_1 POL2_{it} + \phi_2 POL2_{jt} + Z'_{ijt}\beta]\eta_{ijt}. \quad (A.1)$$

The disturbances η_{ijt} are assumed to be independent and identically distributed, but possibly heteroskedastic, such that $E[\eta_{ijt}|X_{ijt}]=0$, where X_{ijt} is the set of all variables included in the exponential term in equation (A.1). The effects of interest concern the variable POL, which is a proxy for the existence of preferential treatment. Two gravity specifications are considered. The first specification uses a binary indicator for preferential trade agreement (PTA) membership, POL = PTA-bin, where PTA-bin = 1 when there is a PTA in place between countries i and j in year t, zero otherwise. The second specification uses the core depth, POL = PTA-core, which is a count of the total number of core provisions that are included and legally enforceable in a PTA (see Hofmann, Osnago, and Ruta 2017 for details).

Notably, third-country effects for the origin and the destination countries are considered separately and determined by geographical distance between countries. The third-country effects are captured by spatial terms, computed following LeSage and Pace (2008). Proximity between a pair of countries is measured as the inverse of distance between capitals, as available from the CEPII (Centre d'Études Prospectives et d'Informations Internationales) gravity database for 225 economies. The starting point is therefore a 225 by 225 matrix of proximities. Given the dyadic nature of the data,

spatial variables are computed for both origin and destination for each country pair. The spatial terms, for both origin and destination, are of two types, and for both *PTA-bin* and *PTA-core* variables.

The first two spatial terms include all partners with an agreement with the origin and the destination, which correspond to POL1,, and POL1,, respectively, in equation (A.1). Therefore, these variables reflect the PTA-type integration of both the origin and the destination. The second set of spatial terms for origin and destination reflect membership in agreements between third countries in the rest of the world, not including the agreements with the origin and the destination, and correspond to POL2, and POL2,, respectively, in equation (A.1). As an example for the PTA variable, consider a dyad composed of South Africa (ZAF) as the destination and France (FRA) as the origin. The first spatial variable for ZAF considers all other country pairs that include ZAF as either destination or source. This variable reflects the degree of economic integration between ZAF and all other countries in the world, excluding FRA. The second spatial variable for ZAF is instead computed as the weighted sum of the preferential integration between all country pairs, excluding ZAF. In both cases, following the literature, weights are normalized to unity. The variable for FRA is computed in a similar fashion. For the case of PTA-core, the binary indicator is replaced by the PTA-core level between two countries.

The dependent variable, the bilateral stock of FDI, is from the World Bank Group Harmonized Bilateral FDI Database; the PTA data are from the horizontal depth database (Hofmann, Osnago, and Ruta 2017). The vector of control variables, Z_{ijl} includes the gross domestic product (GDP) of both the origin and destination countries (from the World Development Indicators) as well as other control variables. These other control variables include a pair of binary indicators for joint World Trade Organization membership (from the CEPII gravity database) and joint European Union membership. Given that investment is regulated by both PTAs and bilateral investment treaties (BITs), an indicator is included that takes the value of one in all years in which a BIT is in force between source and destination (from the United Nations Conference on Trade and Development). Economic size is controlled for by including the log of GDP of both countries (from the CEPII gravity database). Changes in investment incentives resulting from tax policy are accounted for by including the difference in corporate tax rates between source and destination (from the Tax Foundation database).

In addition, principal component analysis (PCA) is used to compute a set of indicators that summarize other social, political, and economic features of countries that are likely determinants of both investment and economic integration. Given a set of characteristics for a given observation, PCA allows the computation of a smaller set of orthogonal indicators that contain most of the information included in the original characteristics. The structure of the economy is described by five indicators from the Penn World Tables: the capital-labor ratio, human capital endowments, and the percentage of GDP allocated to private consumption, investment, and government consumption.

Cultural characteristics are represented by four indicators from the CEPII gravity database that indicate the percentage of the population that is either Catholic, Muslim, Protestant, or has other or no religious beliefs. Governance and political rights are included by combining different indexes from multiple sources. These include the six indexes from the World Governance Indicators database (Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption); the Political Rights, Civil Liberties, and Level of Democracy indexes from the Freedom House database; the Regime Durability Index from the Systemic Peace Project; the Political Competition Index from the Polyarchy data set; and the Political Constraint Index from the POLCON database. Population and the area of the country (from the CEPII gravity database) are also included. The three PCA components that are found to be most important for both origin and destination countries are used in the estimation of the gravity model. For 2017, they account for 76 percent of the total variance of all characteristics (first component 52 percent, second component 14 percent, and third component 10 percent). In addition to these three PCA components for the origin and destination countries, Z_{iit} also includes the PCA components of the absolute differences of the variables between origin and destination. Only the second and third components of the PCA on the difference of the variables are significant and kept in the specification. Finally, a set of pair fixed effects, time-varying origin and destination fixed effects, and year fixed effects are added to Z_{iit} to account for unobserved heterogeneity.

The sample covers 225 economies over the period 2002–17 (135,027 observations that cover different country-pairs and years). Estimation is carried out by means of Poisson pseudo-maximum likelihood (see, for example, Santos Silva and Tenreyro 2006). Table A.1 shows the estimated direct and third-country (spatial) effects of PTA membership for the AfCFTA FDI broad scenario, using the *PTA-bin* indicator as a proxy for PTA membership, and for the AfCFTA FDI deep scenario, using the *PTA-core* count as a proxy for the PTA level of integration. The spatial variables capturing the PTA relationship between all partners with the origin and the destination are, respectively, *PTA-bin1 origin* and *PTA-bin1 destination* for the regression on the binary indicator for PTA membership, and *PTA-core1 origin* and *PTA-core1 destination* for the regression using the core depth count. The spatial variables reflecting the degree of integration between countries in the rest of the world, excluding the origin and the destination countries, are *PTA-bin2 origin* and *PTA-bin2 destination* for the regression using the PTA binary indicator, and *PTA-core2 origin* and *PTA-core2 destination* for the regression on the core depth count.

The direct effects, *PTA-bin* and *PTA-core*, are positive and significant. For the AfCFTA FDI broad scenario, the direct effect of the implementation of a PTA between two countries yields, on average, an increase in investment of 23.5 percent $(100 \times [\exp(0.211) - 1])$. For the second scenario, the introduction of an agreement of core depth equivalent to 28 results in an increase in investment of 32.7 percent $(100 \times [\exp(28 \times 0.0101) - 1])$. The spatial terms have similar relative signs and magnitudes: On the one hand, the higher the

Variables	AfCFTA FDI broad scenario FDI stocks		AfCFTA FDI deep scenario FDI stocks	
PTA-bin	0.211***	(3.158)	NA	NA
PTA-bin1 destination	1.352	(0.950)	NA	NA
PTA-bin1 origin	-1.029	(-0.712)	NA	NA
PTA-bin2 destination	4.771	(0.865)	NA	NA
PTA-bin2 origin	-2.524	(-0.480)	NA	NA
PTA-core	NA	NA	0.010***	(2.873)

NA

NA

NA

NΑ

NA

NA

NA

NΑ

0.057

-0.049

0.196

-0.129

(1.147)

(-0.986)

(1.037)

(-0.709)

Table A.1 PTA-related coefficients from the gravity econometric specification

Source: World Bank estimations.

PTA-core1 destination

PTA-core2 destination

PTA-core1 origin

PTA-core2 origin

Note: Specifications include gross domestic product of the origin and destination countries and several controls for membership in the World Trade Organization, membership in the European Union, existence of a bilateral investment agreement between the pair, differential between the origin and destination corporate tax rates, and principal components summarizing determinants related to the structure of the economy, religious composition, and governance. Pair, year, and time-varying origin and destination fixed effects are included. Sample coverage: 2002–17. Number of economies = 225. Number of observations = 135.027.

All PTA terms (direct and spatial effects) are jointly significant at 1 percent (AfCFTA FDI broad scenario, PTA) and 5 percent (AfCFTA FDI deep scenario, PTA-core). The sum of the spatial effects is jointly significant at 5 percent for regressions in the AfCFTA FDI broad scenario and deep scenario.

AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; PTA = preferential trade agreement. Robust t-statistics in parentheses. Errors are clustered at the country pair level.

*** p<0.01, ** p<0.05, * p<0.1. NA = Not applicable.

level of economic integration of the neighbors of the destination, the higher the level of investment. On the other hand, investment decreases with preferential access between the neighbors of the origin country. The large magnitude of the spatial effects is explained by the large number of country pairs in the data set. For instance, the estimated coefficient associated with *PTA-bin1 destination* is related to the case in which the destination country has preferential access to all countries in the sample other than the origin country. In the same vein, the effect of *PTA-bin2 destination* reflects the case in which all neighbors of the destination country in the sample have preferential access to each other, excluding the destination.

Three main factors influence how countries are affected by implementation of the AfCFTA: initial PTAs signed by the country, PTAs signed by the country's neighbors, and initial level of FDI. The first factor is the direct effect, which is determined by

the initial level of integration. The second factor is an interaction of the geographical position of the country with the level of integration acquired by its neighbors. In this regard, all else equal, third-country effects will tend to be higher for countries that are more centrally located. Similarly, third-country effects will be higher if more neighbors experience increased preferential integration. Third, because percentage changes are applied to baseline investment, the initial levels of FDI play a role in determining the changes to FDI associated with AfCFTA implementation. The joint, estimated effect by country on FDI stocks is reported in tables A.2 (inward FDI stock) and A.3 (outward FDI stock).

Table A.2 Estimated changes in inward FDI stock in 2035, by economy

		AfCFTA FDI broad scenario AfCFTA FDI deep s		deep scenario	
Economy	Baseline (2017 US\$, billion)	Change (US\$, billion)	Percentage change	Change (US\$, billion)	Percentage change
Congo, Dem. Rep.	9.098	18.914	207.89	26.078	286.63
Congo, Rep.	7.108	12.031	169.25	17.166	241.50
Equatorial Guinea	1.441	1.648	114.30	2.303	159.74
Gabon	2.724	3.053	112.06	4.131	151.63
Angola	30.892	34.401	111.36	44.989	145.63
Nigeria	91.120	100.990	110.83	157.052	172.36
Cameroon	2.652	2.918	110.05	4.057	153.00
São Tomé and Príncipe	0.133	0.146	109.46	0.189	142.15
Ghana	13.248	13.093	98.83	19.657	148.38
Central African Republic	0.299	0.287	96.04	0.395	132.17
Togo	2.262	2.142	94.69	3.068	135.68
Liberia	9.274	8.578	92.49	12.877	138.85
Sierra Leone	0.452	0.414	91.72	0.611	135.23
Guinea	1.103	0.994	90.08	1.480	134.14
Chad	0.589	0.527	89.46	0.728	123.46
St. Helena	0.002	0.002	89.20	0.003	114.44
Côte d'Ivoire	8.240	7.299	88.57	10.593	128.55
Senegal	6.205	5.464	88.05	7.896	127.26
Réunion	0.587	0.516	87.99	0.669	114.02

 Table A.2 Estimated changes in inward FDI stock in 2035, by economy (continued)

		AfCFTA FDI br	AfCFTA FDI broad scenario		AfCFTA FDI deep scenario	
Economy	Baseline (2017 US\$, billion)	Change (US\$, billion)	Percentage change	Change (US\$, billion)	Percentage change	
Mali	4.167	3.475	83.41	5.104	122.49	
Burkina Faso	2.531	2.106	83.20	3.061	120.91	
Niger	2.481	2.001	80.65	2.893	116.63	
South Africa	114.783	91.931	80.09	123.788	107.85	
Mauritania	12.032	9.014	74.91	10.332	85.87	
Gambia, The	2.478	1.824	73.58	2.353	94.94	
Botswana	5.429	3.983	73.37	5.382	99.15	
Uganda	9.268	6.629	71.53	9.284	100.17	
Somalia	0.018	0.013	70.88	0.014	77.64	
Guinea-Bissau	0.254	0.177	69.49	0.250	98.25	
Tanzania	7.105	4.915	69.18	6.750	95.01	
Benin	1.822	1.260	69.14	1.820	99.86	
Zambia	22.527	15.409	68.40	21.525	95.55	
Mozambique	34.521	23.584	68.32	32.032	92.79	
Mauritius	246.065	166.287	67.58	223.077	90.66	
Kenya	6.664	4.444	66.68	6.172	92.61	
Ethiopia	2.342	1.517	64.79	2.147	91.70	
Malawi	0.663	0.399	60.21	0.527	79.48	
Madagascar	3.149	1.881	59.74	2.610	82.89	
Morocco	34.796	20.763	59.67	26.920	77.37	
Eritrea	0.533	0.312	58.43	0.437	81.93	
Cabo Verde	0.856	0.498	58.14	0.689	80.44	
Djibouti	0.295	0.171	57.98	0.237	80.49	
Algeria	24.219	13.657	56.39	17.989	74.28	
Rwanda	1.799	1.009	56.11	1.346	74.83	
Eswatini	1.096	0.609	55.55	0.811	73.92	
Burundi	0.049	0.027	55.53	0.038	77.65	
Sudan	2.003	1.091	54.46	1.878	93.73	
Tunisia	6.366	3.397	53.37	4.401	69.13	

Table A.2 Estimated changes in inward FDI stock in 2035, by economy (continued)

		AfCFTA FDI broad scenario		AfCFTA FDI deep scenario	
Economy	Baseline (2017 US\$, billion)	Change (US\$, billion)	Percentage change	Change (US\$, billion)	Percentage change
Zimbabwe	4.792	2.424	50.58	3.325	69.39
Namibia	4.389	2.174	49.54	2.835	64.59
Seychelles	2.029	0.946	46.64	1.251	61.64
Libya	6.079	2.820	46.38	4.035	66.37
Lesotho	0.076	0.032	42.30	0.041	53.57
Egypt, Arab Rep.	47.791	17.938	37.53	25.514	53.39
Comoros	0.045	0.016	34.68	0.021	46.86
Western Sahara	0	0	0	0	0

Source: World Bank estimations.

Note: Mayotte and South Sudan are missing because of lack of data.

Table A.3 Estimated changes in outward FDI stock in 2035, by economy

		AfCFTA FDI broad scenario		AfCFTA FDI deep scenario	
Economy	Baseline (2017 US\$, billion)	Change (US\$, billion)	Percentage change	Change (US\$, billion)	Percentage change
Equatorial Guinea	0.051	0.028	55.05	0.033	64.08
Mauritania	0.387	0.181	46.67	0.216	55.64
Comoros	0.034	0.015	43.33	0.016	46.80
Guinea	0.120	0.051	42.37	0.054	45.29
Réunion	0.096	0.040	41.55	0.045	47.29
Central African Republic	0.026	0.011	40.21	0.010	39.69
Burkina Faso	0.206	0.082	40.02	0.118	57.37
Djibouti	0.040	0.015	36.48	0.019	46.07
Togo	3.198	1.125	35.18	1.418	44.36
Uganda	0.118	0.041	35.00	0.046	39.45
Kenya	2.602	0.900	34.58	1.025	39.37
Mali	0.116	0.039	33.85	0.052	45.02
Niger	0.090	0.029	31.98	0.041	45.08

 Table A.3
 Estimated changes in outward FDI stock in 2035, by economy (continued)

		AfCFTA FDI br	oad scenario	AfCFTA FDI deep scenario	
Economy	Baseline (2017 US\$, billion)	Change (US\$, billion)	Percentage change	Change (US\$, billion)	Percentage change
Somalia	0.028	0.009	31.66	0.010	35.80
Malawi	0.311	0.097	31.03	0.098	31.35
Zimbabwe	0.785	0.242	30.83	0.253	32.27
Tanzania	1.818	0.541	29.75	0.690	37.96
Ghana	0.554	0.164	29.52	0.203	36.65
Sierra Leone	0.018	0.005	27.11	0.008	44.11
Botswana	1.075	0.248	23.08	0.293	27.30
Lesotho	0.079	0.018	22.49	0.021	26.51
Mozambique	0.536	0.120	22.37	0.133	24.82
Zambia	2.601	0.547	21.01	0.465	17.89
Morocco	4.816	1.000	20.77	1.262	26.21
Burundi	0.021	0.004	18.82	0.004	19.65
Rwanda	0.011	0.002	15.62	0.002	15.05
Chad	0.004	0.001	13.94	0.000	12.16
Senegal	1.465	0.189	12.91	0.192	13.12
South Africa	103.377	12.032	11.64	11.763	11.38
Nigeria	4.931	0.563	11.42	0.146	2.96
Côte d'Ivoire	2.970	0.323	10.87	0.302	10.15
Namibia	1.019	0.098	9.60	0.095	9.34
Egypt, Arab Rep.	1.993	0.174	8.71	0.120	6.02
Gambia, The	0.029	0.002	8.13	0.000	0.34
Sudan	0.023	0.002	7.58	0.002	9.80
Tunisia	1.155	0.080	6.89	0.048	4.12
Libya	6.827	0.432	6.33	0.118	1.73
Congo, Dem. Rep.	0.185	0.011	6.05	-0.011	-5.74
Angola	5.279	0.250	4.73	-0.026	-0.50
Madagascar	0.773	0.036	4.67	-0.030	-3.88
Benin	0.364	0.000	0.05	-0.022	-6.02

Table A.3 Estimated changes in outward FDI stock in 2035, by economy (continued)

		AfCFTA FDI broad scenario		AfCFTA FDI deep scenario	
Economy	Baseline (2017 US\$, billion)	Change (US\$, billion)	Percentage change	Change (US\$, billion)	Percentage change
Eswatini	1.973	-0.072	-3.66	-0.238	-12.04
Cabo Verde	0.059	-0.004	-6.29	-0.008	-13.48
Seychelles	10.220	-0.800	-7.82	-1.822	-17.83
Algeria	1.192	-0.095	-7.98	-0.186	-15.57
Mauritius	199.189	-20.433	-10.26	-38.286	-19.22
Eritrea	0.002	0.000	-15.07	0.000	-25.70
Ethiopia	0.059	-0.009	-15.33	-0.016	-27.24
Guinea-Bissau	0.008	-0.002	-19.21	-0.003	-33.62
Gabon	0.768	-0.166	-21.62	-0.259	-33.69
São Tomé and Príncipe	0.034	-0.008	-23.21	-0.012	-35.56
Cameroon	0.263	-0.063	-24.04	-0.098	-37.15
Western Sahara	0.028	-0.007	-24.78	-0.010	-35.19
Liberia	10.010	-2.501	-24.98	-3.933	-39.30
St. Helena	0.004	-0.001	-26.57	-0.002	-37.76
Congo Republic	0.277	-0.077	-27.85	-0.115	-41.45

Source: World Bank estimations.

Note: Mayotte and South Sudan are missing from table because of lack of data.

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Appendix B

Gravity Model Estimates of NTM Reductions Brought about by Deep PTA Commitments

INTRODUCTION

To estimate nontariff measure (NTM) cost reductions from a potential African Continental Free Trade Area (AfCFTA), this analysis follows the gravity-based top-down approach in Egger et al. (2015). Therefore, instead of using detailed NTM information (known as a bottom-up assessment), this report infers NTM cost reductions directly from the observed variation in trade when controlling for the presence of preferential trade agreements (PTAs). Thus, this approach differs from the one in which direct scenario assumptions are made on the basis of available NTM estimates (for example, Kee and Nicita 2016; Kee, Nicita, and Olarreaga 2009), using interaction terms for NTM and PTA variables that identify NTM trade cost reductions (Cadot and Gourdon 2016), or assuming that coefficients for specific NTM-related PTA provisions accurately measure the corresponding effects of NTM trade cost changes (for example, Disdier, Fontagne, and Cadot 2015). This identification strategy is enabled by using an applied tariff rate that captures PTA-based tariff reduction schedules and, consequently, the tariff-related component of the PTA. This then allows PTA-related NTM trade cost reductions to be isolated from those that follow from tariff concessions.

The study relies on the assumption that all other PTA-induced NTM-related trade cost reductions, that is, those cost reductions the exercise actually intends to identify, are then captured by the PTA variable included alongside the applied tariff rate. In contrast to other approaches, this analysis does not aim to pin down the exact effects from the provisions of PTAs conditional on the incidence of the respective NTM. This approach is less demanding in its needs for detailed policy data on the data input side, while still allowing the analysis to link model experiment design to the observed impact of agreements such as the AfCFTA on trade flows (and so, by design, avoiding

the need to assume the effects). Furthermore, the study treats trade cost reductions as symmetric, which disregards the country-specific variation in some NTMs. However, given the depth and complexity of modern PTAs (see, for example, Mattoo, Rocha, and Ruta 2020) and heterogeneity of NTMs (UNCTAD 2019), a bottom-up identification and estimation strategy would be highly complex (for example, the investigation would need to address collinearity of coexisting provisions, or endogeneity corrections for different provisions, as well as NTMs), and would rely on the availability of detailed data on NTMs that match the content of the provisions of PTAs that simply do not exist at this time.

The chosen approach is suitable for deriving a scenario that is complementary to the original AfCFTA scenario (called the AfCFTA trade scenario in this volume), which included tariff reductions, a narrow set of NTMs, and trade facilitation. More specifically, NTM reductions entered into the original scenario are by and large nontechnical measures (see Kee, Nicita, and Olarreaga 2009, 181). However, modern, deep PTAs, such as the envisaged AfCFTA, contain a significantly broader set of non-tariff-related provisions, most notably, but not exclusively, provisions regarding the alignment and mutual recognition of technical measures (for example, sanitary and phytosanitary measures, technical barriers to trade–related conformity assessments, standards, risk assessments, and so on), as well as investment-related provisions. This broader set of NTM-related trade costs addressed by modern PTAs is captured by the approach in this volume, and can be used when specifying trade cost reductions for the computable general equilibrium model. Critically, the structural gravity estimation relies on an econometric specification of the gravity equation that is consistent with the microeconomic theory underpinning the computable general equilibrium model.

DATA

Consistent with the database used for the computable general equilibrium modeling exercise, this analysis uses 2014 trade data from the Global Trade Analysis Project, which includes internal absorption. Moreover, it uses the following controls: standard gravity distance variables are sourced from CEPII (Centre d'Études Prospectives et d'Informations Internationales); trade agreement variables are from the World Bank (Hofmann, Osnago, and Ruta 2017); and gross domestic product data are retrieved from the World Bank World Development Indicators. Furthermore, the investigation constructs a variable for the time difference between countries, following Egger et al. (2011); a variable that indicates whether two countries used to be the same country; and a sector-specific network-type indicator for the number of shared trade partners.

Additionally, the analysis uses a pool of variables on the structure of the economy, geographic area of the country, religious composition, governance, and state of democracy to run a principal component analysis on absolute differences for a bilateral composite indicator, and directly on the variables for destination-specific indicators.

The latter exercise is also performed for indexes capturing the quality of trade facilitation, that is, the cost of moving goods across borders, and logistics performance indicators. This step is important to reduce the potential overlap with the trade facilitation component of the original scenario. Destination-specific composite indicators are then interacted with the internal trade dummy to allow for heterogeneity of the home market effect.

Finally, depending on the type of trade (goods vs. services) two types of trade policy variables are used to gauge the trade elasticity. First, the tariff variable is combined from multiple sources with the following preference ordering: Market Access Map (MacMap) Economic Partnership Agreements (tariff reduction schedules available for more than 300 agreements), MacMap preferential, UNCTAD Trade Analysis and Information System (TRAINS) preferential, MacMap-applied Most Favored Nation, TRAINS-applied Most Favored Nation, and World Trade Organization bound rates. Thus, preference is given to MacMap rates, where available, to minimize the mixing of rates with different underlying methodologies to calculate tariff ad valorem equivalents (AVEs). Because the analysis relies on high-quality information on tariff reduction schedules for the identification strategy, working with MacMap Economic Partnership Agreements, which is only available from 2014 onward, is preferred. Combining this with the latest public Global Trade Analysis Project release constrains the investigation to a 2014 cross-section. Second, the sector-specific overall World Bank Services Trade Restrictions Index AVEs for services trade is used (Jafari and Tarr 2017). These are available for only eight sectors (trade, transport, water transport, air transport, communication, financial services, insurance, and business services). For other sectors, the total Services Trade Restrictions Index is used as a proxy.

RESULTS

The results suggest that, on average, the NTM-related trade cost reduction is 2.6 percentage points for goods trade and 13 percentage points for services trade. This difference in magnitude between goods and services is reasonable given that services trade policy is generally considered more restrictive than goods trade policy. For example, the highest goods AVE identified by Cadot and Gourdon (2016) is 26.2 percent for animal products, compared with Jafari and Tarr's (2017) estimates for Organisation for Economic Co-operation and Development countries of 35 percent and 31 percent for fixed line and insurance services, respectively. Transition and low-income countries' services trade policies are even more restrictive. Thus, the potential for PTA-induced trade cost reductions is likely to be higher for services than for goods.

Furthermore, the overall magnitude (that is, the effect averaged across sectors) of the PTA effect is in line with estimates by Cadot and Gourdon (2016), who find a PTAbased NTM cost reduction of 2.1 percentage points, which is 20 percent lower than the estimates here. However, their estimates include only sanitary and phytosanitary and technical barriers to trade-related measures, and consequently do not capture other potential non-tariff-related effects of modern PTAs (for example, investment, intellectual property rights, competition, or public procurement provisions).

Table B.1 summarizes the sectoral estimates of NTM cost reductions differentiated between the goods and services sectors. For the goods sectors the analysis maps average PTA effects measured by a dummy PTA variable against those PTA effects implied by a World Bank core index score for the AfCFTA's depth. Thus, these effects apply to AfCFTA country pairs that do not have a trade agreement currently in force. On average, the PTA dummy picks up higher effects than the core index, although the two are highly correlated. Furthermore, in line with the difference between total goods and services cost reductions, the majority of services sectors are expected to experience relatively higher trade cost savings than most goods sectors.

Table B.1 Average PTA-induced NTM cost reductions under the AfCFTA FDI deep scenario

GTAP Code	GTAP Name	Core AfCFTA
Goods		
1_pdr	Paddy rice	15.0
2_wht	Wheat	50.5
3_gro	Cereal grains n.e.s.	15.5
4_v_f	Vegetables, fruit, nuts	11.9
5_osd	Oil seeds	20.9
6_c_b	Sugar cane, sugar beet	13.9
7_pfb	Plant-based fibers	0.0
8_ocr	Crops n.e.s.	4.4
9_ctl	Bovine cattle, sheep and goats, horses	3.4
10_oap	Animal products n.e.s.	4.5
11_rmk	Raw milk	0.0
12_wol	Wool, silk-worm cocoons	8.0
13_frs	Forestry	3.2
14_fsh	Fishing	8.0
15_coa	Coal	0.0
16_oil	Oil	0.0
17_gas	Gas	0.0
18_oxt	Other extraction (formerly Minerals n.e.s.)	4.9

Table B.1 Average PTA-induced NTM cost reductions under the AfCFTA FDI deep scenario *(continued)*

GTAP Code	GTAP Name	Core AfCFTA
19_cmt	Bovine meat products	6.3
20_omt	Meat products n.e.s.	5.4
21_vol	Vegetable oils and fats	26.5
22_mil	Dairy products	0.0
23_pcr	Processed rice	2.1
24_sgr	Sugar	2.1
25_ofd	Food products n.e.s.	2.7
26_b_t	Beverages and tobacco products	10.7
27_tex	Textiles	1.8
28_wap	Wearing apparel	0.0
29_lea	Leather products	0.0
30_lum	Wood products	0.7
31_ppp	Paper products, publishing	6.7
32_p_c	Petroleum, coal products	5.4
33_chm	Chemical products	2.9
34_bph	Basic pharmaceutical products	0.0
35_rpp	Rubber and plastic products	4.0
36_nmm	Mineral products n.e.s.	2.9
37_i_s	Ferrous metals	3.8
38_nfm	Metals n.e.s.	1.2
39_fmp	Metal products	2.3
40_ele	Computer, electronic and optical products	2.2
41_eeq	Electrical equipment	3.1
42_ome	Machinery and equipment n.e.s.	2.8
43_mvh	Motor vehicles and parts	0.5
44_otn	Transport equipment n.e.s.	0.0
45_omf	Manufactures n.e.s.	1.7
46_ely	Electricity	0.0
47_gdt	Gas manufacture, distribution	0.0

Table B.1 Average PTA-induced NTM cost reductions under the AfCFTA FDI deep scenario *(continued)*

GTAP Code	GTAP Name	Core AfCFTA
Services		
48_wtr	Water	15.5
49_cns	Construction	3.3
50_trd	Trade	26.8
51_afs	Accommodation, food and service activities	18.1
52_otp	Transport n.e.s.	30.6
53_wtp	Water transport	35.7
54_atp	Air transport	294.6
55_whs	Warehousing and support activities	38.4
56_cmn	Communication	18.6
57_ofi	Financial services n.e.s.	29.9
58_ins	Insurance	13.4
59_rsa	Real estate activities	4.1
60_obs	Business services n.e.s.	0.0
61_ros	Recreational and other services	3.8
62_osg	Public administration and defense	0.0
63_edu	Education	0.0
64_hht	Human health and social work activities	9.1

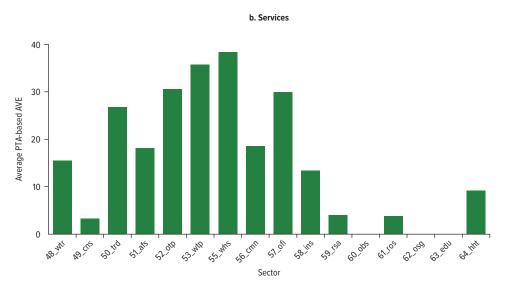
Source: World Bank estimations.

Note: AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; GTAP = Global Trade Analysis Project; n.e.s. = not elsewhere specified; NTM = nontariff measure; PTA = preferential trade agreement.

Overall, the majority of goods sectors are located in the lower left quadrant of figure B.1, meaning that their PTA-induced NTM cost reductions range from zero to 10 percent. The highest trade cost savings are likely to be achieved for a group of agriculture-related primary and processed food sectors (for example, 1-paddy rice; 3-cereal grains n.e.s.; 4-vegetables, fruits and nuts; 5-oil seeds; 9-bovine cattle, sheep and goats, horses; 21-vegetable and oils). Typically, these sectors have a high incidence of sanitary and phytosanitary and technical barriers to trade-related measures and thus have relatively high potential for a PTA to promote regulatory alignment via mutual recognition, adoption of international standards, transparency initiatives, and similar tools to curb the regulatory burden of conducting cross-border business. Services, particularly air, water, and other transport sectors, as well as warehousing—that is,

a. Goods 30 21_vol 5_osd World Bank core-based AVE 20 3_gro 6 c b 10 12_wol 31_ppp 19_cmt 20_omt 0_oap 32_p_c 13_frs 39_fmp 41_eeq 37_i.s 8_0 45_omf 24_sgri 40_ele 33_chm 35_r 45_omf 24_sgri 40_ele 33_chm 25_ofd 16_oii 43_mvh 15_coa 41_eeq 37_i_s_8_ocr 18_oxt 9_ctl _33_chm^{35_rpp} 36_nmm 23_pcr 10 20 30 Average PTA-based AVE

Figure B.1 Ad valorem equivalent average PTA-induced NTM cost reductions



Source: World Bank estimations.

Note: Outliers removed (sectors 2 and 26 for goods; sector 54 for services). AVE = ad valorem equivalent; PTA = preferential trade agreement.

more generally, logistics services—have experienced significant trade cost reductions. Typically, these are services that facilitate trade in goods. Furthermore, NTMs in retail services (included in 50-trade) and financial services trade have been addressed by past agreements. In contrast, services that are typically provided by the public sector or that are heavily regulated and mostly not included in PTAs (for example, education or health services) have not seen significant NTM cost reductions in past services agreements.

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Appendix C Geographic and Sectoral Aggregation in the CGE Model

The computable general equilibrium (CGE) model's reference year is 2014, and it is initialized and calibrated to the Global Trade Analysis Project (GTAP) database, version 10. The GTAP version 10 database was recalibrated after the inclusion of a Social Accounting Matrix for the Democratic Republic of Congo. The resulting 141 regions in the database were aggregated to 34 regions (table C.1). Similarly, the database's 65 sectors were aggregated to 21 sectors (table C.2), with an emphasis on the more traded manufacturing sectors and on the trade and transport services.

Table C.1 GTAP regional concordance

	Region or country name	GTAP concordance
1	Egypt, Arab Rep. (EGY)	Egypt, Arab Rep. (EGY)
2	Morocco (MAR)	Morocco (MAR)
3	Tunisia (TUN)	Tunisia (TUN)
4	Rest of North Africa (XNF)	Rest of North Africa (XNF)
5	Burkina Faso (BFA)	Burkina Faso (BFA)
6	Cameroon (CMR)	Cameroon (CMR)
7	Côte d'Ivoire (CIV)	Côte d'Ivoire (CIV)
8	Ghana (GHA)	Ghana (GHA)
9	Nigeria (NGA)	Nigeria (NGA)
10	Senegal (SEN)	Senegal (SEN)
11	Rest of West Africa (XWF)	Benin (BEN), Guinea (GIN), Togo (TGO), Rest of West Africa (XWF)
12	Central Africa (XCF)	Central Africa (XCF)

 Table C.1 GTAP regional concordance (continued)

	Region or country name	GTAP concordance
13	Congo, Dem. Rep. (COD)	Congo, Dem. Rep. (COD)
14	Ethiopia (ETH)	Ethiopia (ETH)
15	Kenya (KEN)	Kenya (KEN)
16	Madagascar (MDG)	Madagascar (MDG)
17	Malawi (MWI)	Malawi (MWI)
18	Mauritius (MUS)	Mauritius (MUS)
19	Mozambique (MOZ)	Mozambique (MOZ)
20	Rwanda (RWA)	Rwanda (RWA)
21	Tanzania (TZA)	Tanzania (TZA)
22	Uganda (UGA)	Uganda (UGA)
23	Zambia (ZMB)	Zambia (ZMB)
24	Zimbabwe (ZWE)	Zimbabwe (ZWE)
25	Rest of East Africa (XEC)	Rest of East Africa (XEC)
26	Botswana (BWA)	Botswana (BWA)
27	Namibia (NAM)	Namibia (NAM)
28	South Africa (ZAF)	South Africa (ZAF)
29	Rest of South African Customs Union (XSC)	Rest of South African Customs Union (XSC)
30	China (CHN)	China (CHN)
31	Rest of East Asia (XEA)	Hong Kong SAR, China (HKG); Japan (JPN); Korea, Rep. (KOR); Mongolia (MNG); Taiwan, China (TWN); Rest of East Asia (XEA); Brunei Darussalam (BRN); Cambodia (KHM); Indonesia (IDN); Lao PDR (LAO); Malaysia (MYS); Philippines (PHL); Singapore (SGP); Thailand (THA); Vietnam (VNM); Rest of Southeast Asia (XSE)
32	United States (USA)	United States (USA)
33	European Union + EFTA (WEU)	Austria (AUT), Belgium (BEL), Cyprus (CYP), Czech Republic (CZE), Denmark (DNK), Estonia (EST), Finland (FIN), France (FRA), Germany (DEU), Greece (GRC), Hungary (HUN), Ireland (IRL), Italy (ITA), Latvia (LVA), Lithuania (LTU), Luxembourg (LUX), Malta (MLT), Netherlands (NLD), Poland (POL), Portugal (PRT), Slovakia (SVK), Slovenia (SVN), Spain (ESP), Sweden (SWE), United Kingdom (GBR), Switzerland (CHE), Norway (NOR), Rest of EFTA (XEF), Bulgaria (BGR), Croatia (HRV), Romania (ROU)

Table C.1 GTAP regional concordance (continued)

	Region or country name	GTAP concordance
34	Rest of the World (ROW)	Australia (AUS); New Zealand (NZL); Rest of Oceania (XOC); Bangladesh (BGD); India (IND); Nepal (NPL); Pakistan (PAK); Sri Lanka (LKA); Rest of South Asia (XSA); Canada (CAN); Mexico (MEX); Rest of North America (XNA); Argentina (ARG); Bolivia (BOL), Brazil (BRA); Chile (CHL); Colombia (COL); Ecuador (ECU); Paraguay (PRY); Peru (PER); Uruguay (URY); Venezuela, RB (VEN); Rest of South America (XSM); Costa Rica (CRI); Guatemala (GTM); Honduras (HND); Nicaragua (NIC); Panama (PAN); El Salvador (SLV); Rest of Central America (XCA); Dominican Republic (DOM); Jamaica (JAM); Puerto Rico (PRI); Trinidad and Tobago (TTO); Rest of Caribbean (XCB); Albania (ALB); Belarus (BLR); Russian Federation (RUS); Ukraine (UKR); Rest of East Europe (XEE); Rest of Europe (XER); Kazakhstan (KAZ); Kyrgyzstan (KGZ); Tajikistan (TJK); Rest of Former Soviet Union (XSU); Armenia (ARM); Azerbaijan (AZE); Georgia (GEO); Bahrain (BHR); Iran, Islamic Rep. (IRN); Israel (ISR); Jordan (JOR); Kuwait (KWT); Oman (OMN); Qatar (QAT); Saudi Arabia (SAU); Turkey (TUR); United Arab Emirates (ARE); Rest of West Asia (XWS); Rest of the World (XTW)

Source: World Bank 2020.

Note: GTAP = Global Trade Analysis Project.

Table C.2 GTAP sector concordance

	Sector name	GTAP concordance
1	Agriculture (AGR)	Paddy rice (PDR); wheat (WHT); cereal grains n.e.s. (GRO); vegetables, fruit, nuts (V_F); oil seeds (OSD); sugar cane, sugar beet (C_B); plant-based fibers (PFB); crops n.e.s. (OCR); bovine cattle, sheep and goats, horses (CTL); animal products n.e.s. (OAP); raw milk (RMK); wool, silk-worm cocoons (WOL); forestry (FRS)
2	Fossil fuels (FFL)	Coal (COA), oil (OIL), gas (GAS), gas manufacture, distribution (GDT)
3	Minerals n.e.s. (OXT)	Other extraction (formerly OMN Minerals n.e.s.) (OXT)
4	Processed foods (PFD)	Fishing (FSH), bovine meat products (CMT), meat products n.e.s. (OMT), vegetable oils and fats (VOL), dairy products (MIL), processed rice (PCR), sugar (SGR), food products n.e.s. (OFD), beverages and tobacco products (B_T)
5	Wood and paper products (WPP)	Wood products (LUM), paper products, publishing (PPP)
6	Textiles and wearing apparel (TWP)	Textiles (TEX), wearing apparel (WAP), leather products (LEA)
7	Energy intensive manufacturing (KE5)	Mineral products n.e.s. (NMM), ferrous metals (I_S), metals n.e.s. (NFM)
8	Petroleum, coal products (P_C)	Petroleum, coal products (P_C)

Table C.2 GTAP sector concordance *(continued)*

	Sector name	GTAP concordance
9	Chemical, rubber, plastic products (crp)	Chemical products (CHM), basic pharmaceutical products (BPH), rubber and plastic products (RPP)
10	Manufactures, n.e.s. (XMN)	Metal products (FMP); computer, electronic and optical products (ELE); electrical equipment (EEQ); machinery and equipment n.e.s. (OME); motor vehicles and parts (MVH); Transport equipment n.e.s. (OTN); manufactures n.e.s. (OMF)
11	Construction (CNS)	Construction (CNS)
12	Trade services (TRD)	Trade (TRD); accommodation, food and service activities (AFS); warehousing and support activities (WHS)
13	Road and rail transport services (OTP)	Transport n.e.s. (OTP)
14	Water transport services (WTP)	Water transport (WTP)
15	Air transports services (ATP)	Air transport (ATP)
16	Communication services (CMN)	Communication (CMN)
17	Other financial services (OFI)	Financial services n.e.s. (OFI)
18	Insurance, real estate services (INS)	Insurance (formerly ISR) (INS)
19	Other business services (OBS)	Real estate activities (RSA), business services n.e.s. (OBS)
20	Recreational and other services (ROS)	Recreational and other services (ROS)
21	Other services (XSV)	Electricity (ELY), water (WTR), public administration and defense (OSG), education (EDU), human health and social work activities (HHT), dwellings (DWE)

Source: World Bank 2020.

Note: GTAP = Global Trade Analysis Project; n.e.s. = not elsewhere specified.

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