

Integrating Africa

From Threads to Hubs

Woubet Kassa, Hiau Looi Kee, and Jean-Christophe Maur

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AFRICA DEVELOPMENT FORUM

Integrating Africa

From Threads to Hubs

Woubet Kassa, Hiau Looi Kee, and Jean-Christophe Maur

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ISBN (paper): 978-1-4648-2320-6
ISBN (electronic): 978-1-4648-2325-1
DOI: 10.1596/978-1-4648-2320-6

Artificial Intelligence: If AI tools were used in the development of this work, page ii of this work will have further information.

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Library of Congress Control Number: 2026910130

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Acknowledgments

This volume is part of the African Regional Studies Program, an initiative of the Africa Region Vice Presidency at the World Bank. This series of studies aims to combine high levels of analytical rigor and policy relevance and to apply them to various topics important for the social and economic development of Sub-Saharan Africa. Quality control and oversight are provided by the Office of the Chief Economist of the Africa Region.

This report was prepared by Woubet Kassa, Hiau Looi Kee, and Jean-Christophe Maur, under the strategic direction of Andrew Dabalen, Chief Economist for the Africa Region. We thank Bernard Hoekman and César Calderón for serving as advisors. The work reflects close collaboration across the offices of the Chief Economist for the Africa Region, the Development Economics Vice Presidency, and the Prosperity Vice Presidency. We express our gratitude to Sébastien Dessus and Daria Taglioni for their guidance at various stages of the report.

A broad set of background papers provided analytical foundations for this report. We thank the authors of these papers, including Jean-Francois Arvis, Elvis K. Avenyo, Bishakha Barman, Diana Beltekian, Karlygash Dairabayeva Croci, Danilo Desideiro, Carmen Estrades, Ana Fernandes, Lionel Fontagné, Franz Gerner, Baher El-Hifnawi, Alvaro Espitia, Bernard Hoekman, Sebastian Krantz, Abraham Lartey, Anthonin Levelu, Maryla Maliszewska, Gideon Ndubuisi, Ismaël Ouedraogo, Solomon Owusu, Satya Prah, Nadia Rocha, Gianluca Santoni, Daniel Saslevski, Regina Seri Atsebi, Daria Ulybina, and Enze Xie. We thank Vickram Cuttaree and Prashant Singh for their support in our engagement with the African Union and the Regional Economic Communities, as well as their inputs at various stages.

We extend our appreciation to the African Union Commission, the AfCFTA Secretariat, and the Regional Economic Communities, including EAC, ECOWAS, SADC, COMESA, IGAD, CEMAC, WAEMU, and ECCAS, for their active engagement. National-level consultations in Ethiopia, Rwanda, and other countries enriched the report with insights from policy makers, private sector associations, researchers, civil society organizations, and regional institutions. We acknowledge the support of Roberta Bensky for developmental editing; Amy Lynn Grossman, Honora Mara, and Jewel McFadden for production, editorial, and publishing support; and Beatrice Berman and Fan Yang for communications and client engagements.

The team expresses its gratitude to the peer reviewers: Marina Wes, Prudence Sebahizi (AfCFTA Secretariat), David Luke (London School of Economics and Political Science), Arkebe Oqubay (former Senior Minister in Ethiopia; SOAS University of London), Souleymane Coulibaly, Russel Hillberry (Purdue University), and Marcelo Olarreaga (University of Geneva). Their feedback strengthened the analytical rigor and clarity of the report. Finally, we express our gratitude to the leadership of the Africa Region for championing this initiative.

Foreword

Africa stands at an inflection point. A continent of 1.5 billion people is projected to reach 2.5 billion by 2050, with 12 million young people entering the labor market each year, must navigate a global economy whose rules are being rewritten in real time. Trade fragmentation, supply chain reorganization, and the energy transition are reshaping how value is created, where it flows, and where the jobs of the next generation will be. For Africa, these shifts present both unprecedented risk and opportunity.

For decades, African leaders have understood that economic transformation cannot be achieved country by country alone. Markets are too small, infrastructure too thin, and the structural challenges too deeply shared. Regional integration has been the strategic answer articulated in the Abuja Treaty, to be realized in the Regional Economic Communities, and given continental scope through the African Continental Free Trade Area. The vision has been ambitious. The implementation has been partial.

This report *Integrating Africa: From Threads to Hubs*, offers a frank assessment of where Africa's integration agenda stands and what it will take to deliver on its promise. The report's central conclusion is direct: Africa trades, but not yet in ways that drive transformation or generate jobs at the scale the continent needs. Africa's regional networks remain threads, bilateral and corridor-specific connections that move goods and people but do not yet aggregate into the dense, multi-hub economic geography that has powered structural transformation, productivity growth, and job creation in other regions. The path forward is to weave those threads into integrated hubs.

The link between regional integration and job creation is compelling. For most African countries acting alone, domestic markets are not large enough to generate the productive employment their young people need. Larger, integrated regional markets enable firms to scale. Firms that scale invest, hire, and become more productive. Productive firms create formal jobs that lift households out of poverty. Integration, therefore, is not just one of many development priorities. It is central to Africa's jobs and transformation agenda and a foundational driver of the others.

Africa's regional agreements have largely zero or near-zero tariffs. The binding constraints lie in trade costs imposed by inefficient borders, fragmented payment systems, restricted services markets, and the procedural and institutional gaps that turn formal commitments into practical barriers. Most of these trade costs are unilateral and domestic, generated within

African economies themselves. This reframes the integration agenda: it is as much a national reform agenda as a regional negotiation one, placing a substantial share of the gains within reach of unilateral action.

The evidence also points to where the opportunities lie. Deep agreements, those that combine substantive commitments with credible enforcement raise exports substantially; medium and shallow agreements deliver far less. The AfCFTA holds extraordinary potential if its commitments are matched by the institutional architecture needed to make them work. Encouragingly, intra-African trade is already more manufacturing-intensive than Africa's trade with the rest of the world, meaning the gains from deeper integration are likely to land on the firms that hire formally and the jobs that build middle-class livelihoods.

Integration must be understood as an interoperability challenge across goods, services, finance, people, and data. Goods alone cannot deliver transformation when services markets remain closed, when payments take days rather than seconds, when investment regimes contradict one another, and when professionals cannot move with the firms that employ them. The report's analysis reveals a recurring pattern: broad coverage of policies is not matched by binding commitments, and binding commitments are not matched by the governance machinery needed to enforce them. Closing both gaps, substance and enforceability, is the operational task ahead. The report proposes a three-tiered institutional architecture for delivering on this agenda, with the African Union setting continental rules, the Regional Economic Communities serving as primary delivery platforms, and coalitions of willing countries pioneering where consensus lags.

The World Bank Group is committed to supporting Africa translate integration into jobs at scale. Through a deepening portfolio of regional operations, including the Abidjan-Lagos Corridor, the Lobito Corridor, and the Congo Basin Program, by supporting domestic reforms for AfCFTA implementation, and by mobilizing private capital, The World Bank is working to turn corridors into productive economic zones, regional infrastructure into firm-level competitiveness, and trade agreements into the jobs they were always meant to enable. This work is being carried out in close partnership with the African Union, the Regional Economic Communities, the African Development Bank, and the wider development community.

In a fragmenting world, Africa's path to resilience and to the jobs its young people need and deserve runs through deeper integration with itself, and from that foundation, with the wider world.

We commend this report to ministers, regulators, business leaders, civil society, and citizens across Africa whose livelihoods depend on getting this right, and to all partners committed to Africa's integrated, productive, job-creating future.

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Overview

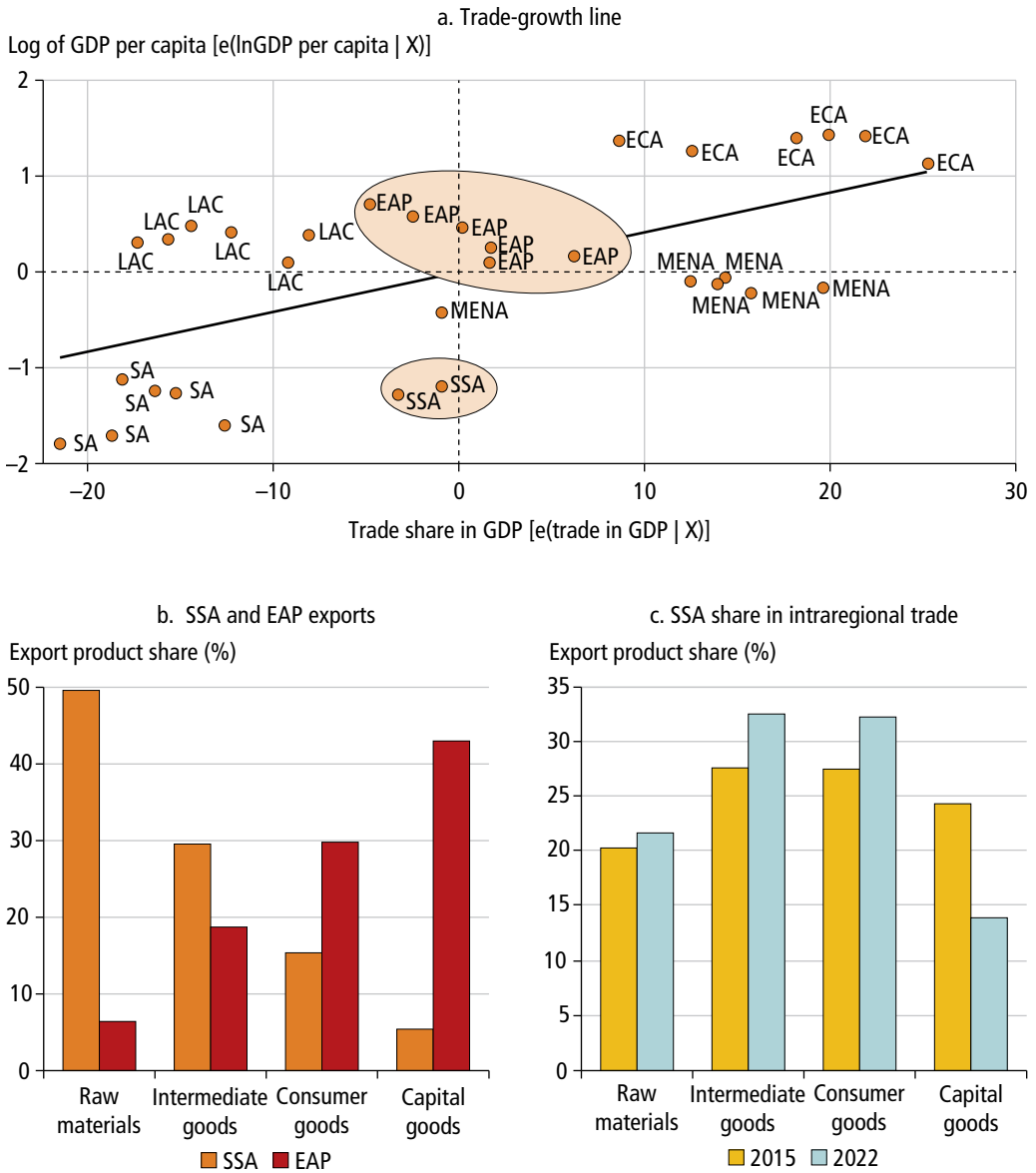
Why Integration, and Why Now? A Development Rationale

African countries have become increasingly open to trade, but without experiencing the growth and structural transformation seen in other regions. International trade played a central role in the East Asian growth miracle (World Bank 1993), and subsequent expansions in preferential trade agreements globally helped usher in an era of global and regional value chains (World Bank 2020). Recent empirical studies reaffirm the trade-growth link, demonstrating that trade can support long-run growth, especially where accompanied by structural change and industrial upgrading. Yet Africa has not followed this pattern. As figure O.1a shows, Sub-Saharan Africa (SSA) exhibits a level of trade openness (with a ratio of trade to gross domestic product [GDP] of 55–60 percent) comparable to that of East Asia and Pacific (EAP). Unlike EAP, where openness translated into high and rising per capita income, SSA economies remain far below the global income–openness line. In 2015, both regions recorded similar trade-to-GDP ratios (56 percent), yet SSA’s GDP per capita (\$1,635) was just 16 percent of EAP’s. This decoupling between trade and income points to a fundamental structural disconnect in Africa’s trade integration model.

The problem lies not in how much Africa trades, but in what it trades and with whom. As figure O.1b illustrates, SSA’s exports to the rest of the world are heavily concentrated in primary commodities—fuels, metals, and raw agricultural goods. These sectors are low in complexity, have limited domestic linkages, and are exposed to price volatility. In contrast, EAP exports predominantly capital and consumer goods—products embedded in manufacturing- and technology-intensive value chains that create jobs, knowledge spillovers, and productivity growth. A different picture emerges when examining intra-African trade. As shown in figure O.1c, SSA trades more manufactured goods, processed food, and capital goods with itself than with the rest of the world. The structure of intraregional trade more closely resembles that

All dollar amounts are US dollars unless otherwise specified. For a list of country codes, go to <https://www.iso.org/obp/ui/#search>.

Figure 0.1 Trade-Growth Line and Composition of Exports



Source: World Bank based on data from the World Integrated Trade Solution (wits.worldbank.org).
 Note: In panel a, the different dots represent different points in time for a given region. ECA = Europe and Central Asia; EAP = East Asia and Pacific; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SA = South America; SSA = Sub-Saharan Africa.

of EAP—characterized by higher-value products, stronger forward and backward linkages, and greater potential for industrial deepening. Yet this intra-African trade remains underdeveloped, accounting for just 15–17 percent of total exports.

Geography and scale jointly constrain Africa’s path to industrial transformation, making regional integration a structural necessity rather than a policy choice. Sixteen of the continent’s

55 countries are landlocked, and many others are geographically remote from major global trade routes, limiting their ability to participate in global value chains that depend on high-frequency, just-in-time logistics. For these economies, regional markets are not substitutes for global markets—they are prerequisites for industrial development. More broadly, the case for integration in Africa is rooted in its fragmented economic geography. With median GDP below \$15 billion and domestic markets smaller than many Asian cities, most African countries are simply too small, landlocked, or remote to achieve scale economies independently. National markets lack the density to support diversified production, industrial agglomeration, or modern service exports.

Regional integration addresses this structural limitation by pooling demand, lowering average production costs, and enabling the emergence of regional value chains. It does so particularly in sectors such as agro-processing, automotive components, and light manufacturing that would be otherwise subscale at the national level. Many countries are just one or two adjacency steps away from more complex products but remain trapped in low complexity equilibriums because of capability gaps that are insurmountable without regional specialization. This evidence reframes the economic rationale for regional integration. It is not merely a textbook prescription for small markets.

Regional integration is a necessary strategy to realign trade with development goals. Integration expands market size, facilitates specialization, supports production networks, and reduces unit costs through economies of scale. It helps overcome the spatial and infrastructural fragmentation that inhibits African firms from participating in complex, higher-value sectors. Crucially, integration can shift Africa's comparative advantage from static resource-based exports toward dynamic manufacturing and services. In short, Africa already trades the right things with itself—but not enough. The case for regional integration is thus a case for turning existing structural patterns into engines of transformation. It is a structural strategy to expand the feasible set of development trajectories under conditions of fragmentation, specialization traps, and institutional heterogeneity.

Why Now? A Convergence of Shocks and Shifts

The global trade landscape has entered a phase of deep uncertainty in ways that heighten both the urgency and the potential for integration. The postwar liberal trade order, once anchored in multilateralism and rules-based institutions, is giving way to strategic decoupling, export controls, carbon tariffs, and industrial policy races. Countries are turning inward and to their neighbors. Multiple shocks have exposed the vulnerabilities of globally extended supply chains and have revived the logic of friend-shoring and regionalization. For African countries historically marginalized in global production networks, this fragmentation could reinforce exclusion, unless they reposition themselves through regional hubs of production and trade. Africa must deepen integration or risk deepening marginalization.

Africa, more than any other region, remains acutely vulnerable to external trade shocks. Much of Africa's trade depends on demand from large economies—such as China, the European Union (EU), and the United States—on discretionary preference schemes like the Africa Growth and Opportunity Act, which can be suspended or revoked unilaterally. The expiration of AGOA at the end of September 2025, alongside earlier country-specific suspensions and broader trade policy shifts in the EU and United States have underscored the fragility of relying on nonbinding,

externally granted preferences or market access. Such episodes expose the overdependence of African economies on these markets. In contrast, regional trade integration offers a more stable, reciprocal, and rules-based foundation for long-term investment. Uncertainty is the enemy of investment. Firms require not just access to markets, but reliable access. The erosion of the reliability of global markets poses growing risks to African exporters. These risks are compounded by the fact that Africa's export structure is still heavily concentrated in a narrow set of raw commodities, limiting the flexibility of its responses. If reinforced with rules-based and enforceable mechanisms, the African Continental Free Trade Area (AfCFTA) and agreements based on Regional Economic Communities (RECs) can shield members from the arbitrariness of unilateral trade policy shifts.

The green transition offers Africa a rare but fleeting window to reposition itself in strategic value chains. Rising demand for clean energy inputs—especially in battery storage, electric vehicles, and solar technologies—has sharply increased the value of minerals in which Africa holds a comparative advantage. The continent accounts for over 50 percent of global cobalt and 40 percent of manganese, and it holds major reserves of lithium, graphite, and rare earth minerals (Ndubuisi et al. 2025). These minerals are no longer just export commodities; they are becoming the backbone of industrial strategy in the twenty-first century. Yet the opportunity is not automatic. Without regional integration, African economies risk repeating past patterns of exporting raw materials while missing out on value addition and employment gains. Regional integration offers a platform to avoid this trap, linking upstream extraction with midstream processing and downstream manufacturing across borders. No single African country controls the full chain, but together they can contribute more fully. At the same time, climate-linked trade policies in major markets raise new risks. The EU's Carbon Border Adjustment Mechanism and the Deforestation Regulation will penalize exports from African countries unable to verify their environmental compliance. Most African firms currently lack the standards infrastructure and traceability systems required to navigate these new rules. Regional coordination is again the answer, through shared certification schemes, green infrastructure investment, and policy alignment under the AfCFTA and REC frameworks.

Macroeconomic vulnerabilities are intensifying, and regional integration offers a path to resilience. Africa's average public debt has risen to over 60 percent of GDP, inflation pressures remain high, and currency volatility has returned with a vengeance (IMF 2024). In such environments, reliance on distant markets and volatile capital inflows becomes more costly. Regional integration, by contrast, creates buffers: it allows for local currency settlements, intra-regional shock absorption, and pooled demand that can stabilize investment cycles. Evidence from recent crises, including the 2008 financial crisis, the 2014 commodity price collapse, and the COVID-19 pandemic, shows that regional trade networks tend to recover faster than global trade flows when external shocks hit (Nicita and Saygili 2021). Thus, integration is a resilience strategy as much as a growth strategy.

What This Report Offers

This report offers a novel analytical blueprint for unlocking Africa's integration potential. It brings novel tools, data, and conceptual frameworks to diagnose and address the key

barriers—economic, regulatory, and institutional—to deepen trade and production integration across the continent. The report reflects deep analytical work and repeated consultations across World Bank teams and regional partners. What emerges is a clear insight that successful regional integration rests on four interdependent pillars (refer to figure O.2).

Pillar 1: Regional Value Chains. Chapter 1 examines the patterns, determinants, and strategic opportunities for Africa’s participation in global and regional value chains, with a focus on how specialization and diversification interact across sectors, countries, and regional blocs.

Pillar 2: Fixing the Frictions. Chapter 2 analyzes how internal, bilateral, and multilateral trade costs create “economic separation” between neighboring countries in Africa and how integration can reduce frictions, close internal distances, and fulfill trade benefits.

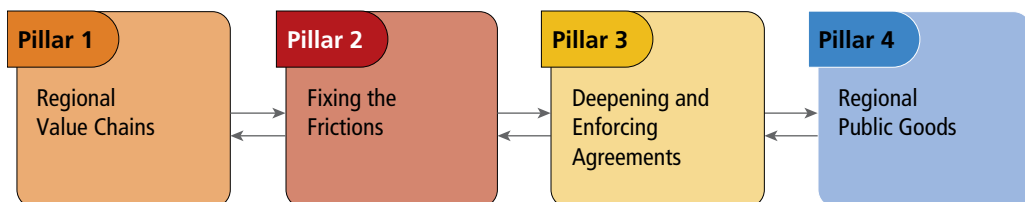
Pillar 3: Deepening and Enforcing Agreements. Chapter 3 focuses on existing regional trade agreements within Africa and the AfCFTA, investigating how Africa may consolidate existing agreements and elevate the ambition of current commitments in order to reap the gains from regional integration.

Pillar 4: Regional Public Goods. Chapter 4 examines how Africa’s regional integration must be underpinned by the effective provision and financing of regional public goods (RPGs) in peace and security, infrastructure, energy, environment, and digital domains. The chapter develops the economic rationale, typology, and actionable toolkit for delivering RPGs, including reforms in institutional architecture and investment mechanisms.

For regional integration of Africa to be successful in transforming Africa, all four pillars are necessary. The report sees integration as a coherent system of mutually reinforcing interventions across these four pillars. It applied the following frameworks to build the pillars:

- A rigorous framework for developing competitive regional value chains as a foundation for industrialization and transformation;
- New empirical tools to diagnose and reduce trade costs or frictions, including both border and behind-the-border frictions;
- A diagnostic and policy framework to deepen the implementation of the AfCFTA and other regional agreements through evidence-based reforms; and
- An operational toolkit for the provision of RPGs, including security, corridors, power pools, and digital platforms.

Figure O.2 Four Pillars to Integrating Africa



Source: Original figure for this publication.

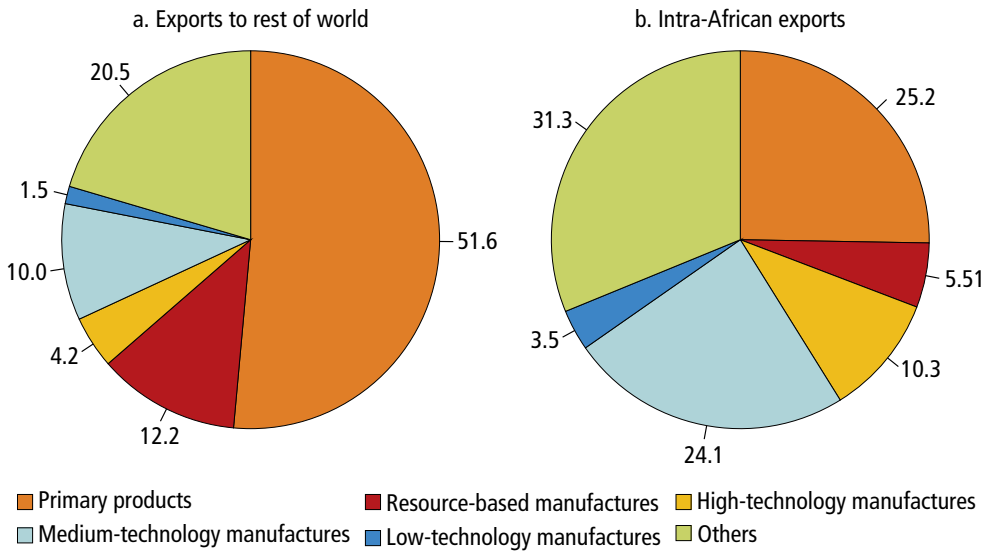
Key Findings

First, Africa's trade has not delivered structural transformation. Regional integration is the path to structural transformation. African economies exhibit high trade openness but underperform in GDP per capita relative to global peers (refer to figure O.1). Many countries in the region now trade as much as peers in EAP but cluster well below the global trade-to-income trendline. Why? First, the composition of exports dominated by unprocessed commodities and extractives with low value addition and weak domestic linkages undermines transformative potential. Second, nearly 85 percent of this trade goes outside the continent, with limited regional trade, constraining learning-by-doing, regional specialization, and diversification. SSA is the only region where intraregional trade intensity, measured by share of intra- to extraregional trade, has declined since 2018, bucking global trends. In contrast, regions that have achieved structural change through trade, such as EAP and Europe and Central Asia, have used regional trade to build dense production networks in higher-value sectors. Third, the regional dimension matters. Intra-African trade, when it happens, is different. It's more likely to involve capital and consumer goods, sectors where industrial upgrading and diversification can take place.

The implication is clear. Trade is not development-neutral. Its direction, content, and partners determine whether it delivers transformation. Without a shift in the structure and direction of trade toward regional production, higher-value goods, and functional integration, Africa risks remaining open but not transformed.

Second, intra-African trade is richer in industrial content and offers higher development returns. Though smaller in volume (15–17 percent of exports), intra-African trade is more diversified and more manufacturing intensive, featuring a significantly higher share of processed agriculture and foods, textiles, light manufacturing, and transportation equipment. This trade composition has higher potential for creating jobs, fostering innovation, and developing industrial capabilities. By deepening regional trade, Africa can drive greater industrialization and move up the value chain in sectors like agro-processing, textiles, pharmaceuticals, and automotive manufacturing.

Figure O.3a shows that over half (52 percent) of Africa's exports to the rest of the world are primary commodities, with manufactures making up just a fraction. In stark contrast, intra-African trade (refer to figure O.3b) is far more diversified, with over 60 percent of flows made up of manufactured products, particularly medium-technology manufactures and processed goods. Mining and extractives dominate total exports, but 90 percent of these are traded with extra-African markets (10 percent traded within the region); intra-African trade accounts for 30–40 percent of value-added goods like food and beverages, machinery, and transportation equipment. In some RECs, such as the South African Development Community (SADC) and East African Community (EAC), the share of manufactured exports within intrabloc trade exceeds 50 percent, illustrating the industrial depth of regional markets.

Figure 0.3 Africa's Extra- and Intra-regional Exports, by Sector

Source: World Bank elaboration based on CEPII data available at https://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=8.

This illustration complements the finding in chapter 2 that global value chain participation in Africa is skewed toward upstream (forward) linkages, but that growth, jobs, and technology spillovers come mainly from downstream (backward) participation. To drive growth and industrialization, Africa needs to shift its position in global value chains, focusing on value-added activities like processing, assembly, and manufacturing within regional value chains.

Third, regional value chains provide the foundation for Africa's structural transformation. Regional integration expands the frontier of what is feasible. The report provides new empirical evidence showing that production remains shallow, fragmented, and with limited regional industrial interlinkages. It also demonstrates that African countries are close to producing more complex goods if regional integration addresses key market and capability constraints.

The analysis begins by mapping out the specialization patterns of individual countries and RECs, including what sectors they already excel in, what is adjacent in their product space, and which sectors are close enough to current capabilities to realistically diversify into. The key insight is this: individual countries are often too small, too fragmented, and too constrained in their capabilities and market size to move up the value chain meaningfully into high-value complex industries on their own. Why? Because industrial upgrading depends on (1) the density of the product space, or how many feasible sectors surround current capabilities; and (2) the relatedness across industries—that is, can firms, skills, and infrastructure spill over into new sectors? Both of these factors, density and relatedness, are far richer at the regional level. RECs or other regional subgroupings provide larger demand, pooled capabilities, and broader product space. In essence,

regional integration expands the frontier of what is feasible. At the national level, most African countries' comparative advantages are stuck in agriculture and raw commodities. Aggregating at the REC level, however, opens new feasible high-value industrial paths.

Many African countries are close to producing more complex products but cannot do so in isolation because of market size, fixed costs, and limited economies of scale. Regional integration offers a way out of this trap. Industrial strategies will be most effective if they recognize regional complementarities, avoid duplication, and strengthen cross-border linkages. This approach reframes integration not only as a trade agenda but as a strategy to unlock latent productive capabilities and expand what is industrially possible. These diagnostics reveal not only where competitive production is feasible but also where complementary regional investments could yield transformative returns in complexity, jobs, and value addition. The policy implication is that industrial strategy needs a strong regional dimension by design. To achieve this, the report proposes a portfolio approach to industrial strategy. Africa's policymakers can deliberately combine proximate bets, which build on existing capabilities at lower risk and cost, with selective transformative bets that target higher-complexity sectors and require deeper regional coordination.

Not all sectors offer the same transition potential. Some sectors are closely related to a country's or region's existing capabilities ("small push" or proximate). These sectors require relatively little new investment or coordination—for example, agri-processing in the Economic Community of West African States (ECOWAS) or basic manufacturing in SADC. Other sectors are farther away but are more transformative ("big push"). These sectors lie farther from existing capabilities, and reaching them requires major investments in infrastructure, new skills, capital, and, above all, regional coordination.

The risk is that most countries are stuck in a small push loop, in low-value, low-diversification traps. Regional integration offers a way out of these traps. Big push is possible only through regional integration. Very few single countries have the scale, the density, or the capital to go it alone. This report does not recommend just sectors; it recommends a strategy. The recommended strategy is regional, coordinated, and differentiated across countries, and it combines both small push and big push bolstered by regional integration. That report also suggests that regional integration may allow countries to reap the positive benefits of pooling markets and resources, and to mitigate the negative spillovers of failed industrial upgrading due to import competition.

Fourth, to make real progress, it is essential to better understand the structure of trade costs. New analytical decomposition of trade costs reveals that the dominant friction costs are unilateral, or behind-the-border, and regulatory barriers. About 60 percent of total trade costs stem from unilateral sources. These costs arise mainly from domestic institutional constraints: customs clearance inefficiencies, unaligned regulatory frameworks, suboptimal logistics services, transit fragmentation, and poor infrastructure. Bilateral frictions at border posts, including divergent product standards, nonmutual recognition of licenses and permits, and weak transit regimes, further compound these issues. The key insight is that

Africa's trade bottleneck is not tariff barriers but regulatory and procedural fragmentation both behind and at the borders.

This understanding reframes the integration agenda: reducing trade costs in Africa is not primarily about liberalization but is about making systems interoperable. The report's analysis, product space diagnostics, and trade cost decomposition all point to the same finding: where systems are interoperable, trade and production networks emerge; where they are not, integration stalls even with zero tariffs. Past efforts focused on physical connectivity, legal agreements, and tariffs in isolation, yet fragmentation persists even in RECs because systems do not connect. Interoperability is the operating system of integration. It is the capacity of data, goods, finance, regulation, logistics, and institutions to operate seamlessly across borders. The implication is clear. Make interoperability the central test of integration readiness. Do not ask whether the border is open; ask whether systems can talk, whether trucks and goods can move, whether data and money can flow, and whether firms can operate across jurisdictions. Use interoperability to align trade, infrastructure, digital, and regulatory agendas under the AfCFTA and the RECs. The AfCFTA must evolve from legal commitments to functional integration, a shift underscored in the next message.

Fifth, the depth of trade integration matters. Research shows that deep trade agreements can raise exports by up to 56 percent, whereas shallow agreements deliver only marginal gains. Implementing the AfCFTA as a deep trade agreement would generate additional welfare gains. The difference lies in scope: deeper preferential trade areas go beyond tariffs to include enforceable rules on services, investment, standards, competition, and procurement. Many African agreements include these areas in name but lack binding commitments or credible implementation. This challenge points to a deeper problem: Africa has signed many trade deals with narrow and outdated rule books. Legal commitments on key areas going beyond World Trade Organization commitments such as capital movement, labor regulation, intellectual property rights, and environmental standards are rare across African preferential trade areas. Without modern rule systems, these agreements struggle to support diversification or deeper regional supply chains.

Key Policy Recommendations

Africa's integration challenge is about implementation, coordination, and ambition. Fragmented national strategies, shallow regional agreements, and overlapping mandates have limited the ability of trade integration to drive structural transformation. Unlocking scale economies, lowering trade costs, and enabling regional value chains requires sequenced actions that are anchored in national reform, delivered through regional cooperation, and supported by a credible continental framework. At the supranational level, this effort entails the following interrelated layers of cooperation:

- *Continental*, under the African Union (AU) and the AfCFTA. The AfCFTA extends free trade from RECs to the continent. The agreement has several functions: a vehicle for the

alignment of policies at the continental level, starting with free trade for goods; agreeing to new market-opening commitments (for example, by lowering trade barriers among individual RECs, services liberalization commitments, and investment agreements); realizing continental public goods (for example, common air market and monitoring of trade integration); and, finally, exchanging best practices.

- *Regional*, through the continuation of the mission of RECs. The agenda of implementation of regional commitments has been partially achieved, and the levels of market integration remain too shallow. A reinvigorated agenda through better follow up of commitments and possibly deepening of integration is essential.
- *Plurilateral*, through selected initiatives, recognizing the wide disparities across the 54 economies in the continent and different levels of ability to implement reforms. Countries that are more advanced in some areas could lead some of these initiatives, paving the way for the rest of the continent. Plurilateral initiatives also serve in the delivery of RPGs that do not need to involve wider constituencies, such as managing shared environmental resources or regional electricity power pools.

Most industrial strategies in Africa remain nationally framed, resulting in fragmented efforts and lost economies of scale. The AfCFTA provides a continental umbrella, but success depends on the RECs, other subregional efforts, and cross-border coalitions that can translate national ambitions into coherent regional production system. Regional industrialization depends on credible hubs that pool scale, align incentives, and ensure reliable services for firms.

Because domestic factors are the largest cause of distance to regional and international markets, regional integration must take place in the context of a strong program of national reforms that target market fragmentation. In other words, the principle of national treatment should guide reforms efforts to avoid separate regimes for foreign traders and domestic ones, and, instead, to create unified ones. This principle applies for instance to the questions of sanitary and phytosanitary (SPS) and technical barriers to trade (TBT) measures or regulatory reforms opening services markets. In this context, regional trade agreements have an important role to play as instruments that can anchor reforms of policies that then become aligned to those of their preferential trade partners.

Transportation and trade transaction costs remain an important source of distance from foreign markets. Although RECs have undertaken significant strides in facilitating trade, these efforts require deeper consolidation, particularly with respect to transit and the interconnection and cooperation between border authorities of partner countries, the adoption of dematerialized documentation, and the adoption of common corridor management solutions. Different RECs employ various approaches that reflect their unique institutional arrangements. For instance, the EAC functions as a single market, whereas other RECs do not, which means that solutions are not necessarily directly transferable from one region to another and that continental approaches may not necessarily be the answer. In this spirit, continental efforts should be designed to complement and support RECs' implementation efforts: as a forum for

the promotion of modern solutions, but also where separate regional groupings share borders (such as the Cameroon–Nigeria border, the Algeria–Mali border, or supporting the Tri-partite efforts).

Throughout the continent, a major challenge is that progress in liberalizing transportation markets has lagged trade facilitation reforms. Inefficiencies persist, particularly in the cross-border road transportation sector, which continues to suffer from high logistics costs, regulatory fragmentation, and limited competition. These issues are especially pronounced in regions like West and Central Africa, where market access remains constrained by an outdated and uncompetitive first-come, first-served transportation permit system. Additionally, progress toward regulatory harmonization in these areas has been slower than in other parts of the continent. Commitments on liberalization of trade in transportation services as part of the AfCFTA provide an opportunity to advance this agenda; however, significant efforts must be made to reform domestic legislation to improve professional standards and reduce the costs of market entry.

An ambitious Africa trade integration agenda can be realized with renewed and sustained attention to continental and regional integration. The implementation of most African trade agreements remains shallow when measured in their impact on trade and welfare, and thus they have a limited ability to drive structural transformation. The agreements between African countries are binding in fewer policy areas compared to global benchmarks, especially in services, investment, and governance of state interventions such as subsidies and state-owned enterprises. This report suggests pursuing this renewed effort on three fronts:

- A reaffirmation of the unfinished regional trade integration agenda;
- The AfCFTA framework, which connects existing RECs and provides competing alternative for regional trade; and
- The deepening of current commitment into more meaningful opening of regional markets.

The AfCFTA offers a chance to change this trajectory. Phase II and III protocols covering competition, investment, digital trade, and e-commerce provide the scaffolding for a deeper continental agreement. But success depends on three design principles: allowing variable geometry to let front-runners lead, making commitments binding and monitoring their implementation, and building flexibility into implementation without sacrificing ambition.

First on the implementation agenda, trade liberalization commitments must be enacted. This area concerns chiefly trade in goods for which the benefits of preferential duty-free trade have not been fully enjoyed. Numerous nontariff measures still prevent firms from claiming preferential treatment. The signing of the AfCFTA shows that better solutions could lead to more frequent use of preferences with rules of origin that are better designed and simpler to comply with, or mechanisms to solve other nontariff measure obstacles (such as nontariff measure notification mechanisms and trade information portals).

More broadly, liberalization commitments made by trade partners in existing agreements lack the legal and institutional heft seen in other trade agreements. Here, too, the AfCFTA may offer an alternative venue with the implementation of a continentwide dispute settlement mechanism, a tool that is not available in existing RECs. Strengthening the role of regional institutions in managing the effective implementation of agreements, starting with proper monitoring of the volume and impact of regional trade and the implementation of policy commitments, is another dimension that the AfCFTA seeks to address with more consistency than currently is done in RECs. New solutions designed in the context of the AfCFTA, some of which may be implemented in partnership with RECs, would complement and possibly reinforce existing efforts.

Concomitant with the low levels of legally binding commitments and empowerment of regional institutions to implement them are the low levels of deep integration commitments across existing agreements in the continent. Expansive and deep trade agreements should not be mistaken for guaranteed impact on trade integration, but evidence tends to suggest that existing agreements have not achieved as much as predicted. Investigating the content and ambition of deep agreements across the world and their impact on trade volumes and welfare shows that only one agreement involving African countries (Common Market for Eastern and Southern Africa members) is classified in the category of agreements with deeper policy coverage across the 18 most common disciplines included in trade agreements, and with a higher prevalence of legally binding language than the average agreement. Empirical evidence shows that these agreements have the highest positive impact on trade in goods and on welfare, which suggests that most agreements signed by African countries have space to improve their positive impact on regional trade and country welfare by changing their scope.

This report comes with some initial findings on what could qualitatively improve trade agreements in Africa, including the AfCFTA, in future iterations. Analysis shows that the target policy area varies depending on the agreement and the set of policies it covers, therefore suggesting that a one-size-fits-all approach in this respect is not optimal. Second, more legally binding and specific agreement provisions, including institutional and implementation arrangements, are associated with higher impact on trade.

Among the policy areas in trade agreements that have had more impact are several that have been successfully negotiated in the AfCFTA, including services trade and investment liberalization, as well as standards and technical barriers to trade. Here the AfCFTA brings to the table issues that are imperfectly addressed within existing RECs. Africa already has working models to draw from. The EAC, for instance, includes stronger provisions on SPS, TBT, and services than most RECs. These innovations should be scaled continentwide through the AfCFTA, using what works to raise the bar. The continent doesn't need more agreements; it needs better ones. Deeper, enforceable, and strategically targeted rules are key to unlocking Africa's trade potential. The AfCFTA can fix this problem, but only by becoming a platform

for real policy convergence, institutional enforcement, and deeper integration beyond tariffs. A related question is how the AfCFTA should ideally complement regional and national reform efforts that differ in each area.

Liberalization of services trade is heterogeneous across Africa, including within regional economic communities; and, notably, levels of restrictiveness remain high relative to the rest of the world. The gradual approach adopted under the AfCFTA—with a first focus on priority sectors and the invitation to countries to make concession offers that presumably, at best, offer standstill guarantees of existing levels of openness—makes sense given the complexity and breadth of the agenda and varied institutional capacity levels of member countries. One question is about the way forward. The AfCFTA platform could offer the possibility of a flexible coalition-based model of liberalization in which groups of like-minded countries with specific interest and ability conduct reform. Pursuit of plurilateral cooperation has become more prominent in the past decade. Examples include the so-called joint statement initiatives pursued in the World Trade Organization since 2017 addressing e-commerce, services domestic regulation, and investment facilitation, among other subjects. Countries can then accede to plurilateral initiatives when they are ready.

The area in which the AfCFTA initiative is at its most ambitious is investment facilitation. This is a very welcome and important addition to the regional integration agenda in Africa. Cooperation on investment rules lends itself well to multilateral approaches, when it comes to investment protection and facilitation. With respect to investment protection, global dispute settlement mechanisms offer several advantages in terms of a guarantee of impartiality, access to relevant expertise, and signaling effects. For investment facilitation, adoption of common standards for licensing and authorization rules improves transparency and reduces transaction costs. An innovative aspect of the AfCFTA approach is to provide more discretionary space to states on certain policy dimensions: human rights, anti-corruption, and climate obligation—important objectives for which it will be important to monitor implementation to ensure that states do not use them to escape their obligations.

Unlike in services and investments, countries have made relatively little progress around SPS and TBT provisions. Most agreements refer to the text of the World Trade Organization agreements. Preferential agreements can make a difference on joint approaches to facilitate implementation of SPS and TBT, an area in which current African RECs are largely incomplete. With respect to SPS, the EAC and SADC are the most active players on the continent. Regional bodies and committees certainly contribute to important missions to build common trust and exchange information, possibly contributing to more transparency in the administration of these regulations or promoting the adoption of international and regional standards. Joint approaches to risk and border management, or some areas of the quality infrastructure requiring economies of scale such as accredited laboratories testing and certification, would go further in facilitating trade. Rather than harmonizing rules and regulations

(which implies “sameness”), regional bodies could do more to promote mutual recognition agreements, notably in testing and certification.

Regional and global integration are complements, not substitutes. Beyond broadening the scope of existing agreements, another strategy to maximize the impact of preferential trade is to expand country partnerships in new trade agreements. The AfCFTA tackles both issues in the context of the African continent, but for many African countries the largest trade partners will remain outside the continent for the foreseeable future. In the context of building more advanced value chains in Africa, access to quality and competitively priced inputs is essential. Some countries in the continent have started to explore agreements with large world trading blocks (China, the EU, the United States). RECs in Africa still maintain high levels of tariffs—among the highest in the world—and tariff duty levels in Africa have not diminished in decades. Regional integration provides the scale and connectivity needed to increase competitiveness in global markets. Thus, the challenge is not to choose between regional and global integration, but to design policies that leverage both to create a robust and diversified economy.

Beyond trade integration, regional economic integration is also achieved through the joint provision of RPGs. Africa’s RPG ecosystem operates through a three-tiered institutional architecture. At the continental level, the AU provides legal frameworks, political legitimacy, and space for coordination. At the intermediate or regional level, RECs act as the primary operational delivery platforms. At the subregional level, plurilateral arrangements—coalitions of willing states—advance specific RPGs when broader consensus lags or is not necessary (for example, agreements between riparian countries). This layered system reflects the logic of subsidiarity in public goods provision: goods should be delivered at the lowest governance level capable of doing so effectively, but with the AU acting as the architect of integration frameworks.

RPGs are foundational to making trade and integration work. Their provision succeeds when aggregation technologies match the AU’s design role, RECs’ operational scale, and plurilaterals’ flexibility. Infrastructure, energy, and digital platforms are not just complementary to trade but are prerequisites for successful regional integration. Without shared investments in infrastructure (roads, ports, energy grids) and digital systems (payments, data exchange), integration will remain shallow. This report shows that the level of regional provision depends on four parameters: coordination cost, anchor incentives, enforcement, and financing. When coordination costs rise because of overlapping mandates or anchors’ disengagement, provision collapses. When incentives, finance, and enforcement align, integration accelerates, as seen with the Southern African Power Pool in energy and ECOWAS in security.

Consistent with the subsidiarity principle, RECs’ smaller membership, geographic proximity, and higher preference alignment reduce the transaction costs of collective action and strengthen demand for subregional solutions. RECs meet the “supply” conditions for

integration more often than the AU, owing to anchor-led provision for some RPGs, whereby one nation must take the lead (for example, a regional port), and provide stronger or easier enforcement (fewer parties), and more predictable financing.

The takeaway is clear: Africa’s integration effort must shift from creating institutions to coordinating them. The AU should set template rules and ensure coherence. The RECs must deliver measurable results (traded gigawatt hours, secured corridors, connected markets). Chapter 4, on RPGs, reframes Africa’s integration challenge through a simple but powerful lens—coordination costs. Africa does not lack institutions or ambition, yet regional public goods remain underprovided. The problem isn’t vision; it’s institutional entropy—too many mandates, too little coherence. The level of regional provision depends on four parameters:

1. **Coordination cost.** As mandates multiply, efficiency collapses. For example, the overlap between the Central African Power Pool, Economic Community of Central African States, and North African Power Pool explains why Central Africa trades almost no electricity.
2. **Anchor incentives.** When large economies lead, systems work. South Africa’s role in the Southern African Power Pool shows that one anchor can stabilize the grid for 12 neighbors.
3. **Enforcement strength.** Rules without authority don’t deliver. The ECOWAS Peace and Security Council succeeds because its decisions are binding, unlike the AU’s voluntary compliance.
4. **External finance.** Predictable funding sustains cooperation. The ECOWAS 0.5 percent community levy and the new United Nations–assessed contribution for AU peace missions are game changers.

Plurilateral coalitions should innovate when consensus stalls. Plurilateral initiatives—coalitions of willing states advancing under AU or REC frameworks—offer a pragmatic solution to the lowest-common-denominator problem in Africa’s integration. By enabling subsets of members to deepen cooperation in specific areas, plurilaterals sustain momentum, lower coordination costs, and allow RPG provision to proceed at a feasible pace while maintaining inclusiveness through open accession. Plurilaterals narrow the coordination set to countries with aligned preferences and capacity, converting weakest-link or high-threshold RPGs into arrangements that are feasible to deliver now. Annex O.A presents a tailored policy matrix that maps specific reform actions at national, regional, and continental levels.

A Vision of an Integrated Africa

A vision of an integrated Africa that delivers jobs and prosperity for all is not just a dream. It is an economically viable future, within reach if Africa addresses its internal constraints. Achieving this vision requires more than political will or trade agreements on paper. It requires a functional integration, not just a legal one. It requires a shift from political declarations, political will, and agreements on paper to economic interoperability. It demands a step change

in the provision of regional public goods and coordination. Integrated transportation networks, harmonized technical standards, cross-border digital finance systems, efficient logistics chains, and transparent regulatory frameworks are all prerequisites. Firms must be able to scale and specialize regionally. Nontariff barriers, fragmented policies, and underinvestment in regional infrastructure must be tackled head-on. A competitive, integrated Africa requires functional institutions and modern tools—that is, not just declarations of intent, but implementation capacity. Only then can the continent’s latent comparative advantages be transformed into a dynamic industrial and trade base. It also requires a paradigm shift in how integration is pursued—not just as a political project, but as an economic strategy grounded in evidence. The costs of inaction are growing.

Imagine an Africa no longer defined by fragmentation but by connectedness, where national economies are woven into regional production networks, and where firms operate seamlessly across borders. A car manufactured in Ghana includes steel sourced from South Africa, lithium-ion batteries assembled with cobalt from the Democratic Republic of Congo and lithium from Zimbabwe, electronic components produced in Kenya, and tires manufactured in Nigeria. Instead of exporting raw cocoa beans to Europe, Côte d’Ivoire and Ghana process and package chocolate domestically, generating local value addition, building food processing clusters, and supplying supermarkets across Africa and beyond. Grain from Ethiopia and Sudan feeds mills in Kenya that supply processed food to Malawi, Zambia, and beyond, replacing costly food imports.

A shipment of Tanzanian textiles travels seamlessly to Senegal via high-speed rail and air cargo, crossing borders without delay or discrimination. Small businesses connect through integrated digital platforms and harmonized product standards. Energy pools span borders, ensuring that electricity from Grand Inga in the Democratic Republic of Congo powers industries as far away as Kigali, Lusaka, and Yaoundé. Critical minerals, once exported in raw form, are refined and transformed into battery components in regional hubs. Data centers and digital services, backed by common protocols and cybersecurity standards, serve firms and consumers from Lagos to Nairobi. When these are achieved, the lives of over 1.57 billion people, roughly 19 percent of the global population, will be lifted. Imagine that.

Annex O.A Integrating Africa: Consolidated Policy Recommendations

Theme	National	Regional (RECs/Corridors)	Continental (AU/AfCFTA)
<i>Pillar I—Integrating Africa’s Production: Regional Value Chains</i>			
Industrial strategy and value chains	<p>Link national industrial incentives to regional sourcing and exports.</p> <p>Develop production hubs with reliable power, logistics, and predictable regulation.</p> <p>Combine proximate sectors with transformative sectors requiring regional scale.</p> <p>Align TVET and supplier-upgrading with regionally prioritized industries.</p>	<p>Coordinate sector priorities across member states and monitor against measurable targets. Support anchor-led cross-border production networks with harmonized rules. Scale regional digital platforms for SME inclusion in value chains.</p>	<p>Integrate industrial strategy into AfCFTA Phase II/III protocols.</p> <p>Anchor regional industrialization in shared value chains that link national capabilities across borders, with coordinated investment in midstream processing and intermediate goods production. Use AfCFTA market integration to give producers in high-fixed-cost sectors the continental scale that no single country can offer. Treat regional and global integration as complements; use continental scale for external partnerships.</p>
<i>Pillar II—Fixing the Frictions: Trade Costs, Transport, and Logistics</i>			
Trade costs and behind-the-border frictions	<p>Reduce unilateral costs: streamline customs, unify regulations, and improve logistics. Apply national treatment—single regime for domestic and foreign firms across goods, services, and standards. Invest in single-window systems, risk-based inspections, and digital documentation.</p>	<p>Make interoperability the central test of integration readiness. Deploy interoperable border procedures, dematerialized documentation, and shared KPIs. Address regulatory fragmentation from overlapping REC memberships.</p>	<p>Set continental interoperability standards for data, permits, payments, and risk management. Operationalize AfCFTA customs, facilitation, NTB, and transit annexes. Publish comparable cross-country trade cost metrics to drive reform.</p>
Transport, corridors, and logistics	<p>Replace restrictive permit and quota regimes with pro-competitive entry rules. Modernize customs. Invest in roads, ports, and multimodal connections.</p>	<p>Liberalize cross-border road transport markets. Treat corridors as industrial assets with binding service-level agreements. Deploy electronic cargo tracking and joint border coordination or one stop border posts.</p>	<p>Leverage AfCFTA services protocol to advance transport reform continent-wide. Promote interoperability of customs data protocols and transit platforms across RECs. Scale proven corridor models through AfCFTA peer learning.</p>

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Annex O.A Integrating Africa: Consolidated Policy Recommendations (continued)

Theme	National	Regional (RECs/Corridors)	Continental (AU/AfCFTA)
Pillar III—Deepening and Enforcing Agreements			
Deep and enforceable agreements	Implement existing tariff schedules and remove NTMs preventing use of preferences. Simplify rules of origin and adopt flexible ROO and self-certification. Align domestic laws with REC/AfCFTA commitments; manage exceptions transparently.	Complete unfinished liberalization agenda with strengthened follow-up. Adopt flexible and simpler rules of origin and promote self-certification. Deepen agreements with more binding and specific provisions. Scale successful REC innovations through cross-REC learning.	Position AfCFTA as a platform for deep integration with binding Phase II/III commitments. Operationalize continent-wide dispute settlement for persistent non-compliance. Embed variable geometry and open plurilateralism for willing coalitions.
Standards, SPS/TBT, and quality infrastructure	Operationalize risk-based SPS/TBT controls with transparent requirements. Invest in testing, certification, and traceability systems.	Advance mutual recognition rather than full harmonization. Pool quality infrastructure: reference laboratories, accredited facilities, and digital registries. Establish joint risk management and border management committees.	Develop continental templates that scale what works; avoid parallel rules. Extend harmonization to food safety, packaging, chemicals, and green standards.
Services, digital and financial integration	Reform services underpinning goods trade: transport, logistics, finance, and digital. Modernize professional standards, and reduce regulatory entry barriers.	Coordinate cross-border regulatory reforms and professional standards recognition. Scale regional digital payment and e-invoicing platforms. Pursue coalition-based liberalization with open accession.	Advance AfCFTA services agenda with variable geometry. Implement investment protocol: common licensing, transparency, and dispute settlement. Set continental digital trade rules on data exchange and interoperability.
Pillar IV—Regional Public Goods: Catalysts, Institutions, and Instruments			
Energy, digital, and infrastructure	Invest in power, logistics, and digital connectivity that connect firms to markets. Locate SEZs on interconnected grids with predictable tariffs. Harmonize national laws with REC and AfSEM energy protocols.	Align four RPG delivery conditions: low coordination costs, anchor incentives, enforcement, and predictable financing. Consolidate power pool institutions and resolve overlapping mandates. Establish regional clearinghouses with credit guarantees.	Anchor AfSEM as continental electricity market framework. Advance SAATM and shared digital interoperability standards. Mobilize continental climate finance and endorse plurilateral renewable corridor pilots.

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Annex O.A Integrating Africa: Consolidated Policy Recommendations (continued)

Theme	National	Regional (RECs/Corridors)	Continental (AU/AfCFTA)
Institutions, enforcement, and financing	Reduce domestic institutional fragmentation; unify agencies across trade, customs, and standards. Build compliance monitoring, and create bankable project pipelines.	Recenter RECs as primary delivery platforms; clarify roles to avoid duplication. Secure predictable financing tied to outcomes. Strengthen monitoring: corridor KPIs, traded power, and clearance times.	Shift AU to coordinator role; rationalize overlapping mandates via subsidiarity. Operationalize dispute settlement; publish comparable metrics; and deepen legal bindingness. Codify anchor-state incentives: leadership roles, weighted cost-sharing, and concessional access.

Source: World Bank.

Note: AfCFTA = African Continental Free Trade Area; AfSEM = African Single Electricity Market; AU = African Union; KPI = key performance indicator; NTB = nontariff barrier; NTM = nontariff measure; REC = Regional Economic Community; ROO = rules of origin; RPG = regional public good; SAATM = Single African Air Transport Market; SEZ = special economic zone; SME = small and medium enterprise; SPS = sanitary and phytosanitary; TBT = technical barriers to trade; TVET = technical and vocational education and training.

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Abbreviations

AACTGS	African Export-Import Bank African Collaborative Transit Guarantee Scheme
AfCFTA	African Continental Free Trade Area
AMU	Arab Maghreb Union
ASEAN	Association of Southeast Asian Nations
AU	African Union
CEMAC	Economic and Monetary Community of Central Africa
CEWS	Continental Early Warning System (African Union)
CMA	corridor management authority
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
EAP	East Asia and Pacific
ECCAS	Economic Community of Central African States
ECOMOG	Economic Community of West African States Monitoring Group
ECOWAS	Economic Community of West African States
EU	European Union
GDP	gross domestic product
GVC	global value chain
IGAD	Intergovernmental Authority on Development
MCBRTA	Multilateral Cross-Border Road Transport Agreement
PSC	Peace and Security Council (African Union)
PSO	Peace Support Operation
RCA	revealed comparative advantage
REC	Regional Economic Community
RPG	regional public good
RVC	regional value chain
SAATM	Single African Air Transport Market
SACU	Southern African Customs Union
SADC	South African Development Community

SIGMAT	Interconnected Transit Goods Management System
SMEs	small and medium enterprises
SPS	sanitary and phytosanitary
SSA	Sub-Saharan Africa
TBT	technical barriers to trade
TIP	Trade Information Portal
WAEMU	West African Economic and Monetary Union

Integrating Africa's Production: Regional Value Chains

Introduction

Africa's economic transformation depends not just on expanding trade but on shifting the structure of that trade toward deeper value added and productive integration. This chapter examines the patterns, determinants, and strategic opportunities for Africa's participation in global value chains (GVCs) and regional value chains (RVCs), with a focus on how specialization and diversification interact across sectors, countries, and regional blocs. Product space analysis shows where Africa's current capabilities can support diversification into higher-value activities and scalable regional production. Finally, the chapter translates these diagnostics into concrete policy directions for building RVCs.

Africa's Limited Integration in Global Trade Networks

***Key message:** Africa remains marginal in global trade and production networks, contributing only 5.5–6.5 percent to global trade despite accounting for 17 percent of the world's population (UNECA 2025).¹ Nevertheless, intra-African trade is steadily growing and, unlike Africa's global exports, is more diversified and has higher value added. This shift reveals the latent potential of RVCs to drive industrial transformation if the continent can leverage scale, infrastructure, and institutional alignment.*

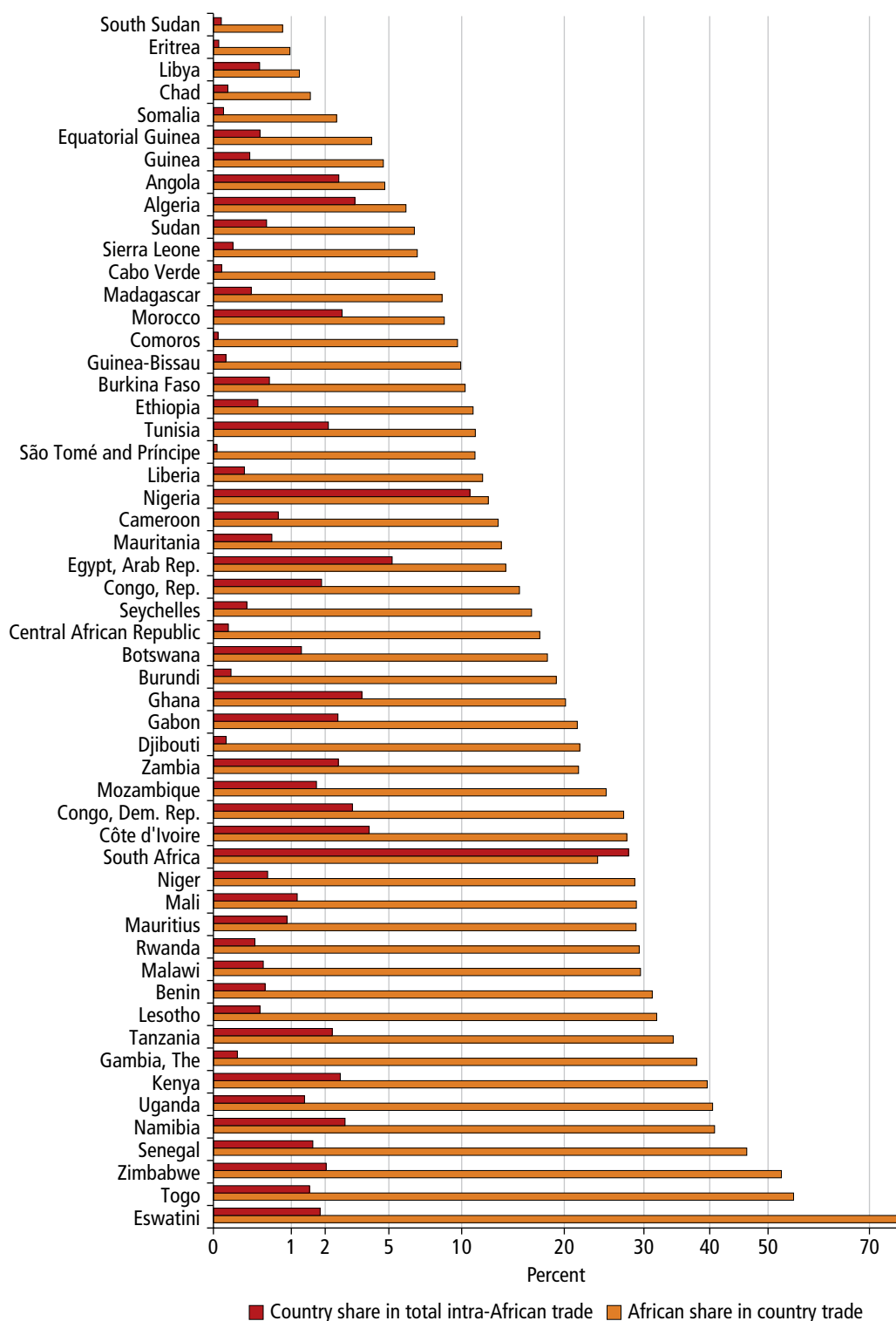
Historically, Africa has had shallow, volatile, and commodity-dependent integration into the global economy. In the early 1980s, the continent accounted for over 8 percent of global merchandise exports; however, by the mid-1990s, after years of structural adjustment, commodity shocks, and low investment, its share had collapsed to a historical low of just

3.2 percent. Since then, it has made modest gains on the back of debt relief, economic reforms, and a commodity boom, pushing the share to 6.5 percent by 2022. The broader picture, however, remains one of persistent global underrepresentation. Even more revealing, Africa has low structural participation in GVCs. Participation tends to occur through forward linkages, with countries exporting raw or semiprocessed inputs (for example, crude oil, cocoa beans, and gold) for further processing elsewhere. In contrast, backward linkages, importing intermediate goods and transforming them into higher-value exports, are relatively rare. This structural asymmetry keeps African economies systematically excluded from the value-added-intensive nodes of global production where the gains from innovation, learning, and scale economies are concentrated (Newman et al. 2016; Taglioni and Winkler 2016).

Africa's intra-regional trade remains modest overall and is geographically and structurally concentrated, with a few countries and subregional blocs serving as regional trade engines. The geographic and structural concentration of trade means that regional integration advances unevenly, with deepening in some blocs and inertia in others. Despite increasing steadily over the past two decades, intra-African trade still represents a small share of the continent's total exports. African countries direct 20 percent of exports to other African countries (figure 1.1), compared to over 50 percent in the Association of Southeast Asian Nations (ASEAN) and the European Union. Fifteen countries conduct at least 30 percent of their trade with other African countries, and only eight of them exceed the 40 percent threshold. South Africa alone accounts for 24 percent of intra-African exports, with Nigeria contributing another 11 percent. Unsurprisingly, these two economies make up more than a third of the continent's total intra-regional exports. Scale, logistics infrastructure, and industrial base play key roles in enabling regional trade. This concentration also underscores how much Africa's regional integration story is anchored in a handful of large players, reflecting both structural constraints and the absence of deeply integrated production systems across the continent.

At the same time, several smaller and mid-sized economies stand out for their high intra-African trade shares relative to their size. Countries like Eswatini, Kenya, Senegal, Togo, and Uganda consistently register intra-African trade shares well above the continental median. These economies export a diverse mix of products, including processed foods, packaging, reexports, and light manufacturing, sectors with strong regional demand and lower entry barriers. Conversely, a significant number of countries remains marginal to regional trade networks, including several conflict-affected, landlocked, or oil-dependent states such as Angola, Eritrea, Libya, Somalia, and South Sudan, which have little or almost no intra-African export shares. The wide dispersion highlights the uneven geography of Africa's regional integration and underscores the need to address fragility and connectivity gaps as part of the integration agenda.

Figure 1.1 Intra-African Export Shares, by Country, 2010–22 Average



Source: World Bank elaboration based on data from CEPII (https://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=37).

Despite the promise of a continental market under the African Continental Free Trade Area (AfCFTA), Africa's regional integration remains asymmetrically structured. Most intra-African trade is clustered within and around a few dominant Regional Economic Communities (RECs), mainly the East African Community (EAC), the Economic Community of West African States (ECOWAS), and the Southern African Development Community (SADC). Among these groups, SADC stands out as the most deeply integrated and trade-intensive bloc: between 2010 and 2022 (average annualized), it accounted for an estimated US\$32 billion in intra-REC trade, representing 37 percent of total intra-African exports. An additional 24 percent of intra-African trade flowed between other RECs and SADC, underscoring its role as a regional anchor and continental trade hub. When including exports to SADC from other RECs, its effective share of intra-African trade rises to 61 percent. SADC also exhibits the highest intra-REC ratio of trade to gross domestic product on the continent, 5.8 percent, a proxy for both trade intensity and bloc-level integration. Of course, South Africa weighs heavily in these regional figures.

Although smaller in absolute trade volumes, EAC exhibits one of the highest intra-REC trade shares as a proportion of total trade, while also maintaining strong trade flows beyond its bloc. These trade flows are supported by institutional reforms, trade facilitation measures, and strong regulatory harmonization efforts, particularly in customs and transportation. Notably, EAC has both a subregional and an extra-subregional trade orientation: nearly 50 percent of its intra-African exports go to RECs outside its own bloc (mainly SADC), indicating functional interregional connectivity and growing East-South linkages.

In contrast, ECOWAS, despite its demographic and geographic scale, lags behind in intra-REC trade intensity, in part because of persistent nontariff barriers, fragmented infrastructure, and underdeveloped cross-border production networks (Brenton and Isik 2012). ECOWAS accounts for approximately 12 percent of intra-African trade, and an additional 15.4 percent of trade with other RECs, including a substantial US\$7.1 billion in exports to SADC alone. These flows are highly concentrated by product and partner.

At the lower end of the spectrum, the Arab Maghreb Union (AMU) remains the least integrated REC. Intra-regional trade within AMU is minimal, below 5 percent. Political fragmentation, protracted regional tensions, and lack of institutional coordination mechanisms have long stifled economic integration in North Africa (AfDB 2022; Schiff and Winters 2003). Despite shared language, currency convertibility, and proximity, integration remains low, highlighting the primacy of political economy over geography in regional outcomes.

The geography of regional trade flows underscores the central role of a few economic engines in anchoring integration. Kenya in EAC, Nigeria in ECOWAS, and South Africa in SADC account for disproportionately large shares of intra-African trade and function as both final markets and processing hubs in emerging RVCs. Their role extends beyond trade volumes; they serve as logistical gateways, intermediate input suppliers, and conduits for industrial spillovers across borders. The broader landscape, however, remains deeply uneven. Whereas RECs such as EAC exhibit intra-African trade shares exceeding 20 percent of total exports, others—including the

overlapping zones of the Economic and Monetary Community of Central Africa (CEMAC) and São Tomé and Príncipe, and of EAC and the Intergovernmental Authority on Development (IGAD)—register below 10 percent. In the absence of integrated production systems and supporting infrastructure, regional trade remains fragmented and vulnerable to external shocks.

The heterogeneity extends beyond volume and into structure. For example, SADC's intra-regional exports are more diversified and industrial in nature, featuring processed foods, chemicals, machinery, and transport equipment. In contrast, CEMAC and ECOWAS are largely characterized by exports of raw materials and primary commodities, reflecting weaker industrial capacity and limited RVC development. These structural differences partly explain divergent trade intensities and resilience: RECs with a more diverse product mix tend to maintain higher intra-regional flows, even during external shocks. The product content of regional trade thus provides a critical lens on the state of integration, not just in volume but in economic sophistication and transformative potential.

The limited intensity of trade across RECs further constrains Africa's regional integration. Whereas intra-REC trade accounts for more than two-thirds of intra-African flows, inter-REC trade remains thin and highly localized. Most cross-bloc trade occurs between adjacent regions, such as EAC and SADC, or CEMAC and ECOWAS. In contrast, East-West trade corridors are largely absent, with negligible flows between distant blocs such as AMU and SADC, or EAC and ECOWAS. This pattern reflects both physical infrastructure limitations (for example, lack of transcontinental highways and railway interconnectivity) and institutional segmentation, including fragmented customs regimes and incompatible standards (AfDB 2022; UNECA 2025). Consequently, Africa's trade architecture remains regionally siloed, inhibiting the development of continental-scale value chains. The AfCFTA could help bridge these divides, but only if operationalized alongside real investments in cross-REC logistics and policy alignment.

Integration is advancing, but unevenly. The asymmetries in trade volume, structure, and connectivity have significant implications for the design of Africa's integration strategy, suggesting that the strategy must embrace asymmetry. Rather than assuming a uniform convergence path, policy makers must embrace a *variable geometry* approach, one that builds on regional strengths while providing lagging blocs with targeted support. Strengthening regional engines like ECOWAS and SADC is essential but so is targeting lagging RECs with bespoke support, including infrastructure investments, regulatory harmonization, and industrial upgrading. Accelerating cross-REC trade corridors can stitch together fragmented markets into coherent continental value chains. Policy makers must support both the regional champions and the lagging peripheries by reinforcing high-performing hubs like those in EAC (Kenya), ECOWAS (Ghana and Nigeria), and SADC (South Africa) with infrastructure upgrades, trade logistics reforms, industrial clustering policies, and regulatory tools. Simultaneously, they must help lagging countries and RECs enter regional trade through investing in connectivity and institutional capacity, through corridors, and through special economic zones. The AfCFTA provides the legal and policy umbrella to scale these interventions, but its success depends on

real cross-REC investments, particularly in trade corridors, digital systems, and regulatory harmonization. Without such interventions, the risk is that Africa's integration will deepen only around its strongest nodes, leaving weaker economies behind and perpetuating geographic inequalities in trade participation.

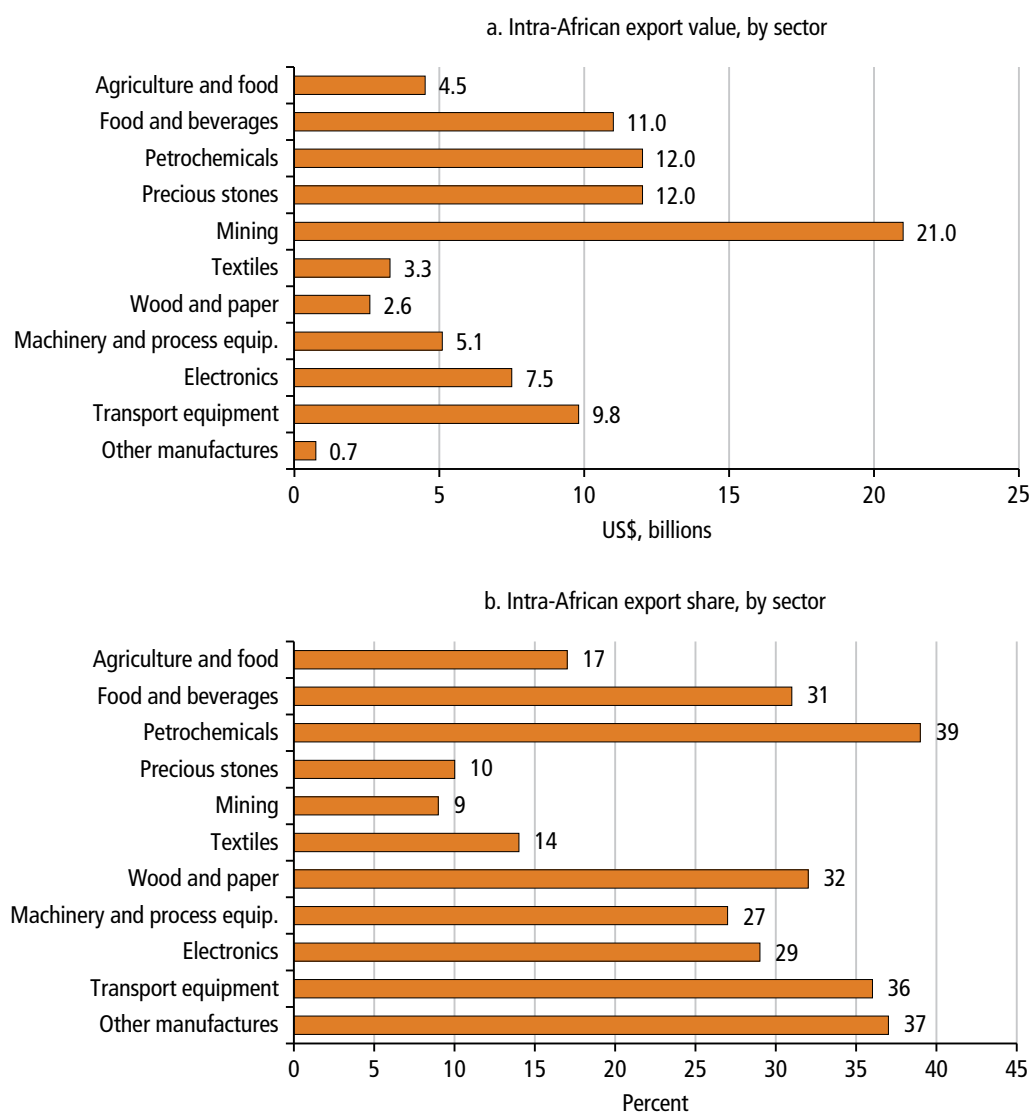
Intra-African Trade: More Industrial, Diversified, and Structurally Aligned with Africa's Transformation Goals

***Key message:** Intra-African trade is more diversified and embodies more value added than trade with the rest of the world, offering the prospect of anchoring regional industrialization around emerging RVCs in processed foods, chemicals, and light manufacturing.*

Intra-African trade, although still a modest share of total exports, is compositionally distinct from extra-African trade. Whereas exports to the rest of the world remain dominated by extractives, intra-African export flows feature processed intermediate products and manufactures, aligning more closely with the continent's transformation goals. Within Africa's export basket, sectors such as petrochemicals, processed foods and beverages, wood and paper, miscellaneous manufacturing, and transport equipment show intra-African shares of 30–40 percent, indicating a latent foundation for RVCs.

Looking at the composition of exports provides two key insights. Panel a of figure 1.2 shows total export volume and value by sector: mining, petrochemicals, and precious stones and metals dominate Africa's export profile by value, accounting for close to half of intra-African trade in volume. In panel b, which reveals the share of each sector's output that is traded within Africa, the picture shifts dramatically. Sectors like mining and precious stones and metals, although large in value, have low intra-African shares (10 percent or less), underscoring Africa's continued dependency on external commodity markets and limited regional processing. In contrast, intra-African shares in petrochemicals, processed foods and beverages, wood and paper, miscellaneous other manufactures, and transport equipment all reach 30–40 percent, pointing to a latent foundation for robust RVC development.

In some RECs, such as EAC and SADC, the share of manufactured exports within intra-bloc trade exceeds 50 percent, illustrating the industrial depth of regional markets. This compositional difference reflects both demand-side complementarities and supply-side constraints. On the demand side, African economies exhibit similar consumption patterns and overlapping needs for industrial inputs—making regional markets particularly conducive to horizontal and vertical trade in similar or connected products. On the supply side, firms face lower fixed costs and entry barriers when producing for proximate markets, and regional partners are more likely to accept standards, specifications, and volumes that correspond with local capabilities. This finding aligns with the “home market effect” in new trade theory, which posits that firms are more likely to specialize in sectors with sufficiently strong domestic (or regional) demand to sustain production at scale (Krugman 1980; Venables 2003).

Figure 1.2 Composition of Intra-African Exports, by Sector, 2010–22 Average


Source: World Bank elaboration based on data from CEPI (https://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=37).

Note: Panel a presents export values of each sector within Africa; panel b presents the shares of each sector traded within Africa. Equip = equipment.

Beyond composition, intra-African trade is more likely to involve trade within an industry, two-way trade in similar goods, and trade in intermediate inputs—all hallmarks of RVC formation. These features are largely absent in Africa's global exports, which remain tied to extractive sectors with limited backward or forward linkages. The economic implications are profound: intra-African trade exhibits greater potential to drive structural transformation by strengthening domestic supply chains, generating employment in tradeable sectors, and

enhancing the resilience of firms through learning-by-exporting effects. This pattern of sectoral depth matters.

Because these sectors not only exhibit regional integration but also tend to have higher domestic value-added content and stronger productivity spillovers, they contribute more significantly to structural transformation, learning, and employment. For example, processed foods and chemicals require inputs from agriculture, logistics, packaging, and energy, creating domestic linkages across multiple sectors. This structural difference reflects deeper economic dynamics. Sectors driving intra-African trade tend to exhibit higher forward linkages (connecting to downstream sectors), learning-by-doing potential, and stronger local content in inputs and skills. These qualities—essential for job creation, technology diffusion, and endogenous growth—position intra-African trade as a vector not just of commerce but of transformation. African exporters involved in regional trade tend to be more diversified, more productive, and more likely to upgrade their capabilities than those depending solely on global commodity markets.

This structural tilt toward industrial goods in regional trade underscores why deepening intra-African trade is not just a matter of market integration but also a core strategy for industrialization. Unlike commodity exports, which often bypass the domestic economy, regional trade embeds production within local and regional economies—fostering capability accumulation and scale economies in sectors critical for development. From a policy perspective, this supports the rationale for industrial policies that consider a regional perspective, focused on clusters, infrastructure corridors, and harmonized input markets. Anchoring industrial policy in these sectors (processed foods, petrochemicals, light manufacturing, and machinery) can accelerate regional diversification and competitiveness. RVCs are forming organically within RECs such as EAC (textiles, construction, and horticulture), ECOWAS (agro-processing and cement), and SADC (chemicals, food, and machinery). These industries demonstrate that regional scale is not just an enabler but also a multiplier, expanding what African economies can produce competitively. Policy makers should prioritize policies that support these organically forming value chains in which regional demand, specialization, and capabilities already converge. As the AfCFTA is operationalized, these patterns offer a strong justification for prioritizing value chain-oriented integration, rather than focusing exclusively on tariff liberalization or global market access.

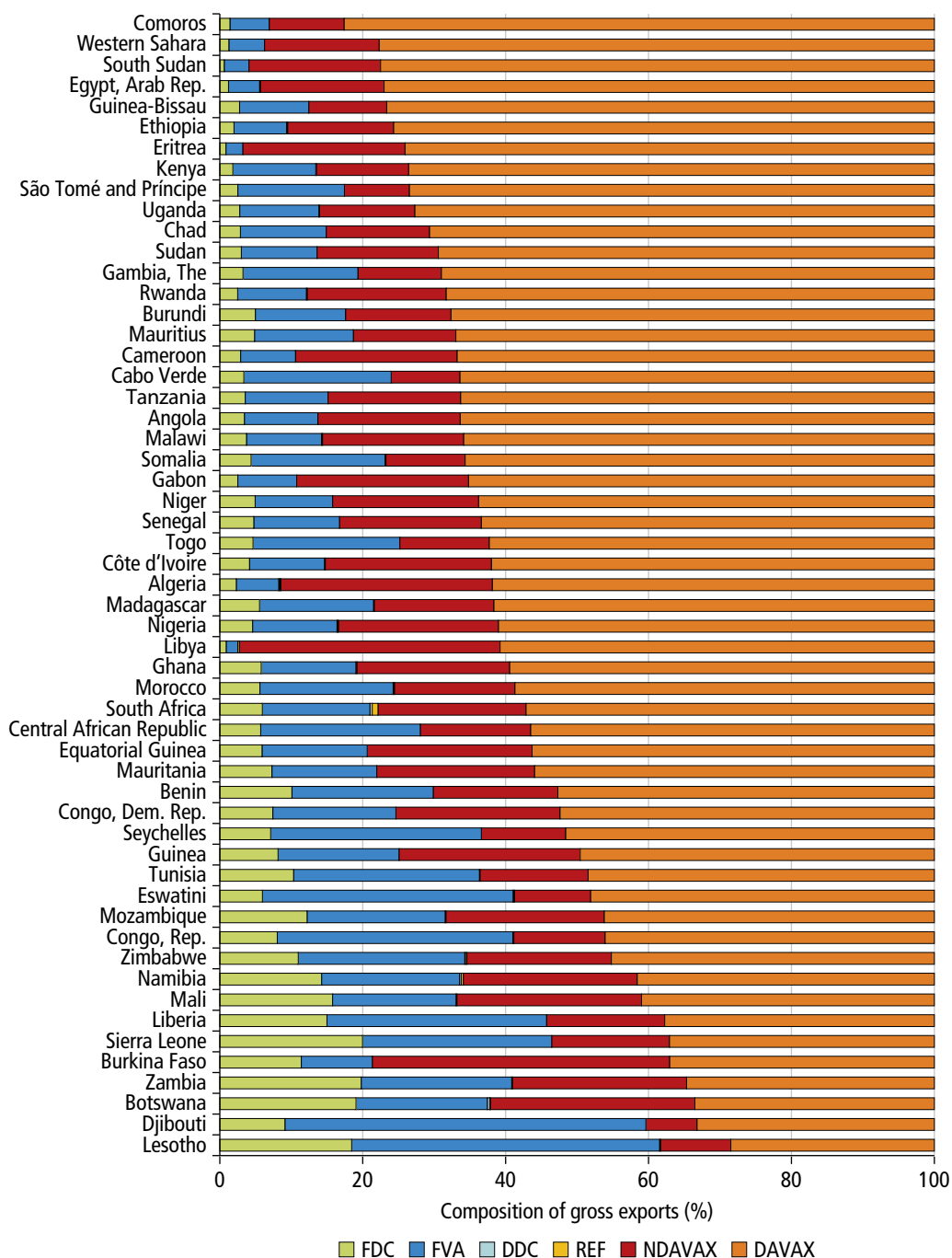
GVC and RVC Participation: Limited, Uneven, and Full of Latent Potential

***Key message:** Africa's engagement in GVCs and RVCs skews heavily toward forward participation in raw materials and extractives. However, emerging intra-African trade networks in processed foods, petrochemicals, and light manufacturing reveal a nascent but powerful basis for building competitive regional production networks, if policies focus on deepening backward linkages and anchoring emerging regional production hubs.*

Africa's GVC participation is moderately high but structurally skewed, dominated by a handful of sectors and countries. As noted earlier, most countries engage in GVCs via forward participation, exporting primary goods and unprocessed inputs that feed into production processes abroad (figure 1.3). In 2021, over 80 percent of Africa's GVC-related exports were driven by forward linkages in primary sectors such as unrefined minerals, crude oil, and agriculture. Over 43 percent of GVC trade is concentrated in precious stones and metals, and in mining (mainly petroleum), and over 58 percent of these flows occur through forward participation. This pattern is evident across nearly all RECs—especially in resource-intensive economies such as Angola, the Democratic Republic of Congo, and Nigeria—but with significant variation across countries and sectors. In Nigeria, for example, GVC participation rates exceed 50 percent but are overwhelmingly forward-oriented and driven by crude oil. Smaller economies like Botswana, Djibouti, and Lesotho show high GVC penetration rates of up to 70 percent, mostly through forward participation in mineral or textile enclaves. Despite the large value of these exports, their structure implies low value capture and weak domestic linkages, which limits industrial spillovers, learning effects, backward linkages, or job creation (Beltekian et al. 2025).

In contrast, backward participation, whereby countries import intermediate goods to process or assemble, is essential for industrial deepening but remains limited and geographically concentrated. Most countries have backward GVC participation rates below 10 percent of gross exports (figure 1.4); only a few exceptions (for example, Kenya, Morocco, South Africa, and Tunisia) surpass this threshold in specific manufacturing- or assembly-based sectors (Beltekian et al. 2025). These backward linkages appear most in electronics or chemicals in the Arab Republic of Egypt and in Tunisia, apparel in Ethiopia, pharmaceuticals in Kenya, and automotive and aerospace components in Morocco, often driven by enclave export processing zones and global buyer networks. The distinction between forward and backward GVC participation is more than technical. It reflects whether a country is locked into extractive activities at the beginning of the value chain or embedded within industrial processes that foster linkages, jobs, and scale economies. Across most of Africa, inefficient logistics, fragmented standards, limited scale (both in markets and production), and high trade costs prevent the emergence of vertically integrated supply chains that attract large-scale investments.

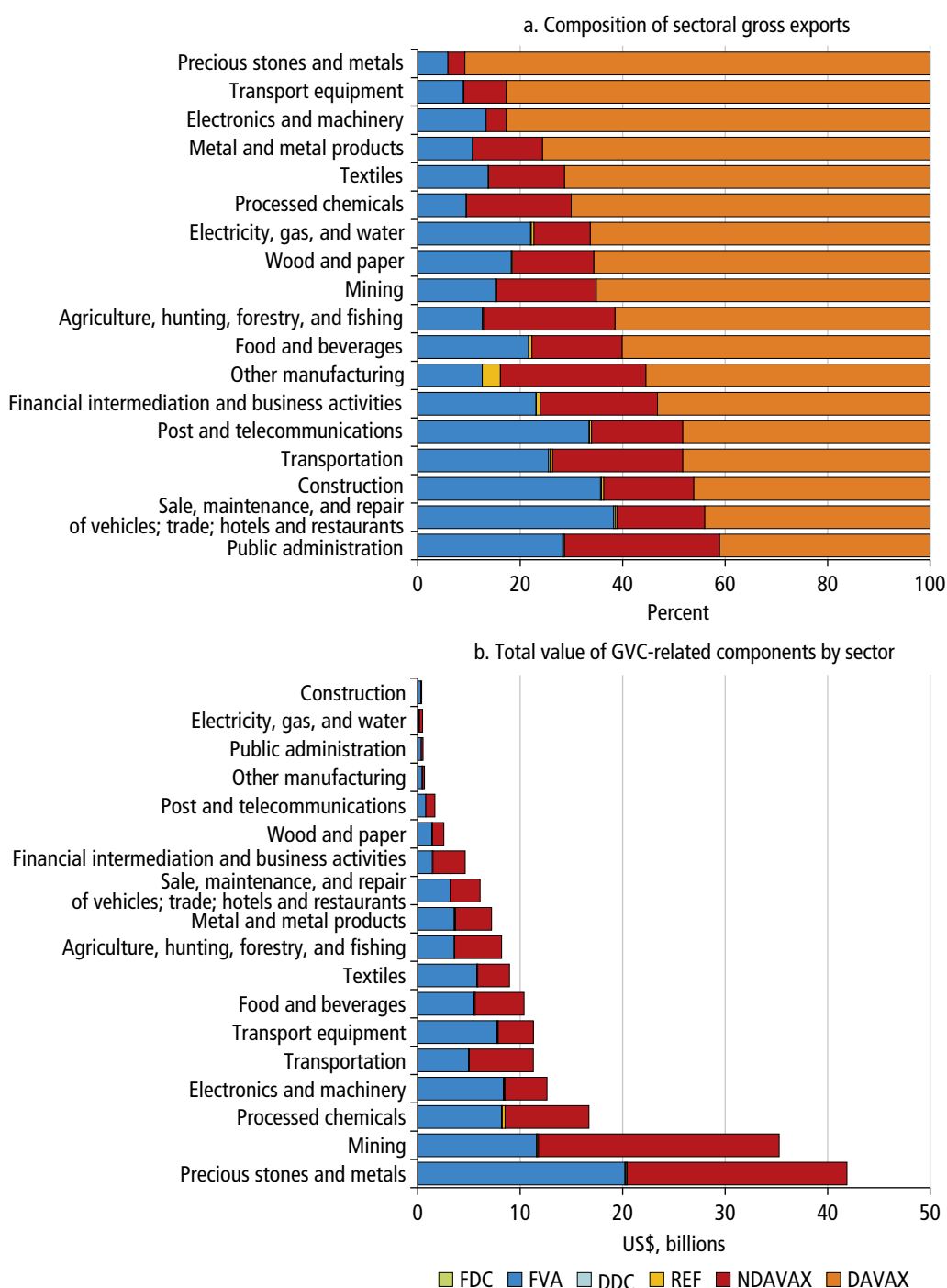
Despite their potential to foster industrial learning and structural change, RVCs remain shallow but are geographically clustered and growing in relevance. Intra-African GVC participation is modest, and RVCs in which African countries co-produce and exchange intermediates account for only 3 percent of the continent's total GVC participation—compared to 26 percent in Latin America and the Caribbean and over 40 percent in East Asia and Pacific. Beneath the aggregate weakness, however, lies a more heterogeneous and revealing pattern.

Figure 1.3 Decomposition of Exports into GVCs, by Country, 2015–19 Average

Source: World Bank elaboration based on data from the EMERGING database (<https://zenodo.org/records/10956623>).

Note: DAVAX captures classical (non-GVC-related) export components; NDAVAX is also known as forward GVC participation or E2R (reexported exports). These components are processed further into products or components that are then exported again. FDC components are exported again as part of a further processing stage. Because of the rather short GVCs African countries are engaged in (except South Africa), DDC and REF components are close to 0. DAVAX = directly absorbed value-added exports; DDC = domestic double counted; FDC = foreign double counted; FVA = foreign value-added; GVC = global value chain; NDAVAX = non-DAVAX; REF = reflected.

Figure 1.4 Decomposition of Exports, by Sector, 2015–19 Average



Source: World Bank elaboration based on data from the EMERGING database (<https://zenodo.org/records/10956623>).
 Note: DAVAX captures classical (non-GVC-related) export components; NDAVAX is also known as forward GVC participation or E2R (reexported exports). These components are processed further into products or components that are then exported again. FDC components are exported again as part of a further processing stage. Because of the rather short GVCs African countries are engaged in (except South Africa), DDC and REF components are close to 0. DAVAX = directly absorbed value-added exports; DDC = domestic double counted; FDC = foreign double counted; FVA = foreign value-added; GVC = global value chain; NDAVAX = non-DAVAX; REF = reflected.

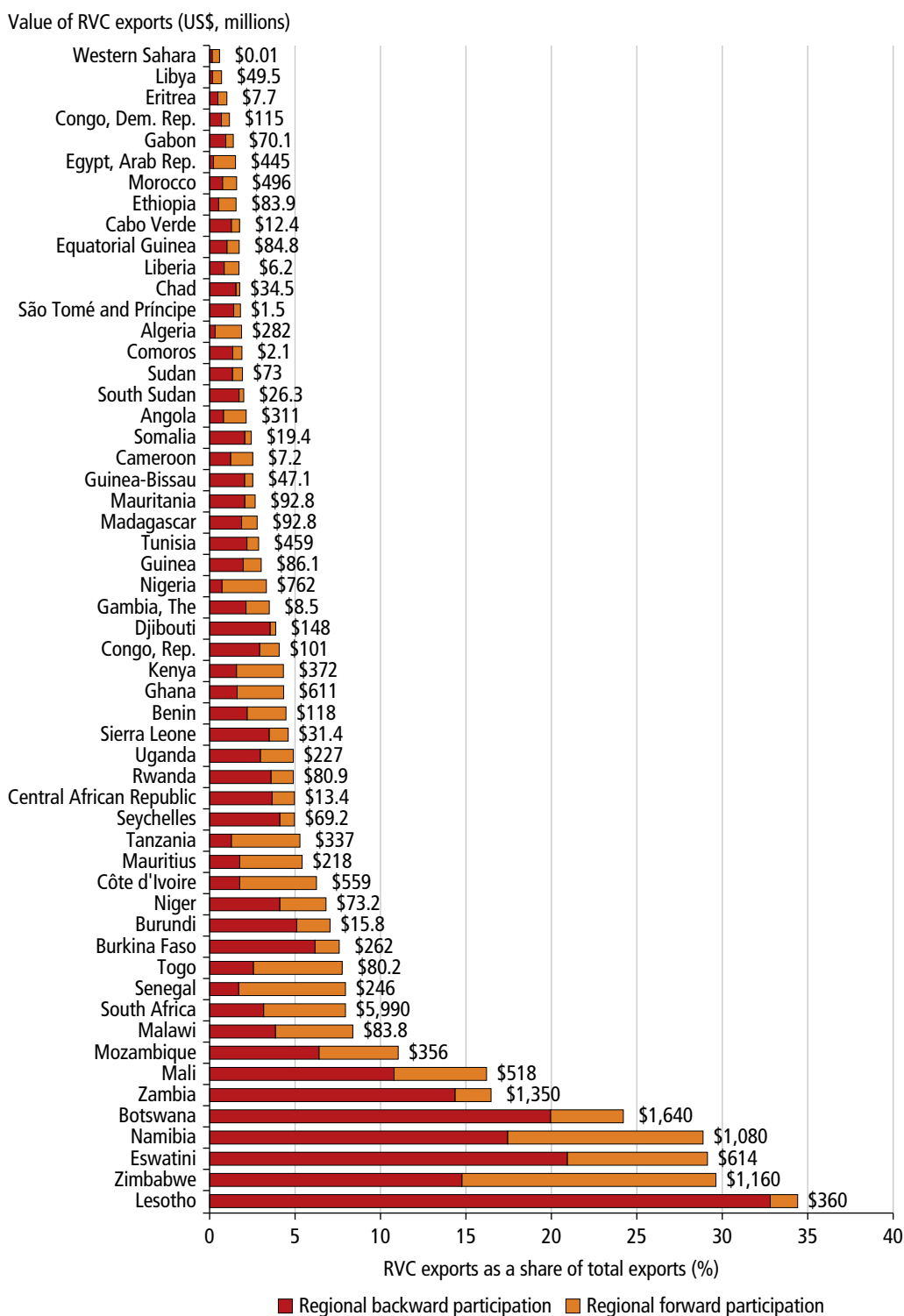
The SADC region dominates regional trade and RVC integration. South Africa leads the region in absolute RVC export volumes, exporting over US\$6 billion worth of RVC-related products, but with a lower RVC intensity (about 8 percent) because of its large trade volumes overall (figure 1.5). Smaller SADC economies like Eswatini, Lesotho, Namibia, and Zimbabwe have the highest RVC intensities, with close to 30 percent of their exports integrated into RVCs. Nigeria ranks sixth in total RVC exports, but much lower in intensity of RVC exports as a share of total exports. These RVC patterns, particularly as seen within SADC, emerge when industrial policy, trade logistics, and regional demand align. In Zimbabwe, for instance, processed foods exports to neighboring countries reflect both demand complementarities and shared agri-ecological zones. Kenya's plastics and packaging trade, Lesotho's textile exports, and Senegal's food processing highlight how small and midsized economies can specialize in RVC-relevant sectors. These activities tend to involve higher domestic value added and more backward linkages than traditional resource exports. Successes remain isolated rather than systemic, however, suggesting that RVCs in Africa are still at an early stage of emergence rather than fully embedded networks.

By sector, RVCs are strongest in processed foods and beverages, processed chemicals, transport equipment, and select light manufacturing sectors. These sectors are both process-intensive and regionally embedded. Sectoral data reveal which parts of Africa's economy already underpin RVCs (figure 1.6). Precious stones and metals as well as mining make up more than one-third of intra-African trade in value (refer to figure 1.2), but less than 10 percent of those exports are regionally integrated. By contrast, processed chemicals and processed foods and beverages exhibit intra-African shares of 30–40 percent, indicating thicker RVC engagement. Processed chemicals, processed foods and beverages, and to some extent transport equipment exhibit balanced backward and forward regional integration, suggesting the strongest potential for value chain deepening. In 2015–19, processed foods and beverages accounted for US\$1.6 billion in RVC trade per year, with an African value-added share of 31 percent. Processed chemicals RVCs reached US\$2.7 billion, driven by plastics, fertilizers, and chemical exports from Egypt, Morocco, and South Africa. Meanwhile, precious stones and metals remain the largest RVC sector by value (US\$7 billion) but is dominated by low-processing flows with weak linkages.

Cross-country sectoral heterogeneity suggests region-specific opportunities.

- *Central Africa.* CEMAC shows early linkages in wood and paper, and in transport equipment components.
- *East Africa.* Led by Ethiopia and Kenya, East Africa is building capabilities in horticulture, apparel, and basic manufacturing, supported by industrial parks and trade corridors. EAC and IGAD display specialization in agriculture and agro-processing, with countries like Ethiopia and Uganda anchoring regional food trade. EAC also displays strong trade ties in textiles and horticulture, with Kenya and Uganda acting as regional nodes.
- *North Africa.* The AMU and Egypt show strength in chemicals and transport equipment. Egypt, Morocco, and Tunisia, in particular, have carved out niches in electronics, pharmaceuticals, and automotive wiring systems, often exporting to regional neighbors in Europe. In AMU, Morocco and Tunisia integrate more with Europe than Africa, but their specializations in machinery, chemicals, and pharmaceuticals hold promise for continentwide production platforms.

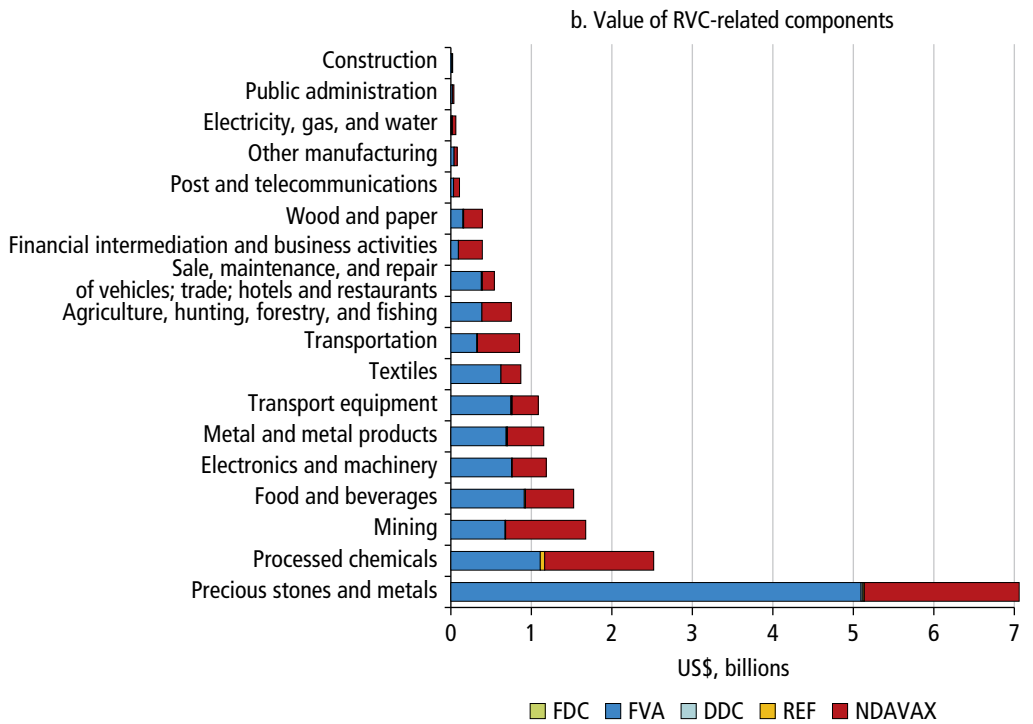
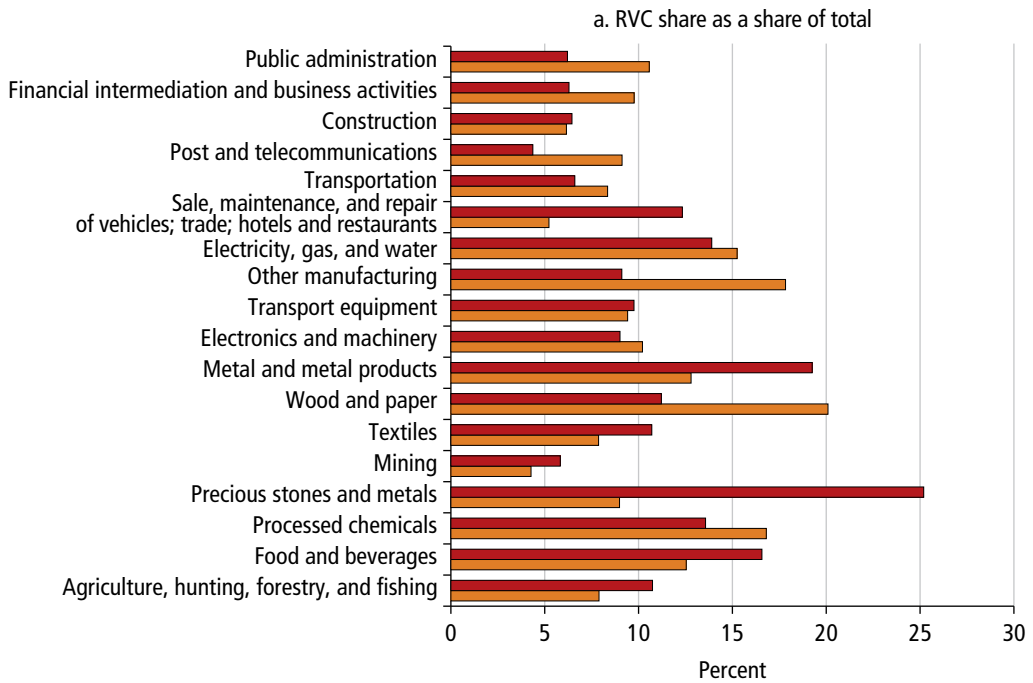
Figure 1.5 African RVC Exports, by Country, 2015–19 Average



Source: World Bank elaboration based on data from the EMERGING database (<https://zenodo.org/records/10956623>).

Note: Total values and shares of RVC components. RVC = regional value chain.

Figure 1.6 African RVCs, by Sector, 2015–19 Average



(continued next page)

Figure 1.6 African RVCs, by Sector, 2015–19 Average (continued)

Source: World Bank elaboration based on data from CEPII (https://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=37).

Note: DAVAX captures classical (non-GVC-related) export components; NDAVAX is also known as forward GVC participation or E2R (reexported exports). These components are processed further into products or components that are then exported again. FDC components are exported again as part of a further processing stage. Because of the rather short GVCs African countries are engaged in (except South Africa), DDC and REF components are close to 0. DAVAX = directly absorbed value-added exports; DDC = domestic double counted; E2R = regional forward participation; FDC = foreign double counted; FVA = foreign value-added; GVC = global value chain; NDAVAX = non-DAVAX; REF = reflected.

- *Southern Africa.* South Africa serves as a regional anchor, with integration into automotive value chains that include component manufacturing in Botswana, Eswatini, and Lesotho. RVCs in SADC are also led by processed foods and beverages and processed chemicals.
- *West Africa.* Although still extractives heavy, West Africa (especially ECOWAS) is becoming a nascent hub for textile and apparel manufacturing, backed by investments in Benin, Ghana, Nigeria, and others. Momentum is growing in agro-processing value chains in Ghana, Côte d'Ivoire, and Nigeria, particularly in cocoa, cashew, rice, and staples, although much value addition still occurs downstream or in semiprocessed forms.

Despite the potential of new opportunities, most regions continue to focus on a particular sector. Processed foods and beverages is the lead RVC sector in EAC (17 percent), processed chemicals in AMU (20 percent), and agriculture in IGAD (41 percent). SADC remains the most diversified region, with meaningful activity in processed foods and beverages, processed chemicals, electrical and machinery, and metal and metal products.

Africa's current RVC structure reveals both a constraint and an opportunity. Sectors like processed foods, light manufacturing, and basic chemicals dominate because they sit at the intersection of strong regional demand, relatively low technological complexity, and adjacency to existing productive capabilities. The concentration in these sectors also reflects binding structural constraints: fragmented input markets, small firm sizes, and institutional coordination failures, particularly across borders (Newfarmer et al. 2020; Sutton and Kellow 2010). The emergence of regional "beachheads"—such as Kenya in plastics, Lesotho in apparel, and Senegal in food processing—offers tangible entry points for scaling RVCs. These nodes have the potential to generate backward linkages and local spillovers, especially when supported by investment in packaging supply chains, harmonized standards, and infrastructure to lower regional trade costs (Taglioni and Winkler 2016).

However, RVCs should be treated not as spontaneous outcomes of trade liberalization but as policy-guided pathways to learning, capability accumulation, and structural change. Thin RVCs that characterize the region reflect more than just geography or infrastructure. They are often reinforced by institutional fragmentation, thin markets, shallow industrial ecosystems, and high transportation costs, as discussed in the next section (Beltekian et al. 2025).

What Matters for Regional Value-Added Trade?

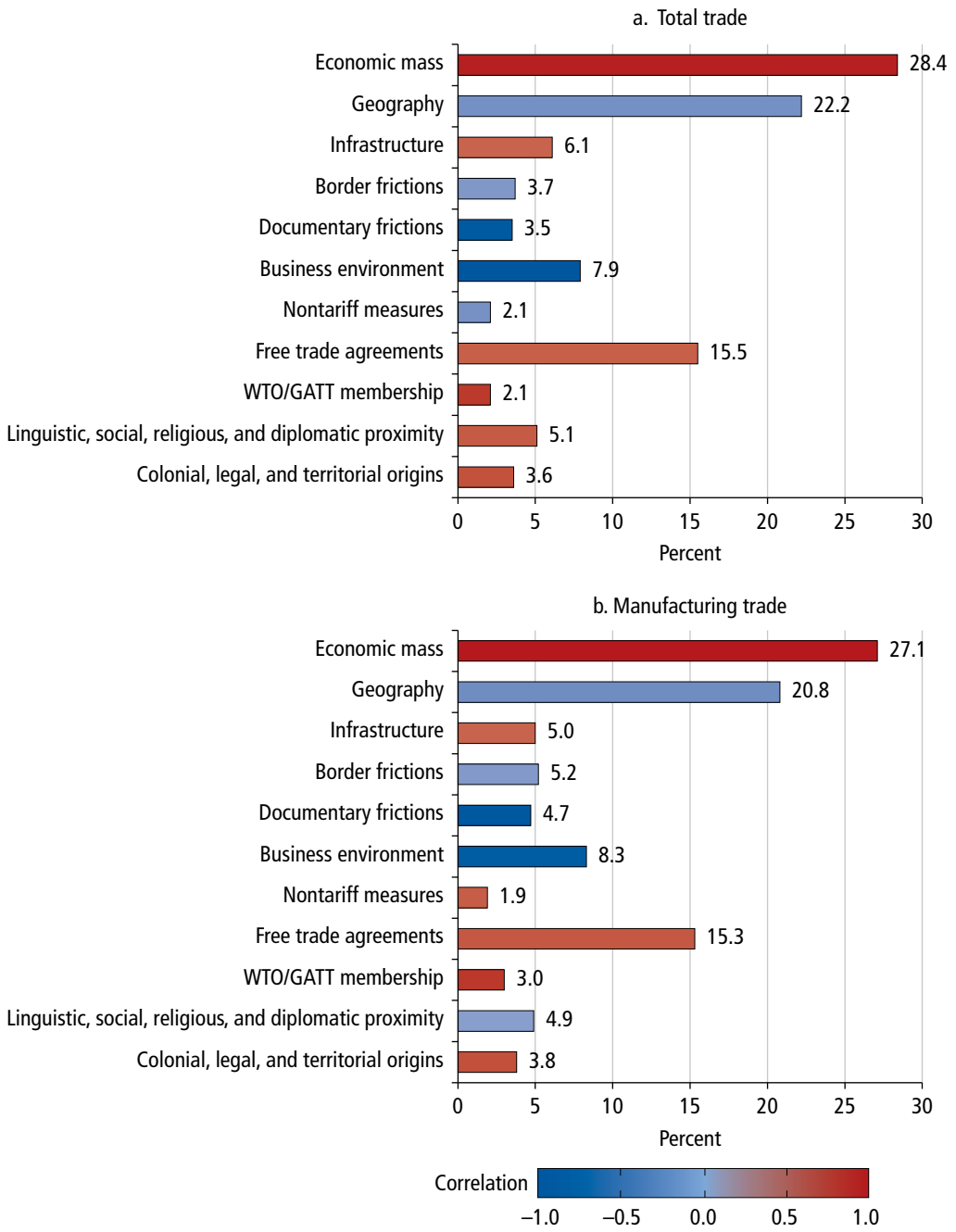
Drawing on CEPII-BACI trade data (2010–22),² regional agreement features, and other frictions, this chapter develops a predictive framework that goes beyond traditional trade diagnostics by combining a structural gravity model with machine learning techniques. The model generates robust, policy-actionable insights.

Besides economic mass (density, income) and geography, the most powerful predictors of intra-African RVC trade are the depth and institutional completeness of regional agreements. In the hybrid gravity-machine learning framework, moving from shallow to deeper REC provisions is associated with up to a 40 percent gain in bilateral value-added trade, holding economic mass constant (refer to the variable free trade agreements in figures 1.7 and 1.8). Deeper RECs incorporate enforceable dispute settlement, customs commonality, mutual recognition, and investment rules. This result aligns with other studies that emphasize the role of institutional harmonization in shaping trade outcomes and with research conducted for this report, discussed further in chapter 4 (refer also to Fontagné et al. 2026). It also mirrors global evidence that emphasizes the importance of services liberalization, mutual recognition, and investment protection for production network development (Mattoo et al. 2020). In the case of Africa, regulatory harmonization can substitute, at least partially, for geographic disadvantage or distance-related frictions. These results challenge the standard narrative that geography or infrastructure alone drives integration. Policy aiming to complete the software of trade—customs interconnection, certification portability, mutual recognition of standards, coordinated competition policies, and enforceability of institutional frameworks—matters as much as physical infrastructure.

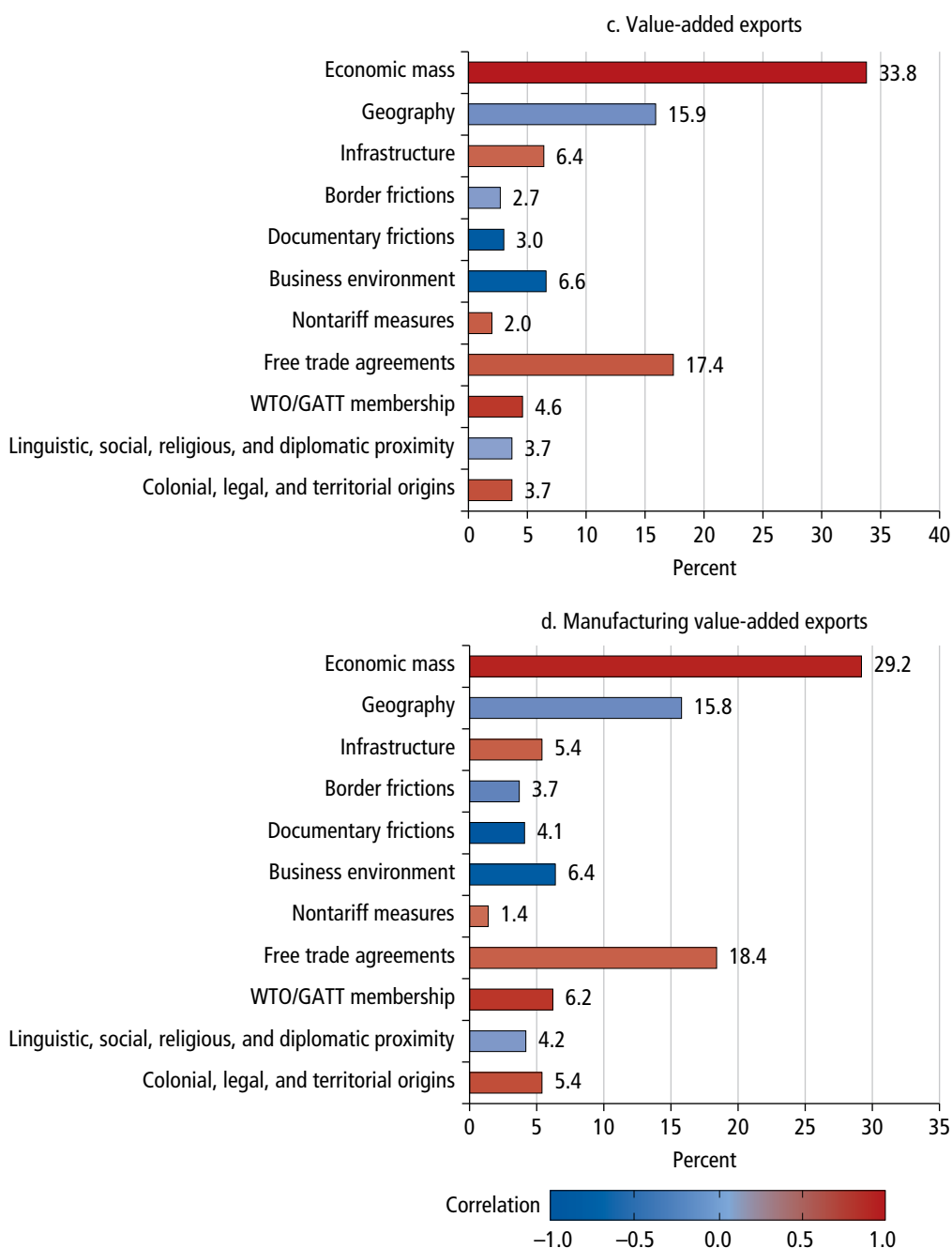
Corridor efficiency, captured through a network time efficiency index (a composite of travel time, reliability, and procedural delays) emerges as a critical factor in RVCs. Reliable corridors are the arteries of Africa's RVCs and industrialization. Empirical analysis of intra-African trade finds infrastructure quality—the route and time efficiency of the regional road network—among the top predictors of bilateral trade and value-added exports, with a larger effect on RVCs than on traditional trade (Krantz et al. 2025). Even landlocked countries can achieve strong RVC linkages if embedded in high-performing trade corridors, explaining why many landlocked or noncontiguous countries (for example, Malawi and Uganda) outperform more geographically proximate but poorly connected peers. This finding aligns with other prominent studies arguing that variability and predictability in trade logistics matter more than average costs (Ojala et al. 2018). Without predictability, firms cannot plan production schedules, undermining regional manufacturing and input sourcing. These frictions disproportionately affect time-sensitive sectors like agro-processing, textiles, and light manufacturing, sectors in which Africa has latent comparative advantage. The policy priority must shift to corridor governance—including cooperation between border agencies, joint infrastructure investment, and satellite-monitored cargo tracking—and not focus just on road construction.

Though not directly traceable, and often subsumed under economic density, production capabilities and export structures matter—possibly more than any single trade friction or policy lever. The relatedness of existing exports to potential new products, as measured by product space density and the depth of revealed comparative advantage (RCA), correlates strongly with RVC participation. Countries with dense, diversified specialization sets—such as Côte d'Ivoire and Senegal (agro-processing), and Kenya (packaging and processed plastics)—are better positioned to plug into multiproduct regional production networks. This finding also supports path-dependent diversification theories and echoes the findings of Bahar et al. (2014) that capability accumulation is easier when production structures are related and geographically embedded. In contrast, mono-exporters or resource-dependent economies often lack the supplier ecosystems and skills necessary to compete in regional processing or intermediate goods trade. Thus, addressing the frictions provides the foundation, but Africa also needs to deepen its production capabilities in diversified industries.

Figure 1.7 Predictor Importance of Intra-African Exports and RVCs



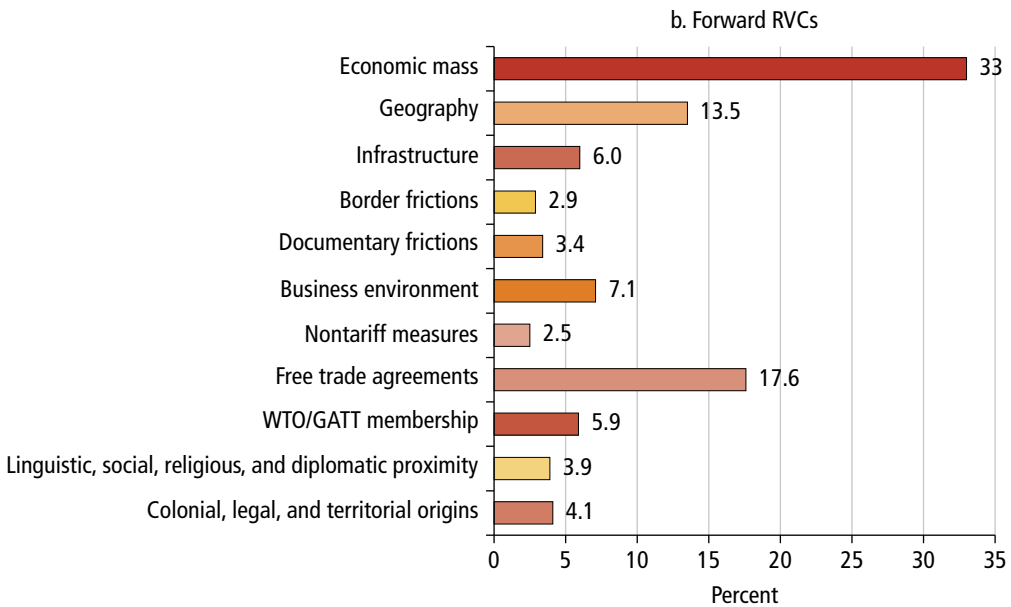
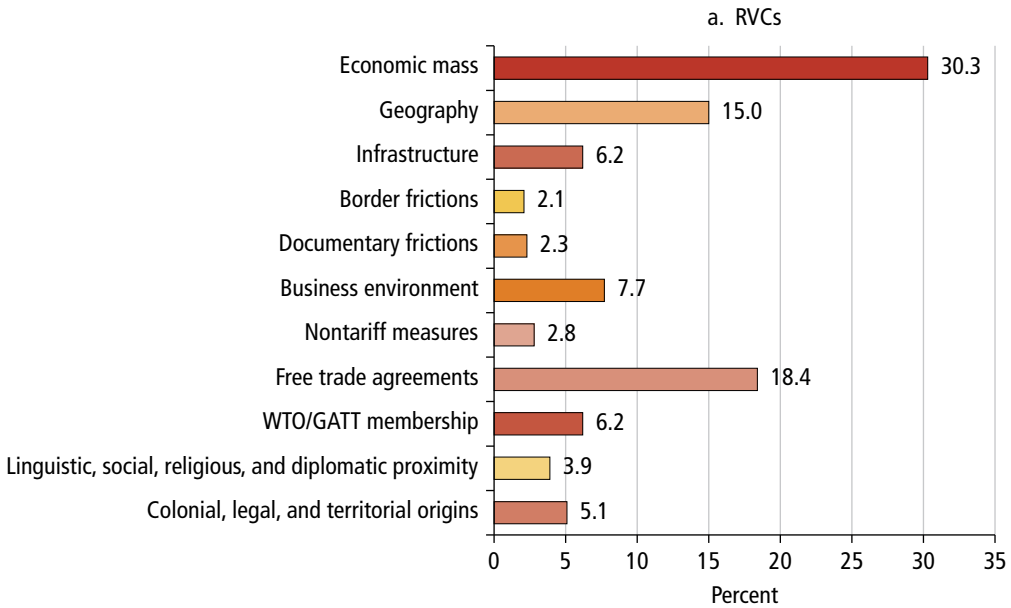
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Figure 1.7 Predictor Importance of Intra-African Exports and RVCs (continued)

Source: World Bank elaboration based on data from CEPII (https://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=37).

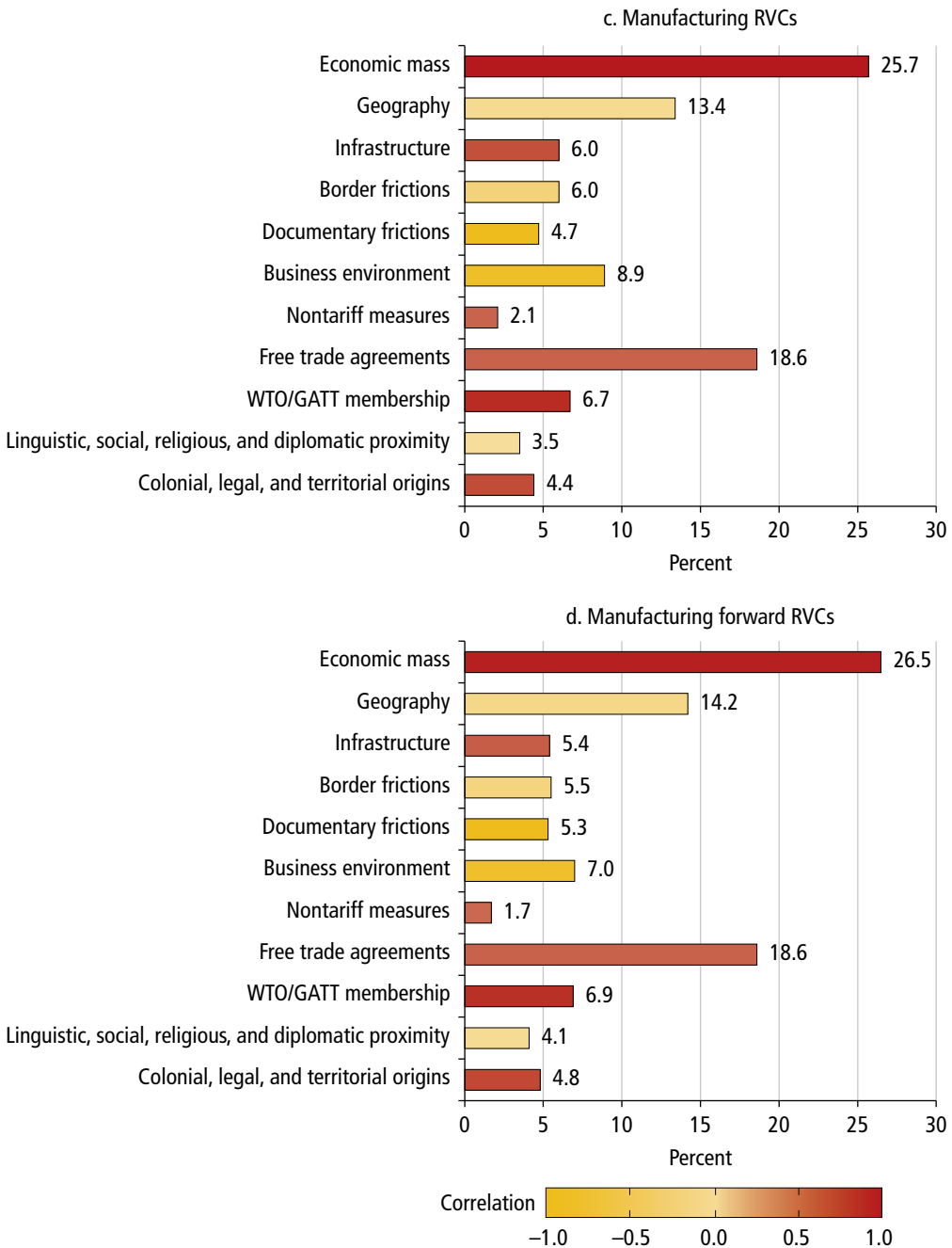
Note: The percent contribution of the respective group appears to the right of each bar. Results reflect the relative importance of each variable in intra-African trade. GATT = General Agreement on Tariffs and Trade; RVC = regional value chain; WTO = World Trade Organization.

Figure 1.8 Predictor Importance of RVCs



(continued next page)

Figure 1.8 Predictor Importance of RVCs (continued)



Source: World Bank elaboration based on data from CEPII (https://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=37).

Note: The percent contribution of the respective group appears to the right of each bar. Results reflect the relative importance of each variable in RVCs. GATT = General Agreement on Tariffs and Trade; RVC = regional value chain; WTO = World Trade Organization.

Specialization Patterns and Opportunities for Regional Value Chains

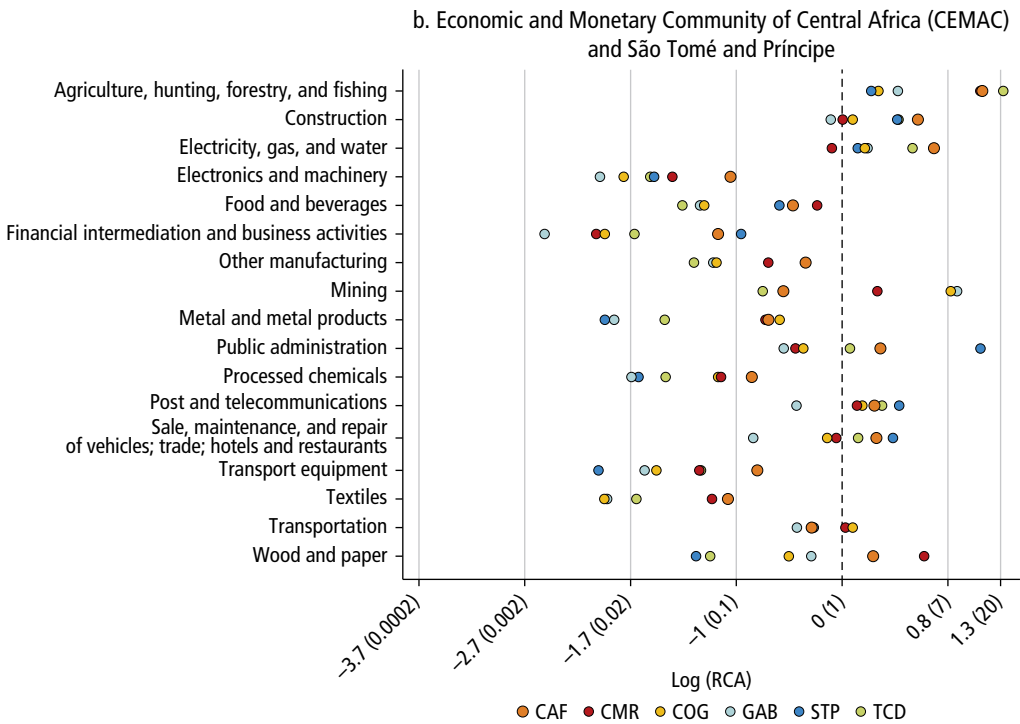
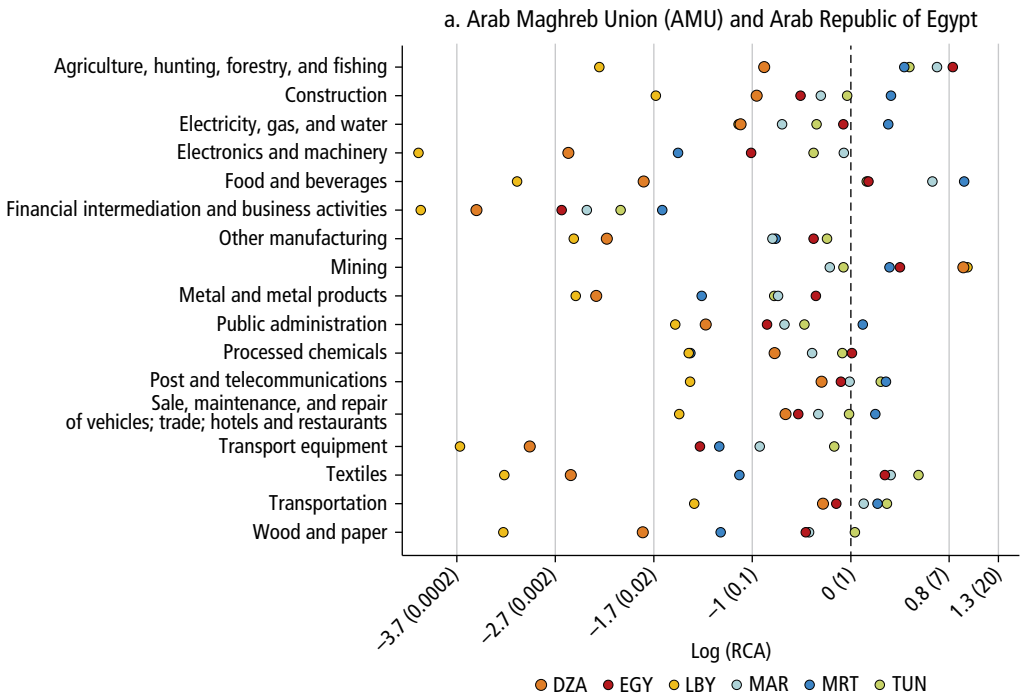
Key message: *Africa's export specialization remains concentrated in primary commodities and similar low-complexity goods, with manufacturing capability anchored in a small number of economies. Because countries often compete in the same narrow range of products, the traditional gains from intra-African trade based on differences in what countries produce are limited. The opportunity lies in aggregation: Pooling demand and supply across regional economic communities multiplies the scope of feasible industrial specialization, opening sectoral possibilities that no African country can reach alone. This is why Africa's industrial strategy must be regional, not national, and why building regional value chains is a structural priority.*

Africa's export specialization remains concentrated in a narrow set of sectors, reflecting a reliance on primary commodities and a limited industrial base. When benchmarked against global markets, most African countries' RCA lies in primary sectors such as agriculture and raw materials, with few countries competitive in manufactured goods. No African country had a comparative advantage (that is, $RCA > 1$) in electrical machinery or transport equipment at the global level. This finding indicates that, although African economies export what they can (given existing capabilities), the products they export generally embody lower value addition and technology.

Manufacturing and diversified industrial exports are conspicuously absent as areas of regional specialization. Only the Southern Africa region (SADC) has countries with RCAs in manufacturing, textiles, or financial services, thanks largely to more industrialized economies like South Africa. In West Africa (ECOWAS), agriculture dominates (with 12 countries having RCA in agriculture), followed by construction and telecom services. East African (EAC) countries likewise show strength in agriculture and utilities (electricity and water) rather than in manufacturing. These patterns underscore a duality: Africa's comparative advantages remain heavily oriented toward primary products and nontradeable services, whereas secondary (manufacturing) sectors lag. Many of the sectors in which African countries are competitive regionally (like construction or agro-processing) are driven by domestic demand and not easily exportable, which limits opportunities to build regional trade around them. In effect, African economies often export similar products and thus compete in the same narrow range. This high similarity of comparative advantage between neighbors limits traditional gains from trade (based on specialization differences), because many countries are doing more of the same rather than complementing each other. The situation reinforces the need for Africa to broaden its production capabilities and move into new products if regional integration is to generate substantial trade and growth gains.

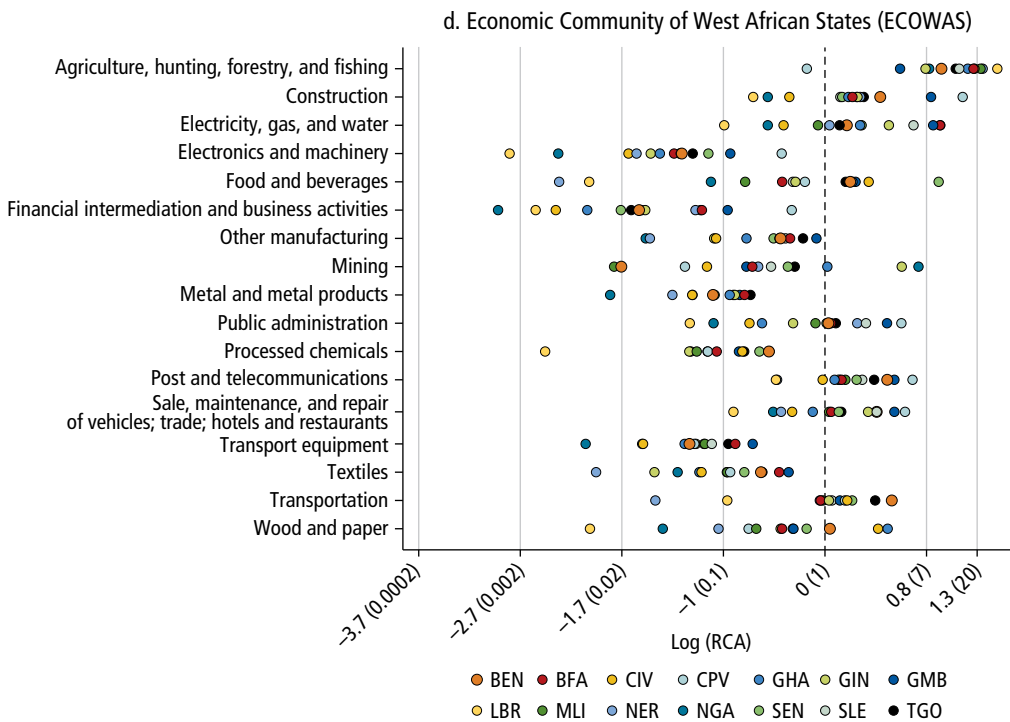
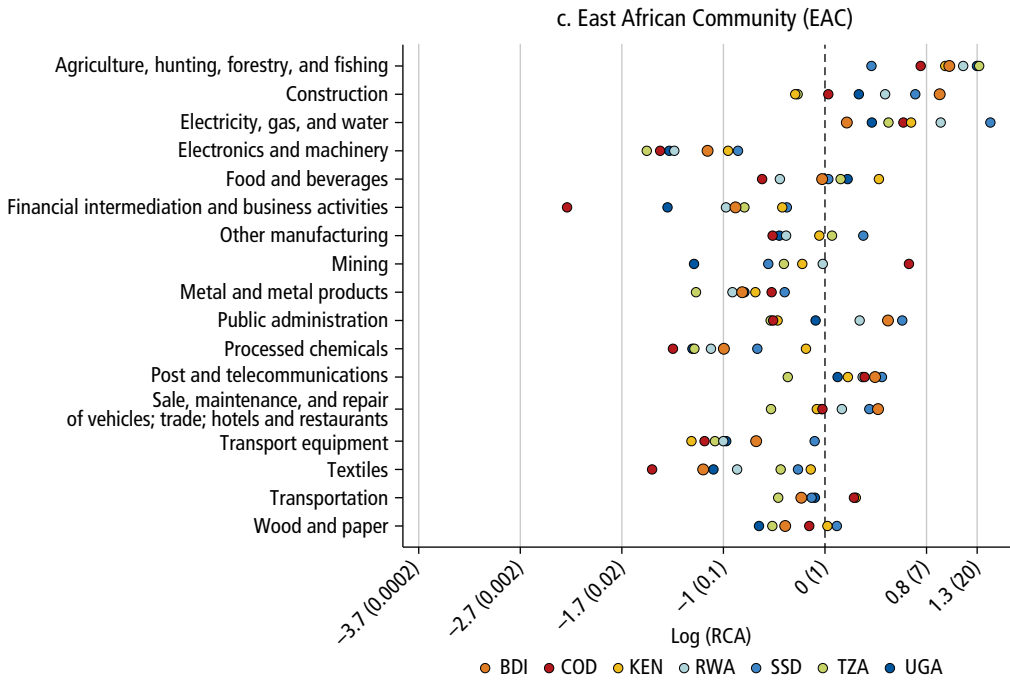
Figure 1.9 underscores how sectoral specialization patterns differ across RECs. For instance, AMU exhibits comparative strength in heavy manufacturing and chemicals, and SADC in extractives and light manufacturing; EAC and ECOWAS show moderate specialization in agro-processing and textiles. The fragmentation of capability across RECs presents both a challenge and an opportunity, one that can be addressed through deliberate regional coordination. On a positive note, a few African countries have begun to diversify their export base and build industrial strengths. For instance, within SADC, countries like Eswatini, Mauritius, and South Africa have developed RCAs in other manufactures or textiles, indicating pockets

Figure 1.9 Revealed Comparative Advantage, by REC and Broad Sector Classification, 2021



(continued next page)

Figure 1.9 Revealed Comparative Advantage, by REC and Broad Sector Classification, 2021 (continued)



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Figure 1.9 Revealed Comparative Advantage, by REC and Broad Sector Classification, 2021 (continued)



Source: Adapted from Beltekian et al. 2025.

Note: The figure presents the regional comparative advantage of each African country compared to the rest of the world. Each panel plots countries' regional comparative advantage according to the REC to which they belong. The calculations use EORA data for 2021. RCA = revealed comparative advantage; REC = Regional Economic Community. International Organization of Standardization (ISO) country codes available at <https://www.iso.org/obp/ui/#search>.

of industrial capability on the continent (Kassa and Ouedraogo 2025). These experiences can provide a foundation for broader RVCs if such capabilities are leveraged across borders. Overall, however, the continent's export profile remains narrow, highlighting the urgency of strategies to expand into higher-value products and overcome the current specialization trap of commodities.

Expanding Africa's Market and Production Possibilities

Aggregating at the regional level multiplies the scope of feasible industrial specialization. When African countries act collectively through RECs, new sectoral opportunities emerge that individual countries alone cannot access. Regional patterns underscore the need for regional, not national, industrial strategies.

Most African economies are structurally small and often rely on overlapping export profiles centered on agriculture, raw materials, and low-complexity goods. These narrow specialization patterns pose limits to both diversification and upgrading when assessed at the individual country level. But this constraint begins to lift when countries aggregate into RECs or other subregional groupings. Combining economies through integration not only enlarges market size but also aggregates know-how, industrial capabilities, and product complementarities, expanding the set of feasible industrial options. This effect is empirically observable in network proximity and product space analysis. A country's potential to diversify into new products depends not only on factor endowments or comparative advantage, but also on the relatedness between existing and prospective products and their density (Beltekian et al. 2025; Hausmann and Hidalgo 2011; Hidalgo et al. 2007). These measures serve as proxies for latent capabilities, the tacit know-how and institutional foundations needed to move into adjacent sectors.

Computing product density and relatedness across aggregated REC export baskets reveals that the scope of reachable sectors increases markedly at the regional scale (figure 1.10). Many countries have narrow export baskets, but regional integration acts as a capability multiplier by effectively increasing product density through shared production systems, standards, and inputs.

These patterns highlight the need for regional rather than purely national industrial strategies. In ECOWAS, combining Nigeria's demand and its capabilities in packaging and chemicals with Côte d'Ivoire's and Ghana's cocoa processing can underwrite a competitive regional confectionery and inputs ecosystem. In SADC, South Africa's bulk chemicals and machinery can be networked with Mozambique, Zambia, and Zimbabwe in fertilizers, metal components, and processed foods, leveraging corridor infrastructure and existing customs coordination. Both cases exemplify how regional scale and relatedness expand feasible upgrading paths beyond national silos, which could be achieved by alignment or coordination in industrial policies, driven by market forces.

Although individual EAC member states such as Kenya, Tanzania, and Uganda currently specialize in food, agro-processing, packaging, and light manufacturing, the region as a whole occupies a dense portion of the product space that borders higher-complexity sectors such as chemicals, construction materials, machinery, and miscellaneous manufacturing, including

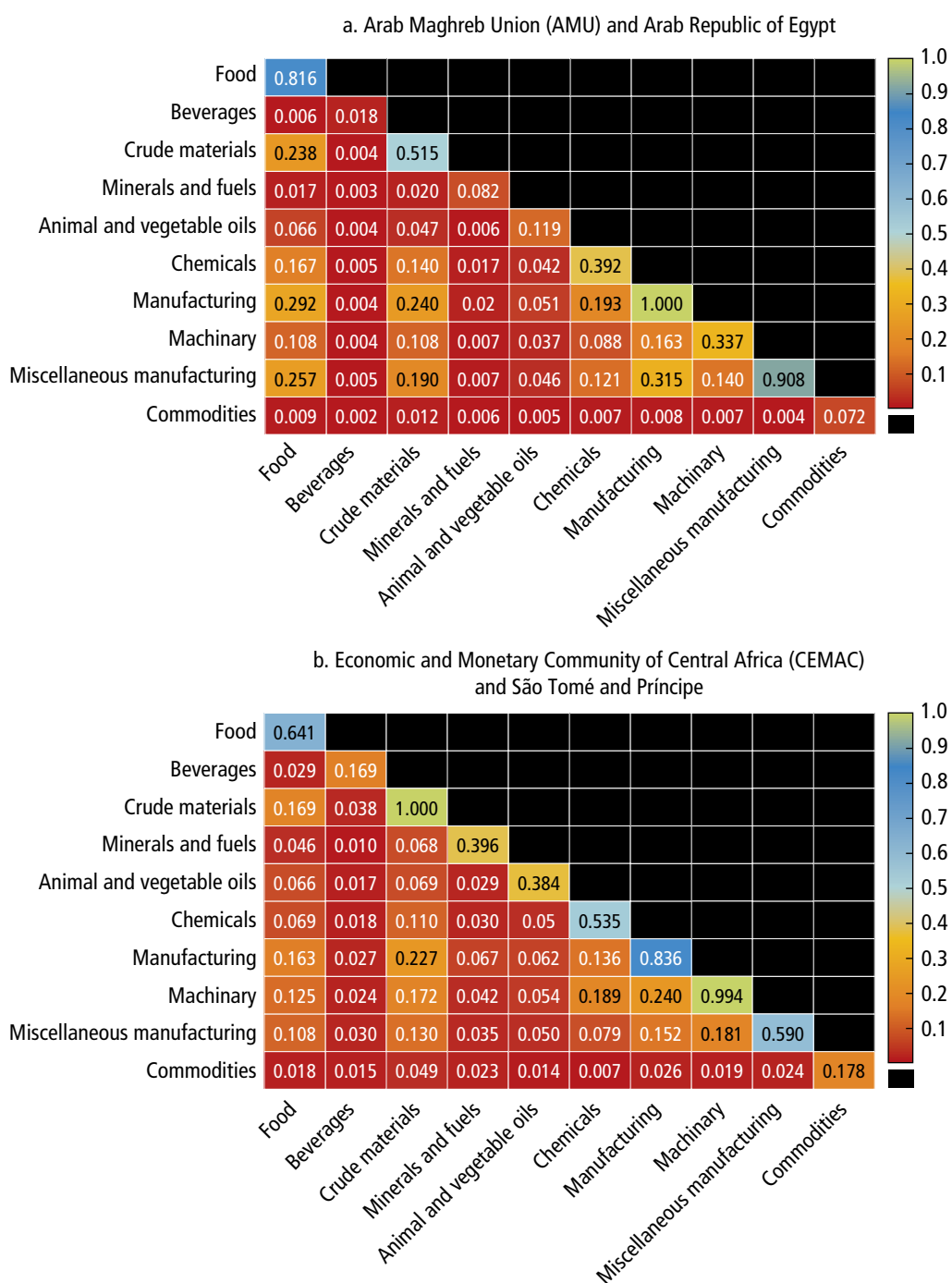
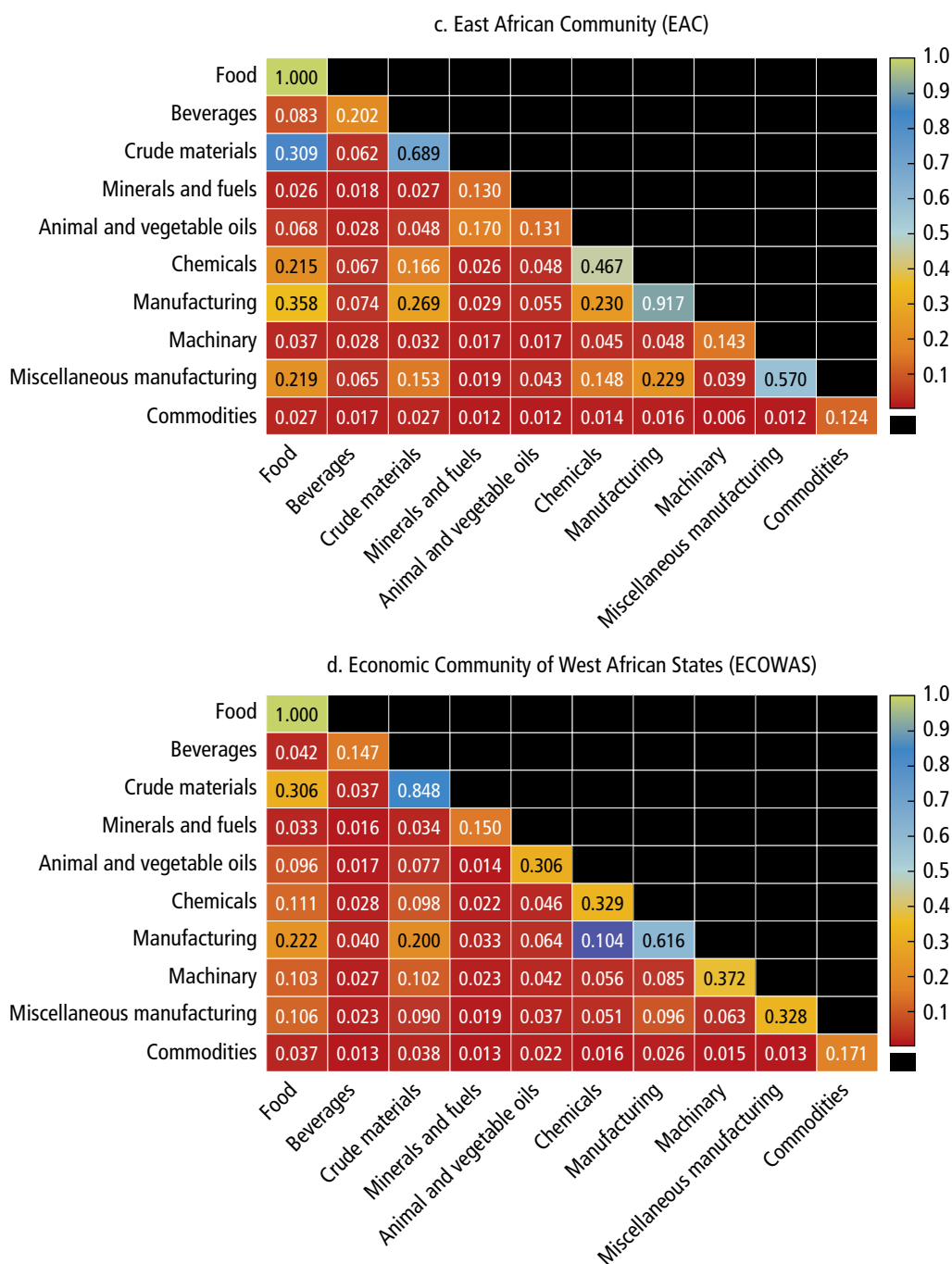
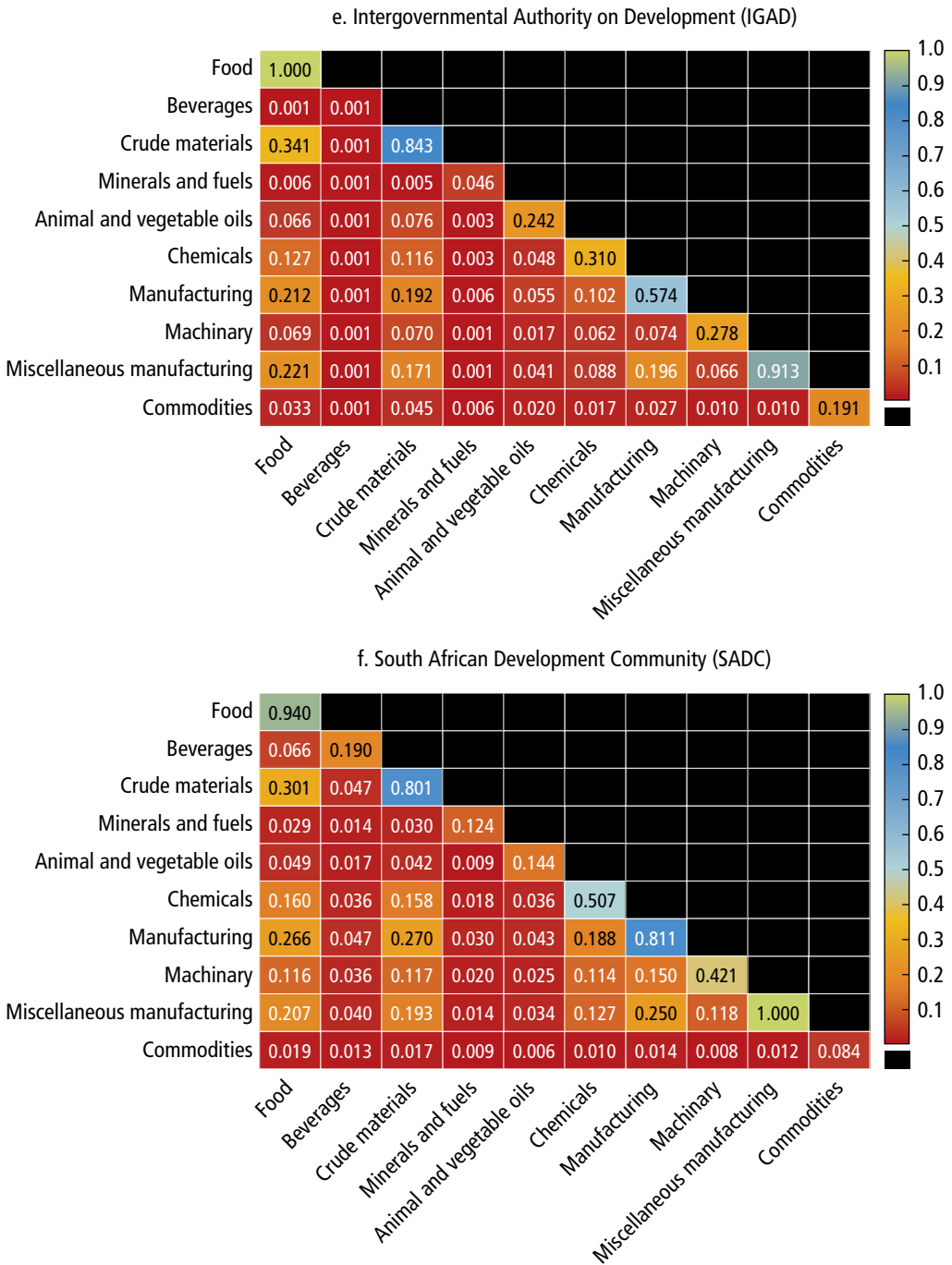
Figure 1.10 REC Specialization Patterns, 2022*(continued next page)*

Figure 1.10 REC Specialization Patterns, 2022 (continued)



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Figure 1.10 REC Specialization Patterns, 2022 (continued)



Source: Adapted from Beltekian et al. 2025.

Note: This figure presents the specialization pattern of African countries by REC membership in 2022. The specialization patterns are calculated by aggregating the 4-digit product data to the 1-digit level corresponding to the 10 Standard International Trade Classification categories. Average REC product proximity score is calculated and then normalized using min-max feature scaling such that each element lies between [0,1]. The closer the element is to 1, the stronger the REC's specialization in a given industry. The calculations use EORA data for 2021 (<https://worldmrio.com>). REC = Regional Economic Community.

transportation components. Ethiopia, though not formally an EAC member, complements this configuration with capabilities in plastic molding, leather processing, and light transportation assembly. Limited scale and fragmented capabilities often make these diversification pathways infeasible for any single country in isolation. However, when assessed as a regional production network, the EAC presents promising specialization synergies. These interlocking capabilities imply that, with coordination, the region could support clustered production in downstream industries such as auto parts, personal care products, or fertilizers, sectors that exhibit high proximity scores in the product space and strong regional demand. Although no single EAC country produces the full set of inputs required for a functioning auto parts industry, Ethiopia, Kenya, and Uganda possess complementary capabilities in plastic molding, metal forming, and transportation assembly. Together, these capabilities can form a regional supply base attractive to lead firms, especially under AfCFTA's rules of origin provisions that encourage regional sourcing.

Similarly, individual ECOWAS countries remain rooted in agriculture and extractives. Scaling as a region, especially leveraging Nigeria's industrial weight alongside Côte d'Ivoire and Ghana, offers new possibilities in manufacturing, beverages, and agro-processing. In agro-processing, the story is even clearer. Côte d'Ivoire and Ghana dominate cocoa production, but Nigeria brings demand scale that can support a wider range of value-added processing, packaging, and distribution. Nigeria also brings upstream capacity in chemicals and plastics that could feed packaging and consumer goods production, and Senegal and Togo offer emerging footholds in processing and regional logistics. A regional strategy in ECOWAS would allow raw inputs to move freely across borders, encourage colocation of intermediate processors and packaging firms, and create conditions for a consumer-facing chocolate industry that serves both West African and international markets. These patterns suggest untapped synergies within RECs that can be exploited only through integration.

SADC, with South Africa as a regional industrial hub, offers another instructive case. Its current comparative strengths in chemicals and heavy industry could be extended into fertilizers and processed intermediate goods, especially by building backward and forward linkages with neighboring economies like Mozambique, Zambia, and Zimbabwe. SADC also exhibits comparative strength in processed foods, base metals, and light engineering, underpinned by South Africa's manufacturing base. Regional RCA scores and density measures show that SADC is uniquely positioned to extend its comparative advantage into regional fertilizer production, metal-based components, and food packaging, sectors that benefit from high economies of scale and regional demand. For example, South Africa's strength in bulk chemicals and Zambia's phosphate resources could support a regional fertilizer cluster serving agriculture from Angola to Malawi.

The feasibility of such deepening is supported by the region's relatively better infrastructure, customs coordination, and historical trade ties. SADC's RVCs are marked by a higher degree of backward linkages compared to other RECs, enabling more distributed gains across smaller members. Botswana and Namibia, although small, are significantly embedded in value chains for beef processing and minerals, respectively. Harnessing regional complementarities

would allow countries to expand into nearby sectors with lower fixed costs (Hausmann and Hidalgo 2009). The SADC Industrialization Strategy (2015–63) actively promotes value chain mapping, infrastructure development, and public-private partnerships, albeit with uneven implementation. These policy foundations, if reinforced with investment in certification, infrastructure, and harmonized regulatory frameworks, could catalyze cross-border industrial ecosystems in sectors such as pharmaceuticals, automotive components, and renewable energy inputs.

The case of AMU, marked by higher industrial sophistication and stronger trade linkages with Europe, illustrates the possibilities of moving into higher-complexity sectors. Egypt, Morocco, and Tunisia already have RCAs in medium-complexity sectors such as chemicals, electronics, and automotive components. Aggregated, their product proximity reveals reachable capabilities in pharmaceuticals, machinery, and medical equipment, and further into automotive components. These patterns suggest strategic regional deepening, with Tunisia, for instance, acting as an anchor for broader value chain expansion into machinery and biotechnology. Morocco and Tunisia have made inroads into aerospace components and automotive wiring systems, benefiting from proximity to European markets and supplier networks. Egypt, meanwhile, is a regional leader in generic pharmaceutical production, offering the possibility of integration into broader regional supply chains in health products. Aggregated as a regional production zone, AMU's combined proximity metrics show that sectors like biopharmaceuticals, electric machinery, and agro-industrial equipment are “nearby” capabilities—technologically adjacent and institutionally accessible. These opportunities are amplified by AMU's relatively better logistics and infrastructure, including port and rail connectivity.

Geographic proximity facilitates the diffusion of productive knowledge, beyond what product space alone would predict, and geographic proximity via regional integration amplifies the regional potential. Studies have shown that neighbors affect the evolution of each other's comparative advantage (Bahar et al. 2014). Regional integration and shared capabilities create externalities that ease diversification. Countries such as Egypt, Kenya, South Africa, Tunisia, and Uganda already possess RCAs in moderately complex sectors like chemicals, agro-processing, and light manufacturing. When evaluated collectively through the lens of the product space, these economies (even small ones) lie near higher-complexity sectors—pharmaceuticals, machinery, and electronics—that are currently out of reach for individual economies but feasible at a regional scale. Knowledge diffusion, input sharing, and supply chain coordination are facilitated over short distances, particularly in settings with high transportation costs and thin institutional frameworks. Regional integration, therefore, not only enables market aggregation but also supports learning, imitation, and input sharing.

The case of The Gambia illustrates how small economies can play catalytic roles in RVCs when their product capabilities are strategically leveraged. Deliberately fostering cross-border linkages could allow The Gambia—with its relative specialization in processed foods and beverages such as groundnut products, preserved fruits, and sugar-based confectionery—to

seed industrial activity in Guinea-Bissau and Senegal, especially in light manufacturing and packaging. Spatial proximity to Guinea-Bissau and Senegal, both of which share overlapping demand and logistical corridors, further increases the likelihood of regional spillovers. However, realizing this potential requires deliberate investments in cross-border logistics, standards harmonization, and regional firm coordination, especially to link The Gambia's niche production strengths with larger consumer markets and intermediate processing capacities in neighboring states. Such proximity remains economically inert, however, in the absence of coordination on trade logistics, quality infrastructure, and mutual recognition of standards. The case of The Gambia thus illustrates the microfoundations of capability-driven regional integration in low-scale economies.

The transition from potential to actual specialization does not occur automatically, however. The RCA and proximity maps reflect both endowments and policy, which are necessary but not sufficient conditions. Regional coordination of industrial and trade policy, infrastructure investment, and standards shape whether latent capabilities are unlocked. This condition implies a shift in the policy locus—from national industrial blueprints to REC-level strategies grounded in granular trade diagnostics—and underscores the importance of coordinated regional industrial strategies, grounded not in abstract blueprints but in rigorous diagnostics of specialization patterns and diversification paths. The policy implication is clear: REC-level strategies must be prioritized. This regional capability mapping changes the scale and ambition of industrial policy. Instead of duplicating small-scale investments across borders, governments can coordinate around shared strengths and enable complementary specialization. Inputs can be sourced from one country, processed in another, and distributed across the region, unlocking the kind of interdependence that builds deeper value chains. Trade integration must be accompanied by regional industrial planning. The experience of ASEAN and the Southern Common Market underscores that regional productive integration succeeds when governments invest not just in trade liberalization but also in complementary policies that reduce search frictions, transaction costs, and asymmetric information in cross-border production partnerships (Baldwin 2011; Estevadeordal and Goodman 2017).

In Africa, AfCFTA offers the trade framework, but the productive response depends on subregions or RECs leveraging their respective comparative advantages. National industrial policies may have spillover effects on other countries, particularly through trade.³ Consumers in importing countries may benefit from lower-price imports because of the successful industrial policy of the exporting countries. At the same time, however, the resulting import competition may hurt producers of the importing countries, which could lead to long-term losses in jobs and growth. Taking into account the industrial policies of neighboring countries through a market-driven regional network, however, could mitigate such negative spillovers while capturing the positive spillovers. Only through regional industrial policies and the pooling of capabilities can Africa shift from fragmented trade to integrated production networks—essential not just for expanding exports but for anchoring value creation within the continent. Regional scale, therefore, is not a luxury but the missing ingredient in Africa's industrialization strategy. Without this second layer of coordination, Africa risks replicating the weaknesses of fragmented industrialization—small-scale, low-tech, and weakly embedded in

regional demand. Through coordinated specialization, however, African economies can expand the scope of feasible transformation, attract investment into higher-complexity sectors, and lay the foundation for competitive, regional production networks.

A Portfolio Approach to Combining Small Push with Big Push Strategies

African economies face a classic trade-off between specialization, which consolidates current comparative advantages and deepens scale economies, and diversification, which builds resilience and expands the future product space. Expanding into closely related products (a small push) is often more feasible but risks reinforcing low-value specialization; escaping that trap requires balancing small push steps with selective big push bets into less proximate, higher-complexity sectors especially at the regional level, where scale and complementarity unlock new pathways. Most African countries typically diversify by incrementally expanding into nearby sectors, those that share capabilities with existing exports. This *related* diversification strategy is rational: it reduces capability gaps and builds on existing industrial know-how. When countries' current capabilities cluster around low-complexity products, however, such as raw commodities or basic agricultural goods, the most feasible diversification paths (that is, small pushes) may offer limited long-term returns, value added, or spillover potential, creating a risk of locking countries into a low-development trap (Hausmann and Hidalgo 2011).

Although relatedness is a stronger predictor of diversification success for low-complexity economies, exclusive reliance on it can be suboptimal because it favors short-term feasibility over long-term evolvability. Instead, successful development paths often involve targeted *unrelated* diversification—strategic investments into sectors that lie further from current capabilities but offer higher returns and create bridges to more complex capabilities in the future. Similarly, recent studies have shown that export-led industrial policies should target sectors not only with current comparative advantage but also with underlying potential—sectors that are technologically related or unrelated but that lie near growing global markets (Reed 2024). These criteria closely mirror this report's density-complexity optimization framework and reinforce the value of strategic big push bets at the REC level.

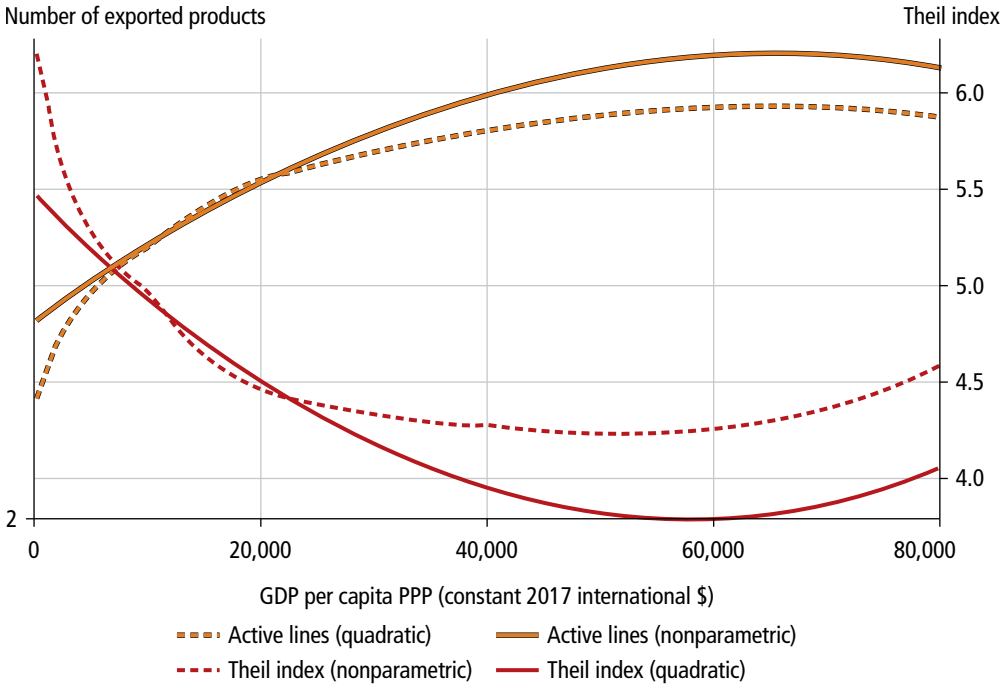
This dilemma is illustrated in the stylized trade-off between diversification and specialization across all countries in the global sample in figure 1.11, which maps all countries by per capita income and their position along the diversification and specialization (concentration) spectrum. The left vertical axis captures diversification as the total number of products in which a country has an RCA ($RCA > 1$), and the right vertical axis measures specialization using a Theil index of concentration. Countries to the top left of the chart exhibit a broad RCA footprint—indicating diversified capabilities—but relatively uniform export shares across products (that is, low concentration). Countries to the bottom right, by contrast, exhibit highly concentrated export baskets, often driven by one or two dominant products. Increasing the number of export products often comes

at the expense of depth in specialization, and vice versa. African countries are clustered toward the lower-left quadrant, indicating low diversification and low specialization depth, suggesting weak productive capabilities overall. Few countries manage to both diversify and specialize, a quadrant occupied mostly by advanced economies, underscoring the importance of designing industrial policies that sequentially build both breadth and depth in exports, through calibrated small push (proximate) and big push (complex) diversification strategies.

Recent research improves policy relevance by simulating dynamic capability accumulation over time (Beltekian et al. 2025; Hidalgo 2023). These models account not just for immediate feasibility but also for how entering one sector opens access to others, thus maximizing future diversification potential. They highlight that seemingly unrelated sectors, when chosen strategically, act as stepping stones to broader industrial development. These models thus help policy makers prioritize sectors that act as hubs rather than as cul-de-sacs. Sector choices may have compound effects on diversification trajectories. For instance, country experience shows that moving into fertilizers or chemicals—although not immediately feasible—can pave the way for downstream sectors like pharmaceuticals or advanced manufacturing. North African economies such as Morocco and Tunisia moved early into pharmaceuticals, electronics, and automotive components even though these sectors were less proximate to prior capabilities. Public-private collaboration, proximity to Europe, and infrastructure alignment made these big push moves possible. Similarly, Malaysia's leap into petrochemicals and Viet Nam's emergence in electronics did not occur organically; instead, they reflect policy-engineered pushes that built distant capabilities over time. The case of Finland and Nokia, widely cited in the literature as an example of how a small country can leapfrog from timber and basic manufacturing to information and communication technology leadership, offers a compelling illustration. Neither organic nor purely market-driven, the transition resulted from sustained public research and development, university-industry linkages, and strategic sectoral bets made in the 1980s–90s.

The distinction between small push and big push sectors is central to this thinking. A small push refers to a move into sectors that are proximate and feasible because of existing capabilities, typically in agro-processing, food, or basic manufacturing. A big push, in contrast, entails moving into more distant but complex products, such as pharmaceuticals, machinery, or electronics, which may require pooled investments, institutional support, or regional scale to succeed. These sectors may not offer immediate returns but often act as hubs, enabling further diversification by increasing the density of the product space. For instance, Although Côte d'Ivoire or Ethiopia may find it easier to expand agro-processing capacity, an early coordinated investment into basic chemicals or machine components, possibly anchored by a REC-level strategy, could generate spillovers that benefit neighboring countries and open the path to deeper specialization. Several North African economies like Egypt and Tunisia have done exactly that, using unrelated diversification as a springboard to enter more complex GVC segments.

Figure 1.11 Predicted Theil's Concentration Index and Number of Active Export Lines, by Per Capita Income



Source: Adapted from Cadot et al. 2011 and Beltekian et al. 2025.

Note: The left axis shows diversification, and the right axis shows specialization. Quadratic corresponds to the ordinary least squares estimation of $Y_{it} = \alpha_0 + \beta_1 \text{GDP}_{pcit} + \beta_2 \text{GDP}_{pc2it} + \epsilon_{it}$, with Y_{it} being the Theil index and the number of active export lines. Nonparametric corresponds to smoother nonparametric regressions of Y_{it} on GDP_{pc} . PPP = purchasing power parity.

From a policy perspective, the AfCFTA and RECs provide the regional scale needed for selective big pushes. The revealed capability diagnostics show that aggregating markets improves both product density and proximity scores, unlocking feasibility in sectors like fertilizers, packaging, machine tools, and medical equipment. Spreading risk, pooling investment, and mobilizing demand across borders will require joint REC-level industrial planning. Timing also matters. Unrelated diversification is most viable at midlevel development stages, when productive capabilities exist but remain fragmented. Delaying big push investments risks stagnation—being too advanced for low-wage assembly yet too underdeveloped for complex manufacturing. Therefore, industrial strategies should be dynamic. At early stages, they should favor small pushes into closely related sectors. As capability density improves, they should introduce selective big pushes, especially into activities that link otherwise disconnected sectors. This approach demands a portfolio mindset: combining low-risk, high-probability entries with high-risk, high-reward sector bets.

In sum, Africa's path to structural transformation depends on mastering the specialization-diversification frontier. Feasibility and ambition must be jointly optimized. A dynamic portfolio strategy—grounded in diagnostics of relatedness, complexity, and regional scale—offers the

highest payoff for sustainable industrialization. Critically, the REC level offers the right scale for such strategies. No single country may have the resources or market size to drive a big push into automotive components or biotechnology, but RECs can pool capacity, align industrial policy, and lower the collective risk. Doing so requires regional coordination on investment, skills, standards, and infrastructure, but it has a transformative potential payoff. In sum, African economies must not only diversify but also diversify strategically. A balanced policy mix of small and big pushes, grounded in empirical diagnostics of complexity, relatedness, and proximity, can help shift the continent's industrial base from fragmented primary production to integrated, higher-value RVCs.

Policy Implications for Building Regional Value Chains

RVCs will not materialize without deliberate coordination of industrial policies, soft and hard infrastructure, and firm capabilities. The evidence in this chapter shows that institutional depth and corridor reliability, rather than geography alone, explain where regional production emerges. Nevertheless, most industrial strategies in Africa remain nationally framed, resulting in fragmented efforts and lost economies of scale. The AfCFTA provides a continental umbrella, but its success depends on RECs, other subregional efforts, and cross-border coalitions that can translate national ambitions into coherent regional production systems.

Deliberate coordination of what to produce, where, and with whom. The evidence from successful late industrializers shows that growth acceleration required strategic prioritization of a few sectors with high learning potential, supported by coordination between the state and firms (Cherif and Hasanov 2025). True industrial policy succeeds when governments combine selective sectoral focus, export orientation, and reciprocal performance discipline—rewarding productivity and learning rather than protection (Cherif and Hasanov 2025). This principle applies with even greater force in Africa, where national markets are small and coordination failures across borders limit scale. The region's path to transformation therefore lies not in dozens of loosely targeted sectors but in regionally prioritized industries that align infrastructure, finance, and skills around shared production ecosystems.

Selective and coordinated regional industrial policy. The product-space diagnostics in this chapter reveal multiple proximate opportunities—agro-processing, fertilizers, textiles, pharmaceuticals, and battery minerals—but these opportunities differ in capital intensity, learning potential, and regional spillovers. Policy makers should view these opportunities through a “quality-ladder” lens, with small push sectors allowing firms to integrate quickly into regional markets and big push sectors requiring large-scale coordination in infrastructure, technology, and finance. Small push strategies—such as upgrading in processed foods, apparel, and fertilizers—create immediate jobs and diversification. Big push strategies—such as electric vehicle batteries, automotive components, and pharmaceuticals—demand high coordination and large private investments to generate transformative spillovers in technology, logistics, and skills. The optimal portfolio combines both, allowing fast wins to build political and fiscal space while large projects deepen long-term capabilities.

Regional coordination mechanisms that align national industrial efforts and sequence interventions. Within each region, priority industries linked to comparative strengths and cross-border corridors could emerge. In ECOWAS, agro-processing and fertilizers can scale through cross-border agro-industrial zones and harmonized input standards that link Benin, Côte d'Ivoire, Ghana, and Nigeria into a single value chain. In EAC and IGAD, pharmaceuticals and textiles can leverage pooled procurement, shared testing facilities, and regulatory harmonization under the African Medicines Regulatory Harmonization program. In SADC, automotive components, plastics, and battery precursors could anchor big push investments connected to the Democratic Republic of Congo–Zambia Battery Council and South Africa's regional supplier networks (Ndubuisi et al. 2025). Although coordination challenges in regional industrial policy are real, corridor-based implementation offers a practical entry point. Co-locating industrial parks and logistics systems along trade routes where alignment among a smaller group of countries is more tractable. Supplier-upgrading instruments at the corridor or REC level, financing certification, tooling, and technology transfer for small and medium enterprises (SMEs) can build the capability foundation that broader regional industrial coordination ultimately requires.

Sequencing. As outlined in a World Bank report on industrialization, successful industrialization follows an Integrate–Compete–Upgrade–Build Capabilities trajectory (Abreha et al. 2021). First, integrate into value chains through existing comparative advantages, then compete by improving efficiency and firm entry, upgrade technologically, and build domestic capabilities for adoption and innovation. Regional industrial policy should anchor this trajectory by pooling resources for technology, skills, and finance via shared technology centers, regional venture funds, and innovation partnerships. The overarching lesson is that Africa's future industrial success could depend on a few well-targeted, regionally anchored sectors, supported by regulatory harmonization, corridor-based infrastructure, and joint capability building. This mix of strategic selectivity and coordinated execution—mirroring the Asian Miracle approach but adapted to Africa's regional institutions—offers the clearest path to building globally competitive manufacturing ecosystems across the continent.

Governance, rules, and coordination. Institutional predictability and rule enforcement provide the foundation of viable RVCs; however, Africa's overlapping trade regimes and inconsistent application of trade rules still fragment markets. Simplified and digital trade rules can turn market access into production incentives. The EAC's customs interconnection, for instance, has reduced clearance times from five days to less than 24 hours at the Malaba One-Stop Border Post (EAC Secretariat 2024b), and ASEAN's Single Window has cut clearance time by four days and saved \$6.4 billion annually (USAID 2024, based on a survey for 2018–22). The underlying governance and coordination architecture, however, has not kept pace with tariff liberalization. Rules of origin, the gateway for preferential trade, remained under negotiation for more than five years after the AfCFTA entered into force, and their certification still rests on fragmented national processes with limited mutual recognition across state parties (UNCTAD 2019). Electronic certificate-of-origin systems have been introduced

in the Common Market for Eastern and Southern Africa (COMESA), EAC, SADC, and the West African Economic and Monetary Fund, but none is yet fully operational, forcing exporters to navigate parallel paper-based procedures and duplicative conformity assessments (Mafurutu 2020). Trade facilitation measures are projected to deliver most of the AfCFTA's potential income gains, yet these gains depend on institutional coordination that remains the binding constraint (World Bank 2020).

RVCs cannot emerge where national industrial policies pull in opposite directions. Without a shared platform to reconcile cross-border decisions on incentives, standards, and investment, RECs end up with parallel national industrial strategies rather than a regional one. EAC's Sectoral Council on Trade, Industry, Finance, and Investment illustrates one institutional response. It brings the four ministerial portfolios that most shape RVC formation—trade, industry, finance, and investment—into a single decision-making body, where sectoral priorities are aligned, implementation is monitored, and cross-border policy conflicts are addressed (EAC Secretariat 2024a). Extending this architecture to COMESA, ECOWAS, and SADC may help translate integration into industrialization. RVCs in automotive, pharmaceuticals, agro-processing, and battery minerals require upstream and downstream decisions made together—on tariffs, rules of origin, supplier development, and investment—and coordination is unlikely to emerge in their absence.

Investment, industrial hubs, and financing. Regional industrialization depends on credible hubs that pool scale, align incentives, and ensure reliable services for firms. The Southern Africa automotive value chain offers potential, with production distributed across Southern African Customs Union members and supported by stable, performance-based incentives and regional policy coordination. South Africa's Automotive Production and Development Programme links tax and investment benefits to output and export targets, sustaining a competitive assembly base in the region. RVCs beyond South Africa, however, remain shallow: component exports from Angola, Botswana, Lesotho, and Zambia to South Africa amount to less than US\$100 million annually (Barnes et al. 2021). Extending this model requires coordinated industrial policy across countries, not incentives in one country alone. Co-located supplier parks and standardized testing centers further deepen linkages. This model offers a clear actionable lesson: industrial incentives must be stable, conditional on performance, and regionally aligned rather than nationally fragmented.

Making RVCs bankable requires coordinated investment and financing architecture across borders. Blended finance, backed by African Export-Import Bank risk-sharing instruments and Multilateral Investment Guarantee Agency guarantees, can de-risk investors entering cross-border manufacturing hubs (African Export-Import Bank 2024). Capital alone is insufficient without institutional reliability. The Ethiopia-Djibouti corridor—despite substantial infrastructure investment and integrated industrial parks—operates well below capacity because of port congestion, power outages, and fragmented logistics (World Bank 2022). Embedding enforceable reliability compacts among corridor authorities, utilities, and customs—monitored at the REC level—is therefore as critical as capital mobilization.

Where new platform sectors are being built, such as battery precursors in the Democratic Republic of Congo–Zambia initiative, early evidence already points to power and transportation reliability as the decisive bottlenecks. Sequencing corridor and energy investments ahead of downstream assembly is therefore a condition, rather than a complement, for competitiveness (Ndubuisi et al. 2025). In short, Africa’s investment strategy for regional hubs should combine performance-based incentives, regionwide policy coordination, and dedicated supplier-upgrade finance, all nested within enforceable corridor reliability—the same combination that underpins Southern Africa’s automotive success.

Technology, skills, and innovation systems. Sustained industrialization depends on building technological and human capital. Rwanda’s Priority Skills for Growth Program—run jointly with agro-processing, energy, and logistics industries—placed 82 percent of graduates in employment or self-employment within nine months (World Bank 2026). By contrast, Lesotho’s apparel industry illustrates the cost of neglect: training has focused narrowly on basic machinist skills, leaving supervisor, technical, and management positions filled by expatriates, which has constrained functional upgrading and deeper local value capture (Morris and Staritz 2017). Regional centers of excellence such as the EAC Regional Centre of Excellence for Vaccines, Immunisation and Health Supply Chain Management in Kigali, and the SADC Centre for Renewable Energy and Energy Efficiency in Windhoek show how shared training and coordination facilities can accelerate upgrading. Future corridor programs should include vocational standards recognized across borders and joint research and development centers. East Asian economies demonstrated that industrial policy succeeds when learning and coordination externalities are jointly targeted through public-private institutions (Cherif and Hasanov 2025). Africa’s challenge is not simply to train more workers but to align skills, finance, and technology around regionally prioritized industries.

SME inclusion, services, and the digital economy. Although the backbone of African industry, SMEs remain excluded from regional production because of high financing and certification costs. Digital infrastructure can narrow this gap. The Eastern Africa Grain Council’s G-Soko warehouse-receipt platform links smallholder farmers across Kenya, Tanzania, and Uganda to regional grain buyers through certified warehouses and electronic warehouse receipt financing, enabling access to credit against stored commodities.⁴ The Pan-African Payments and Settlement System enables instant cross-border payments in local currencies and has cut intra-African transaction costs by up to 27 percent for end users across its 18-country network (African Export-Import Bank 2024). Scaling such platforms will turn digital rails into production rails. REC programs should combine e-invoicing, cross-border digital payments, and online supplier directories with regional credit guarantee schemes targeting certified SMEs. Doing so will help digitalization become part of regional trade and integration policy.

Standards, regulation, and quality infrastructure. Portability of standards determines whether regional supply chains can function. Duplicate testing and certification procedures isolate SMEs from regional markets. EAC’s Medicines Regulatory Harmonization program has roughly halved drug-approval times from 553 calendar days in 2015 to 259 days in 2023 through joint scientific assessments and harmonized technical requirements across seven

partner states (Ngum et al. 2025). COMESA's seed harmonization program allows varieties registered in two member states to be traded and marketed across all 21 COMESA countries without retesting, cutting duplicate registration cycles that previously took two to three years per country. Similar models should be extended to food safety, packaging, and basic chemicals. Establishing REC reference laboratories and digital registries of certified suppliers would reduce duplication and raise trust. Strengthening quality infrastructure—metrology, standardization, accreditation, conformity assessment and market surveillance—reduces the fixed costs of compliance that weigh disproportionately on SMEs (UNIDO 2025). Linking regional standards bodies through the RECs and AfCFTA's sanitary and phytosanitary and technical barriers to trade committees would make harmonization sustainable and continentwide.

Corridors, connectivity, and the business environment. Reliable corridors are the arteries of Africa's RVCs and industrialization. A 10 percent improvement in corridor reliability raises bilateral regional value-added trade by about 3.4 percent (Krantz et al. 2025). The Abidjan-Lagos Corridor—linking one-third of West Africa's gross domestic product—illustrates how reliability, not geography, drives integration: it combines infrastructure, digital cargo tracking, and harmonized border inspections (World Bank 2019). The Regional Electronic Cargo Tracking System on the Northern Corridor has cut transit times for monitored Mombasa-Kampala cargo from over two weeks to under a week (Balamaga 2019), proving that governance software can be as valuable as new hardware. Corridors should be treated as industrial policies, not transportation projects. Regional corridor authorities need legally binding service-level agreements among customs, ports, and transportation agencies, monitored through transparent dashboards. Stable and predictable logistics, power, and land access regimes along these corridors reduce the uncertainty premium that currently deters investors.

Resilience, sustainability, and green industrialization. RVCs must be designed to withstand shocks and align with global decarbonization. South Africa's Renewable Energy Independent Power Producer program mobilized US\$20 billion in private investment for more than 6,000 megawatts of capacity through transparent procurement and grid coordination (Eberhard and Naude 2016), whereas delays in the West African Power Pool reveal the cost of weak governance (Kassa and Ouedraogo 2025). Green corridors and regional power pools should be treated as industrial assets that underpin value-added manufacturing. The Democratic Republic of Congo–Zambia Battery Council exemplifies how coordinated management of resource endowments can anchor Africa's entry into green global value chains (Ndubuisi et al. 2025).

Coordination mechanisms and institutional discipline. Africa's regional industrial policy must combine experimentation with accountability. RECs should establish Regional Industrial Policy Councils that coordinate sector priorities, monitor performance, and share lessons—an approach that draws loosely on soft-coordination mechanisms used in other regional blocs—such as the European Union's Open Method of Coordination, which uses guidelines, benchmarks, and peer review to align national policies toward shared goals. ASEAN's Coordinating Committee on Investment offers another example of shifting from individual country investment promotion to coordinated regional screening and promotion

(ASEAN Secretariat and ESCAP 2024). Industrial agencies should have technical autonomy but be evaluated against measurable targets such as export growth or domestic value added. Support should be conditional on results, ensuring learning through discipline.

Notes

1. These figures include North African countries in addition to countries in Sub-Saharan Africa. Refer to chapter 2 for further discussion.
2. CEPII, “BACI database.” https://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=37.
3. Fernandes and Reed (2026) forcefully emphasize the spillover effect of national industrial policies through trade.
4. Eastern Africa Grain Council, “G-Soko: Structured Grain Trading Platform.” <https://g-soko.co.ke>.

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Fixing the Frictions: The Structural Roots and Policy Levers of Africa's High Trade Costs

Diagnosing the Layers of Trade Costs in Africa

Key message: *Even after accounting for size, geography, and demand, African countries trade far less than comparable peers, leaving the continent more economically distant from itself than from its global partners. These frictions are not the product of geography alone, they reflect human-made structural and institutional barriers. About 60 percent of Africa's trade costs originate within countries rather than at the border, in the form of weak transport and logistics, inefficient customs and regulation, fragmented checkpoints, and limited digitalization. The remaining bilateral frictions, nonharmonized regulations, opaque procedures, and discriminatory licensing are also higher in Africa than in any other part of the world. Distinguishing internal from bilateral costs is what allows reform to target the right level: national, bilateral, or regional.*

Africa remains one of the most economically fragmented regions in the world. Estimates for this report indicate that intra-African trade costs are one and a half to two times higher than the global average for similar income levels (Arvis et al. 2025). The average ad valorem equivalent of intra-African trade costs is between 234 percent and 270 percent, compared to 70–100 percent in East Asia and Pacific. A key feature of these high trade costs is the significant role of country-specific, behind-the-border constraints. Using a descriptive decomposition of estimated trade wedges, analysis for this report finds that domestic components are often large relative to bilateral economic separation. Consistent with earlier evidence, in many African economies, the estimated border wedge often exceeds bilateral trade frictions by a factor of two or more, highlighting the central role of internal market segmentation, infrastructure gaps, and institutional constraints (Arvis et al. 2025). Poor infrastructure explains over 40 percent of transportation costs in Africa (Limão and Venables 2001). World Bank estimates show that, on average, trade costs in Sub-Saharan Africa are more than 50 percent higher than in East Asia and Pacific, and substantially above the global average, even after accounting for distance, tariffs, and income levels (Arvis et al. 2016). These costs create a persistent gap between supply and demand across borders, raising prices, deterring investment, and constraining regional specialization.

Despite political commitments to integration since the 2000s, and many regional agreements, Africa's trade landscape is still characterized by high costs and fragmented markets. A heterogeneous and policy-sensitive architecture of trade costs lies at the heart of this issue. Traditional gravity models tend to compress all frictions into a single border effect estimate for all partners, obscuring the underlying sources of economic separation. Are countries isolated because of poor domestic infrastructure, restrictive cross-border policies, or structural remoteness from markets?

To maintain a clear distinction between internal and bilateral trade costs, this chapter refers to the country-specific internal component (behind-the-border frictions) as the border wedge and to cross-country frictions as bilateral economic separation. The *border wedge*, defined as the difference between the observed domestic trade flows and the tradeable component of domestic trade implied by the model, reflects domestic market segmentation, institutional constraints, infrastructure constraints, and the difference between internal absorption and externally tradeable production. Such constraints may include weak connectivity, insecurity, fragmented logistics, and costly domestic regulations that raise domestic prices relative to world prices. *Bilateral economic separation*, also known as bilateral border trade costs, refers to the revealed trade frictions affecting tradeable goods between pairs of countries. It captures the totality of logistical, regulatory, and structural barriers that limit cross-border exchange.

This two-tier structure organizes the subsequent analysis. Using new estimates of trade frictions, regional data sets, and case evidence, the analysis examines how these cost layers interact to fragment African markets and how they can be reduced at the national and regional levels. Most of the policy-relevant variation lies along these internal and bilateral axes, highlighting the potential for domestic and regional action. For example, countries such as Chad, the Democratic Republic of Congo, and Ethiopia face exceptionally high internal costs, whereas trade between neighboring countries, such as Cameroon and Nigeria or Angola and Namibia, remains more expensive than equivalent trade with China or Europe. What appears to be geographic destiny is, in practice, a policy distortion.

Unilateral or Internal Trade Costs: The Hidden Obstacle to Regional Trade

A defining feature of Africa's trade frictions is that they originate within countries rather than at the border. Internal trade costs driven by inadequate transport and logistics infrastructure, inefficient customs and regulatory systems, cumbersome checkpoints and permits, limited digitalization, and high domestic finance and logistics expenses fragment markets, prevent economies of scale, and limit firms' ability to compete across districts, let alone across borders.

Even before a product crosses a border, internal frictions significantly contribute to trade costs, reducing competitiveness and hindering participation in regional and global value chains. Internal trade costs within Africa are often three to five times higher than in advanced economies,

primarily because of poor logistics, complex regulations, and underdeveloped infrastructure. Internal costs also represent a much higher share of total costs than in advanced economies. Roads and ports in both landlocked and coastal economies remain poorly maintained or incomplete. Only 43 percent of Africa's rural population lives within 2 kilometers of an all-weather road, compared to 60 percent in South Asia. A comparative gravity analysis of subnational trade data from over 30 African countries reveals that the average domestic trade-cost equivalent exceeds 100 percent ad valorem—far higher than comparable estimates for Latin America and the Caribbean or South Asia.

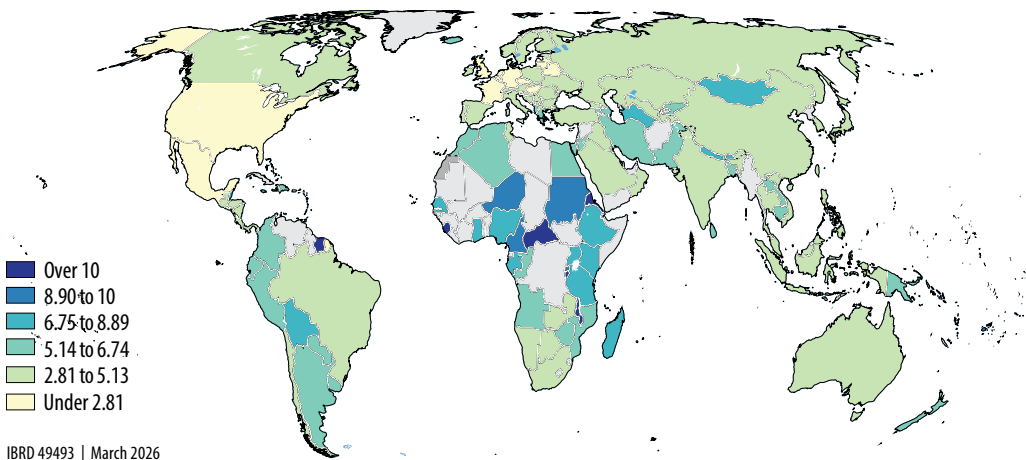
High domestic friction is reflected in the levels of internal transportation costs: in many African economies, the cost of transporting goods from farm to port exceeds the cost of shipping them overseas. For example, transporting a container from Addis Ababa, Ethiopia, to Djibouti can cost about US\$2,000, which exceeds the cost of shipping the same container from Djibouti to China. In West Africa, domestic logistics costs in landlocked countries such as Burkina Faso, Mali, and Niger are 30–50 percent higher than in neighboring coastal countries. In Nigeria, fragmented transportation markets and state-level trade restrictions mean that it is sometimes cheaper to import poultry feed from Brazil than to transport it by truck between states. In Kenya and Uganda, agro-processors often import maize or wheat from global suppliers rather than sourcing from surplus domestic regions because of unreliable logistics and high internal price volatility (Kunaka et al. 2025). EIF (2019) reports that shipping a 20-foot equivalent unit container from Rotterdam to Matadi costs almost double (US\$4,270) what it costs to ship to Pointe Noire or Luanda (US\$2,359) because goods must be transhipped from deep-sea ports to boats that can navigate upriver to the shallower port of Matadi. From Matadi onward, additional costs apply to ship the goods to Kinshasa by truck or rail. Freight costs by truck for a 20-foot container from Matadi to Kinshasa range between US\$3,376 and US\$3,677 in the study. The total cost of shipping a container to Kinshasa could reach an estimated US\$7,600–US\$7,950, more than four times the cost of shipping it to Pointe Noire. Shipments to the hinterland on the Congo River will cost even more (World Bank 2023). These problems are exacerbated by weak road networks, limited multimodal connections, and low competition in domestic trucking.

The average behind-the-border wedge¹—the difference between domestic and international trade flows—is about 3.4 log points worldwide, which implies that, on average, domestic trade is substantially more intense than cross-border trade of comparable scale. However, this global average conceals striking regional disparities. Sub-Saharan Africa has the highest internal trade frictions by far, with an average wedge of about 11 log points—more than three times the global mean and nearly nine times higher than in North America. The Middle East, North Africa, Afghanistan, and Pakistan region also has relatively high internal frictions (about 1.7 times the global average), followed by Latin America and the Caribbean and South Asia, with internal frictions about 1.3–1.5 times higher than the global average (map 2.1). In contrast, East Asia and Pacific and Europe and Central Asia have wedges close to or slightly below the global average, reflecting their dense production networks and advanced integration. North America

has the thinnest internal borders worldwide. Taken together, these differences demonstrate that Africa's domestic markets are deeply fragmented, beyond what can be explained by geography alone, because of intense frictions behind the borders rather than separation between countries. This finding underscores the dominance of domestic segmentation, infrastructure gaps, and institutional constraints in determining trade costs and the scale of the policy effort needed to align internal costs with those of other regions.

The dispersion of internal trade frictions within Africa is striking. Whereas members of the East African Community (EAC) and the Southern African Customs Union (SACU)—such as Botswana (3.6 log points), South Africa (4.8), Kenya (7.2), and Uganda (7.7)—have moderate behind-the-border wedges compared to the continental average, several low-income, landlocked countries have extraordinarily high internal barriers. Ethiopia (8.1), Cameroon (9.3), Sudan (9.6), Rwanda (9.6), Niger (9.9), and Malawi (10.4), for example, exhibit wedges more than twice the global mean of 3.4. This pattern indicates a strong orientation toward domestic markets rather than cross-border trade. Eritrea (10.3), Burundi (11.3), the Central African Republic (12.2), and Sierra Leone (15.5) have some of the highest estimated behind-the-border wedges in the world. These levels of internal orientation are rarely observed outside fragile or geographically isolated economies. In contrast, a few coastal and island states, including Mauritius (6.5) and Cape Verde (7.9), have somewhat lower frictions, reflecting better port access and trade facilitation. This heterogeneity within Africa underscores the broader point that regional integration will yield few benefits unless domestic frictions decline, particularly in landlocked and fragile economies that have substantially higher internal trade barriers than do comparable regions.

Map 2.1 Estimated Size of Behind-the-Border Effects, 2019



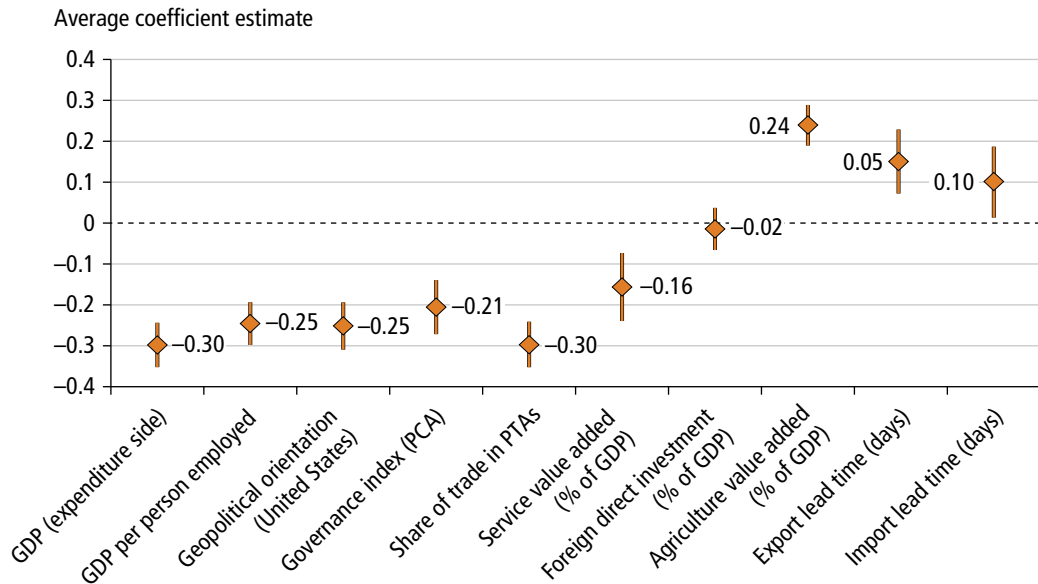
Source: Arvis et al. 2025.

Note: The map illustrates the estimated intensity of internal (unilateral) frictions that each country faces. The values, expressed in log points, reflect the separation between domestic and international trade flows, also known as the country-specific border wedge. Higher values indicate a stronger domestic orientation and greater barriers to external trade. These estimates are based on 2019 trade and macroeconomic data.

Despite these many root causes of high frictions to trade within borders, investigation of possible correlation between various economic policy indicators and the level of unilateral friction costs shows that being a signatory of a regional agreement is associated with lower unilateral friction costs (figure 2.1). Deeper trade agreements tend to create frameworks for domestic regulatory reforms that lower trade costs (the next chapter discusses in detail the role of trade agreements in trade costs). Predictably, variables known to increase frictions, such as import and export lead times, have effects in the opposite direction. Furthermore, the magnitude of this association is commensurate with other dimensions known to influence these costs, such as economic size (as predicted by gravity models of trade), which suggests the importance of such agreements.

Inefficient and unpredictable border administration exacerbates challenges to inland connectivity. Despite modernization efforts, many customs systems remain paper-based, fragmented, and vulnerable to rent-seeking. According to OECD (2023), the average time to process import documentation in least developed countries in Africa remains twice the global average. Although many countries have launched national single-window platforms or adopted the Automated System for Customs Data, significant operational gaps persist. Delays in pre-shipment inspections, overlapping agency procedures, and limited automation continue to slow clearance and create uncertainty for firms.

Figure 2.1 Structural and Macroeconomic Markers of Estimated Behind-the-Border Effects, 2019



Source: Arvis et al. 2025.

Note: The figure illustrates the correlation between the estimated country-level border wedge and various structural and macroeconomic indicators. All variables are standardized, and the coefficients are derived from separate regressions. The dependent variable is the average border effect (log points), and the method is Poisson pseudo-maximum likelihood with robust standard errors. The bars represent 90 percent confidence intervals. GDP = gross domestic product; PCA = principal component analysis; PTA = preferential trade agreement.

Another major source of internal friction is the limited availability and high cost of trade finance and logistics services. Small and medium enterprises face steeper barriers to accessing working capital, especially in rural and peripheral areas. Africa's trade finance gap, the share of trade finance demand that goes unmet annually, is estimated at about US\$100 billion, with small and medium enterprises disproportionately affected: more than half their requests are rejected, compared with fewer than 1 in 10 for multinational corporations (Afreximbank 2025). Poor access to insurance, warehousing, and cold storage further increases the behind-the-border trade costs and limits the range of products that can be traded competitively.

Regulatory fragmentation and opaque business environments also contribute to domestic trade friction. National rules on technical standards, import licensing, and sanitary and phytosanitary controls are often outdated or applied inconsistently. Even well-designed regulations are unevenly implemented, particularly in remote regions. International Trade Centre Business Surveys on Non-Tariff Measures covering Sub-Saharan African economies find that nearly 40 percent of the regulatory nontariff measures reported by exporters as burdensome are applied by the firm's own home country, with most procedural obstacles occurring domestically as well (ITC 2015).

The cumulative impact of these costs goes beyond inefficiency; it distorts trade patterns. Regional agreements yield only limited benefits when domestic systems fail to connect producers to markets. When internal logistics are unreliable or too expensive, firms remain trapped in local markets and avoid formal trade. This situation reinforces economic dualism, in which a vibrant informal sector coexists with weak formal integration.

Bilateral Trade Frictions

African borders are costly and inefficient. Bilateral trade frictions in Africa exceed those of any other region, accounting for nearly one-third of total trade costs and are largely policy-induced rather than geographic. They stem from a combination of soft and hard non-tariff measures: customs delays, non-harmonized regulations, opaque procedures, and discriminatory licensing rules. Together with the internal border wedge, this bilateral layer captures the regulatory, administrative, and coordination failures that shape economic separation between African countries, failures that, like the internal frictions identified earlier, are amenable to reform. Bilateral economic separation complements the internal border wedge discussed in the previous section. Whereas that wedge reflects domestic market segmentation, bilateral separation measures the regulatory, administrative, and coordination barriers that shape exchange between countries. Estimates indicate that, even where domestic constraints are binding, cross-border barriers remain economically significant and directly influence the scope for regional trade integration (Arvis et al. 2025). Sub-Saharan Africa exhibits the highest level of intraregional bilateral separation among major developing regions, exceeding levels observed in Europe and Central Asia and Latin America and the Caribbean, and far above levels recorded in East Asia and Pacific or North America. By contrast, Africa's extraregional separation is close to the global average. Together, these patterns suggest that regional integration within Africa is constrained

not only by domestic fragmentation but also by persistent cross-border frictions. Even along key regional corridors, such as Kenya-Uganda or Zambia-Zimbabwe, the additional estimated trade-cost penalty is 600–900 kilometers beyond the actual geographic distance. These estimates are derived from the ESCAP–World Bank Trade Cost Database,² which primarily captures geographic and logistics-related frictions.

In practical terms, these border frictions result in real economic losses. The average time to comply with export regulations often exceeds four days in low-income countries including many in Sub-Saharan Africa, compared to just one day in high-income countries, with borders operating as major bottlenecks that add substantial time and cost to shipments already delayed by poor road conditions and unpredictable weather (Herrera Dappe et al. 2024). Recent surveys of African traders confirm that border crossings remain among the most cumbersome links in the trade chain. The “border effect” is particularly large in Central and West Africa, where bilateral permits, cargo rotation systems, and language mismatches further inhibit trade flows. Between Ghana and Togo, small-scale traders frequently report delays and multiple payments to customs, police, and local authorities. In the Great Lakes region, traders between the Democratic Republic of Congo and Rwanda often hire informal intermediaries to navigate opaque rules and rent-seeking at the border, suppressing both trade volume and formalization (Horn of Africa Initiative 2023). Customs clearance times and paperwork burdens add substantial delay and cost. A 2024 World Bank field survey along six West African corridors, including Tema-Ouagadougou (through Ghana) and Lomé-Ouagadougou (through Togo), found that more than half of surveyed traders reported exposure to bribery, less than a quarter received formal receipts for payments demanded at borders, and a quarter had witnessed harassment within the preceding six months (World Bank 2024a–2024i). Ghana’s maiden Informal Cross-Border Trade Survey, conducted the same year, estimated that informal flows account for 61.2 percent of total trade with Togo and 55.7 percent with Côte d’Ivoire—a scale that makes these border-level frictions economically consequential, not marginal (Ghana Statistical Service 2024). Moreover, 40 percent of firms in Sub-Saharan Africa report customs and trade regulations as a major obstacle, compared to just 20 percent in South Asia.³

Tariff-equivalent costs of NTBs remain large. For instance, sanitary and phytosanitary and technical barriers to trade compliance add an estimated 12.8 percent ad valorem cost burden on intra-African food trade (UNCTAD 2024). In West Africa, the *tour de rôle* system in West African Economic and Monetary Union (WAEMU) countries allocates freight to transporters using a rotation scheme, regardless of quality or efficiency (refer to box 2.2 later in this chapter for more on the *tour de rôle*). This system has resulted in long delays, idle trucks, and inflated prices, discouraging investment in modern fleets (AfDB 2021). These regulatory and procedural frictions directly raise effective bilateral economic separation by increasing compliance costs, uncertainty, and delays in cross-border transactions.

Recent episodes illustrate how fragile and politically contingent cross-border trade can be. Bilateral frictions are not only physical; they are also deeply regulatory and political. In April 2025, a dispute between Malawi, South Africa, and Tanzania led to unilateral import bans

on agricultural products and retaliatory restrictions, severely disrupting fertilizer flows to landlocked Malawi (refer to box 2.1 in the next section). Similarly, unilateral import bans imposed by Botswana and Namibia on South African vegetable products in January 2022 violated both the Southern African Development Community (SADC) Treaty and the SACU Agreement, demonstrating the lack of enforcement and dispute resolution mechanisms within African Regional Economic Communities (RECs). These examples underscore a core finding: regional integration cannot be taken for granted. Even within longstanding customs unions such as SACU, protectionist impulses can override legal commitments. Misaligned NTBs, licensing systems, axle weight standards, and permit systems (such as the *tour de rôle* in West Africa) add uncertainty and reduce the reliability of cross-border transportation. Together, these regulatory inefficiencies and episodic policy reversals sustain high bilateral economic separation by increasing compliance costs and uncertainty, limiting the predictability required for cross-border trade and regional value chain development.

What the Analysis of Trade Costs Reveals about Policy Priorities

These challenges are not insurmountable. Several African countries have undertaken targeted reforms that provide useful lessons. Rwanda has emerged as a leader in customs digitalization, reducing average border dwell time at major entry points by over 40 percent in five years. Ethiopia's Electronic Single Window, launched in 2020, has streamlined processes for over 20 agencies involved in trade clearance. Kenya's investment in warehouse receipt systems and cargo tracking has improved traceability and reduced losses in agricultural trade. These experiences are consistent with the analysis in this section, which highlights domestic market segmentation, infrastructure gaps, and institutional inefficiencies as central sources of trade frictions. Priority actions therefore include improving internal connectivity, streamlining border administration, strengthening regulatory coordination, and enhancing transparency in logistics markets. Regional and continental institutions can support this agenda by promoting knowledge exchange, benchmarking progress, and providing financing where national budgets fall short. Targeted domestic reforms can substantially reduce the cost of transporting goods across borders, turning regional integration from an ambition into an operational reality.

National governments must embed trade facilitation priorities in their own public investment plans, not just wait for regional infrastructure. As a practical tool, subnational price monitoring systems and food supply chains and internal trade bottlenecks can guide where targeted transportation and trade-facilitation investments will yield the highest returns (Kunaka et al. 2025). Recommended reforms include the following:

- *Invest in internal connectivity infrastructure for markets, not just roads.* Prioritize infrastructure investments that directly reduce market fragmentation—especially rural feeder roads, last-mile connections, and transportation logistics hubs in lagging regions. Use trade flow data and price dispersion maps to target infrastructure where it lowers trade costs most.

- *Integrate trade facilitation into food security and agricultural transformation strategies.* Domestic trade costs disproportionately affect staple food systems (for example, cassava, maize, and rice), undermining both farmer incomes and consumer access. Reduce spoilage, delays, and price dispersion by streamlining intranational transportation, storage, and logistics through cold chain investments and digital inventory systems.
- *Target regulatory simplification as a trade policy instrument.* Domestic trade costs are not just about infrastructure; they are also driven by discretionary inspections, inefficient permits, and nontransparent clearance processes. Create single national trade and logistics windows, integrating customs, transportation, food safety, and tax clearance under a unified digital system.
- *Adopt performance-based monitoring of domestic trade corridors.* Use corridor-level key performance indicators (for example, average clearance time, truck turnaround, and spoilage rates) to monitor and benchmark domestic trade efficiency. Mirror the Central and Northern Corridor transportation observatories—established to monitor freight movement along East Africa’s two main regional corridors linking Dar es Salaam and Mombasa to landlocked countries—at the domestic level for key national corridors.
- *Support logistics and transportation market modernization.* Fragmented, informal, and undercapitalized transportation markets raise domestic trade costs. Encourage fleet modernization, professional trucking associations, and data-driven pricing through credit facilities and fiscal incentives tied to service quality.
- *Use subnational trade cost mapping to guide regional integration strategy.* Within-country barriers shape cross-border trade viability. Incorporate subnational price dispersion, road quality, and internal border frictions into national African Continental Free Trade Area (AfCFTA) implementation plans. Identify and address domestic bottlenecks that prevent firms from participating in regional supply chains.
- *Treat internal trade reform as a macrostructural priority.* Domestic trade costs fragment national markets, suppress economies of scale, and slow structural transformation. Embed internal trade and logistics reforms into growth diagnostics, competitiveness strategies, and climate-resilient infrastructure plans.

In effect, Africa’s borders are not just lines on a map; they are economic choke points. Border costs, however, are not immutable: they can be reduced through streamlined customs, mutual recognition of standards, and interoperable border systems. Reducing bilateral frictions must go beyond “hardware” investments and focus on “software” solutions: harmonized rules, shared digital platforms, streamlined documentation, and mutual recognition of procedures. Regional institutions have made progress, with EAC’s vehicle load regulations, the regional licenses of the Common Market for Eastern and Southern Africa (COMESA), and the Interconnected Transit Goods Management System (Système Interconnecté de Gestion des Marchandises en Transit, or SIGMAT) of the Economic Community of West African States (ECOWAS) offering proof of concept. Nevertheless, implementation gaps, overlapping REC memberships, and

capacity deficits continue to erode the potential of these reforms, leading to the following policy priorities:

- *Institutional durability matters.* African RECs must develop legal mechanisms to prevent and penalize unilateral trade actions that violate regional treaties.
- *Scale and credibility are needed.* Rather than duplicating fragmented NTB platforms, RECs should integrate digital systems and coordinate via AfCFTA institutions to streamline reporting and enforcement.
- *Operational capacity must match ambition.* One-stop border posts (OSBPs) require not only infrastructure but also aligned laws, shared data platforms, and adequate staffing to deliver on their promise. RECs should prioritize full implementation of OSBPs, electronic cargo tracking, and joint customs inspections across major corridors.
- *Transparency is a deterrent.* Corridor performance observatories, like those under the Northern Corridor Authority, should be replicated and used to publicly benchmark progress on border efficiency. A regional digital trade facilitation dashboard, with real-time trade cost indicators, could incentivize reform through peer benchmarking. The experience of the ECOWAS Informal Cross-Border Trade database is instructive: established in 2019 with ECOWAS Commission oversight, the system has struggled to sustain regular data collection since initial donor funding ended, underscoring that regional monitoring architectures require durable institutional and financial commitments if they are to function as accountability tools (ITC 2024; NCTTCA and TradeMark Africa 2025).

Streamlining Transportation Regulation and Corridor Governance

Key message: *Although RECs have undertaken considerable strides in facilitating trade and improving the efficiency of transportation markets, these efforts require deeper consolidation, both at the regional level and through continental initiatives such as the AfCFTA. A major challenge is that progress in liberalizing transportation markets has lagged trade facilitation reforms. Consequently, inefficiencies persist, particularly in the cross-border road transportation sector, which continues to suffer from high logistics costs, regulatory fragmentation, and limited competition. These issues are especially pronounced in regions like Central and West Africa, where market access remains constrained by an outdated and uncompetitive first-come, first-served transportation permit system. Additionally, progress toward regulatory harmonization in these areas has been slower than in other parts of the continent.*

High transportation costs and inadequate trade facilitation across Africa pose substantial challenges to the continent's economic development. These factors restrict the seamless movement of goods and services across borders, thereby limiting market access for both products and labor, and significantly hindering the development of strong regional value chains—a key driver of economic diversification and value addition. African producers are particularly vulnerable to these constraints. Elevated trade and transportation expenses make the commercialization of goods economically unviable within national and regional markets.

This situation curtails business growth, hampers the realization of economies of scale, and discourages investment in value-added production. Furthermore, high trade and transportation costs obstruct the movement of raw materials and intermediate goods across borders, undermining the development of regional value chains and diminishing incentives for regional specialization and division of labor based on comparative advantage (Deloitte and WEF 2022). These structural inefficiencies also distort trade patterns, making it more economical to import goods from overseas suppliers than to source them from closer sources. In doing so, they reinforce bilateral economic separation by reducing the effective proximity of neighboring markets. For example, Kunaka et al. (2016) find that, because of prohibitively high transportation costs within Southern Africa, local producers frequently opt to import intermediate products such as refined sugar and animal feed from South America, despite the availability of competitively priced alternatives in neighboring Zambia.

A recent report highlights that it takes, on average, four times longer to transport staple food like cassava, maize, rice, and wheat in Sub-Saharan Africa than in Europe (Kunaka et al. 2025). This additional time translates into higher food costs, increased spoilage rates, and weakened food security. Remote or landlocked regions, which already have limited access to economic opportunities and essential services, disproportionately bear this burden. High infrastructure gaps, persistent NTBs, protectionist regulations, and the lack of modern regulatory practices contribute to this situation. Although many of these challenges must ultimately be addressed at the national level through targeted policy and regulatory reforms, regional and interregional solutions are equally important. Such solutions can help overcome cross-border inefficiencies by harmonizing transportation and trade policies as well as promoting the development of shared infrastructure and the adoption of digital trade and transit management systems. Additionally, participation in regional and supraregional initiatives helps anchor national reforms.

The next section reviews the key dimensions of the transportation and logistics environment in Africa, with a particular focus on the role of regional initiatives in improving efficiency and competitiveness. It highlights practical examples and emerging lessons from across the continent that can inform broader strategies for building more integrated and efficient regional markets.

Regional Initiatives to Address Nontariff Barriers and to Facilitate Border Crossing

Nontariff measures (NTMs) are legitimate policy instruments designed to safeguard public interests like environmental protection, consumer safety, and public health or revenue collection. They can become barriers when their objective is diverted to restrict trade, intentionally or not. The line between NTMs and NTBs often blurs—that is, a measure intended to protect public interests may easily morph into an NTB if its application is disproportionate (more restrictive than necessary), discriminatory (unfairly targeting foreign goods over domestic ones), or opaque (lacking transparency in its application). NTBs remain one of Africa’s most pressing development and integration challenges (box 2.1). These barriers significantly contribute to the continent’s high trade and transportation costs.

BOX 2.1**When Borders Are Closed**

A recent trade dispute among Malawi, South Africa, and Tanzania—all three of which are members of the Southern African Development Community—vividly illustrates how nontariff measures can disrupt intraregional trade in Africa. In March 2025, citing the need to protect domestic producers, Malawi introduced import restrictions on a range of Tanzanian agricultural products including bananas, ginger, maize, maize flour, and rice. South Africa separately blocked Tanzanian bananas during the same period. On April 23, 2025, Tanzania announced a sweeping retaliatory ban: no agricultural imports from either country, no transit of agricultural cargo through Tanzanian territory destined for landlocked Malawi, and suspension of Tanzanian fertilizer exports to Malawi that had been scheduled to begin on May 1—on the eve of Malawi’s planting season (Reuters 2025). The consequences for Malawi were acute: the country depends on the Port of Dar es Salaam for the bulk of its inbound and outbound trade, and the fertilizer suspension threatened to undermine agricultural production at the most vulnerable point in the calendar. Although the crisis was resolved through diplomatic channels, this situation underscores the fragility of regional trade arrangements in Africa and the need for effective mechanisms to manage and resolve such disputes.

A similar situation unfolded between Botswana, Namibia, and South Africa during the first half of 2022 (Nkunjana and Ntombela 2022). These countries introduced reciprocal import bans on various fruit and vegetable products to shield their local producers from competition. This action escalated trade tensions and led to border closures, openly violating both the Southern African Development Community Treaty and the Southern African Customs Union Agreement, which prohibit the imposition of such unilateral trade restrictions among their member states. Episodes of this kind illustrate how quickly bilateral separation can spike without credible enforcement of institutional commitments.

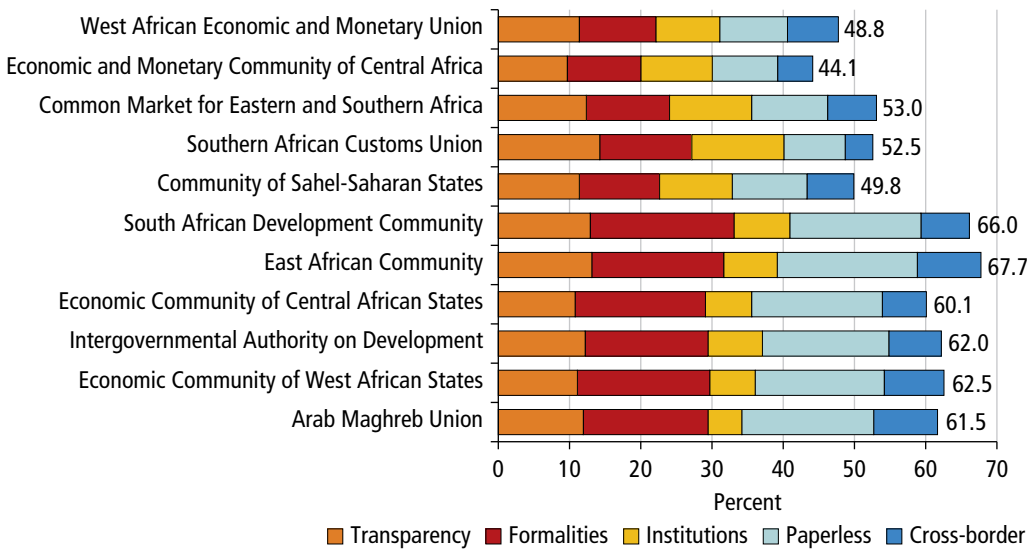
Trade facilitation, by minimizing red tape at the border, represents a critical tool for mitigating the misuse of NTMs and preventing their proliferation. As such, it is a core priority for all RECs and a central component of the AfCFTA framework, which dedicates Annex 4 of the Protocol on Trade in Goods specifically to trade facilitation. Despite that emphasis, Africa continues to lag global peers in the implementation of trade facilitation reforms. According to the 2025 United Nations Global Survey on Digital and Sustainable Trade Facilitation,⁴ the global average implementation rate stands at 86 percent, whereas Sub-Saharan Africa averages only 62 percent. Although this percentage represents a meaningful improvement of 5 percentage points since 2023, progress remains uneven. Implementation rates across RECs range from 44 percent to 68 percent, with EAC and SADC exhibiting the most substantial progress (figure 2.2).

These regional disparities reveal the uneven advancement of trade facilitation reforms across the continent and underscore the need for variable geometry in capacity building, regulatory harmonization, and institutional coordination. Strengthening these pillars is essential not only to improve the efficiency of cross-border trade but also to ensure that regional and continental integration frameworks deliver measurable and inclusive economic benefits.

One-Stop Border Posts

Traditional border crossings in Africa are characterized by fragmented procedures, multiple stops, and overlapping inspections, leading to considerable delays, increased trade and transportation costs, and diminished competitiveness of African businesses. To address these impediments, the implementation of one-stop border posts (OSBPs) in the community of Sahel-Saharan States emerged as a transformative approach to facilitate cross-border trade. OSBPs consolidate the border control functions of two neighboring countries into a single, jointly operated facility that collaboratively conducts entry and exit procedures. This model replaces the conventional system of sequential controls on either side of a border with a streamlined process in which a single set of joint inspections is conducted at one location to meet the regulatory requirements of both countries. By reducing procedural redundancies and shortening clearance times, OSBPs aim to enhance the fluidity of the movement of goods, services, and people across borders, thereby supporting regional integration and improving trade competitiveness.

Figure 2.2 Implementation Rate of Trade Facilitation Measures in Africa’s RECs



Source: World Bank calculations based on data from the United Nations Global Survey on Digital and Sustainable Trade Facilitation (<https://www.untsurvey.org/>).

Note: REC = Regional Economic Community.

The AfCFTA recognizes the importance of OSBPs and their role in the improvement of intra-African trade. Article 25(2)(e), which mirrors the text of art. 8 of the World Trade Organization Trade Facilitation Agreement, indicates such facilities as one of the key mechanisms for optimizing cooperation and coordination among border agencies. Similarly, the World Customs Organization Revised Kyoto Convention Standards 3.4 and 3.5 recommend the establishment of such structures at border crossings and the implementation of joint customs controls to increase security at borders and streamline cross-border operations.

According to the 2024 “One-Stop Border Post Status Report,” Africa currently has 32 OSBPs in operation, with an additional 85 under development or planned for construction (AUDA-NEPAD and JICA 2024). At the forefront of OSBPs implementation, EAC has 12 fully operational OSBPs within the region and plans to establish 10 more in the coming years.⁵ In the ECOWAS region, the West African Regional Transport and Transit Facilitation Project, developed jointly with WAEMU, aims at establishing 11 joint border posts to facilitate border crossing formalities and controls to reduce the cost and time spent at land borders. It currently has six operational joint border posts.⁶

Regional NTB Reporting Mechanisms

One effective tool developed at the continental, regional, and sometimes national levels to reduce bottlenecks and eliminate trade barriers that hinder the free flow of goods and services is the establishment of dedicated online NTB reporting and monitoring systems. These platforms allow economic operators to report NTBs, and specialized monitoring committees are tasked with ensuring timely resolution of the barriers. At the continental level, the African Union (AU) has introduced an NTB monitoring and resolution mechanism within the framework of the AfCFTA, in operation since January 2020.⁷ In West Africa, ECOWAS and WAEMU have adopted the Trade Obstacles Alert Mechanism, a web-based platform that enables businesses to report impediments to trade.⁸ Borderless Alliance, a multistakeholder partnership involving both private and public sectors that aims at eliminating barriers to trade in West Africa, has developed an additional online NTB reporting and resolution mechanism, implemented in Burkina Faso and Ghana.⁹

Likewise, COMESA, EAC, and SADC have developed a joint platform for reporting, monitoring, and removing NTBs encountered in their respective member states.¹⁰ Operated jointly by the three RECs, the Tripartite NTB Reporting, Monitoring and Eliminating Mechanism, accepts complaints submitted on mobile devices via text messages, in addition to its web platform, with reports automatically routed to National Focal Points and National Monitoring Committees for follow-up (Desiderio 2023). The proliferation of NTB reporting and resolution systems across Africa signals a clear trend toward addressing trade barriers in Africa, with such barriers widely recognized as one of the main obstacles to the growth of intra-African commerce. From REC-led platforms to national and continental mechanisms like the one developed under the AfCFTA, adoption of these systems shows undeniable momentum, yet their effectiveness has yielded mixed results so far. Low awareness among traders represents a major obstacle. In addition, the proliferation of multiple platforms often leads to confusion, making it difficult for traders to determine the most appropriate channel for reporting their grievances.

Regional Trade Information Portals

Information asymmetries—with traders lacking full or reliable knowledge about regulations, procedures, costs, or risks—remain a significant barrier across Africa’s trade corridors. These asymmetries increase uncertainty, elevate trade costs, and disproportionately affect smaller firms and small-scale cross-border traders that lack the resources to navigate complex and opaque regulatory environments (World Bank 2020). To address these asymmetries, many African nations have developed Trade Information Portals (TIPs) as digital one-stop shops providing access to key trade-related information.

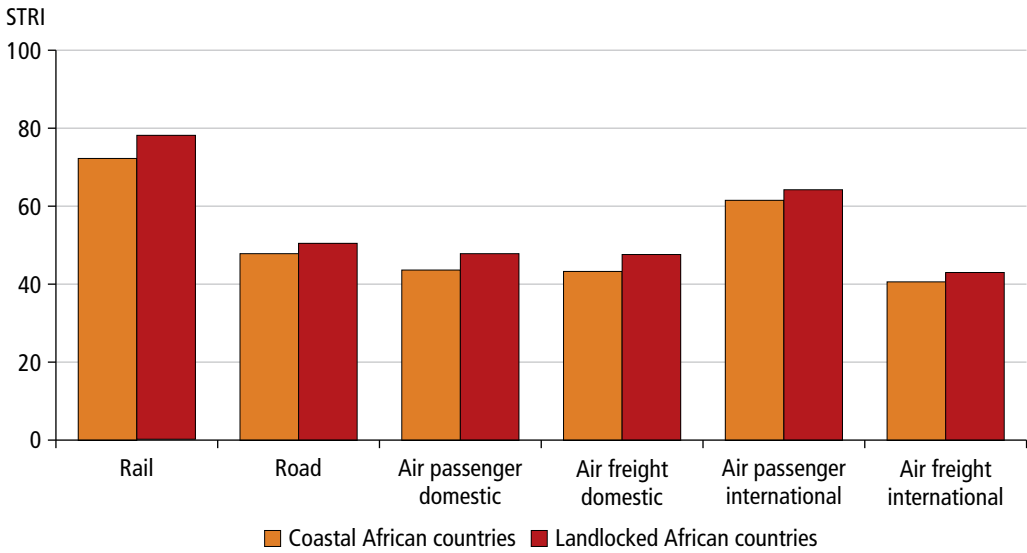
Some RECs have taken this effort further, by establishing regional TIPs that interlink national portals across their member states. The EAC pioneered this initiative in 2018, launching a regional TIP that currently connects the national TIPs of five of its nine partner states, namely Burundi, Kenya, Rwanda, Tanzania, and Uganda. The portal provides comprehensive step-by-step guidance on formalities and documentation needed for goods clearance purposes. A central part of the EAC-TIP, the Trade Facilitation Index, measures and compares the ease of importing and exporting, and the related administrative burden between the EAC’s partner states. In West Africa, ECOWAS has adopted its own regional Trade Information System, based on the same standard and technical features as the EAC-TIP.¹¹ The platform provides detailed guidance on import, export, and transit procedures, including required documentation and access to trade statistics; however, only Burkina Faso, Mali, and Nigeria have fully connected and actively use the system. In 2019, COMESA launched a similar initiative to develop a regional web-based TIP, which so far has yet to achieve any tangible progress in its implementation.

Liberalizing Restrictions on Transportation

Despite wide recognition of infrastructural deficits, cumbersome customs procedures, and NTBs as major contributors to high trade costs in Africa, it is equally important to highlight the substantial impediments posed by fragmented and restrictive transportation regulations. These regulatory constraints prevent or limit market access for foreign transportation operators, reduce competition, and undermine the overall efficiency of regional logistics systems. Discrepancies in standards and administrative procedures governing cross-border transportation operations further increase transportation costs and complicate the movement of goods and services across the continent. Consequently, transportation companies lack incentives to improve service quality or adopt more efficient management practices.

Transportation services are among the most restricted sectors in Africa, second only to professional services (Baiker et al. 2023). Paradoxically, landlocked African countries, which rely heavily on transportation services, tend to have even more stringent restrictions, with the average Services Trade Restrictiveness Index slightly higher in these economies (figure 2.3). Moreover, compared to other modes of transportation, land transportation has seen less liberalization effort in recent years (figure 2.4).

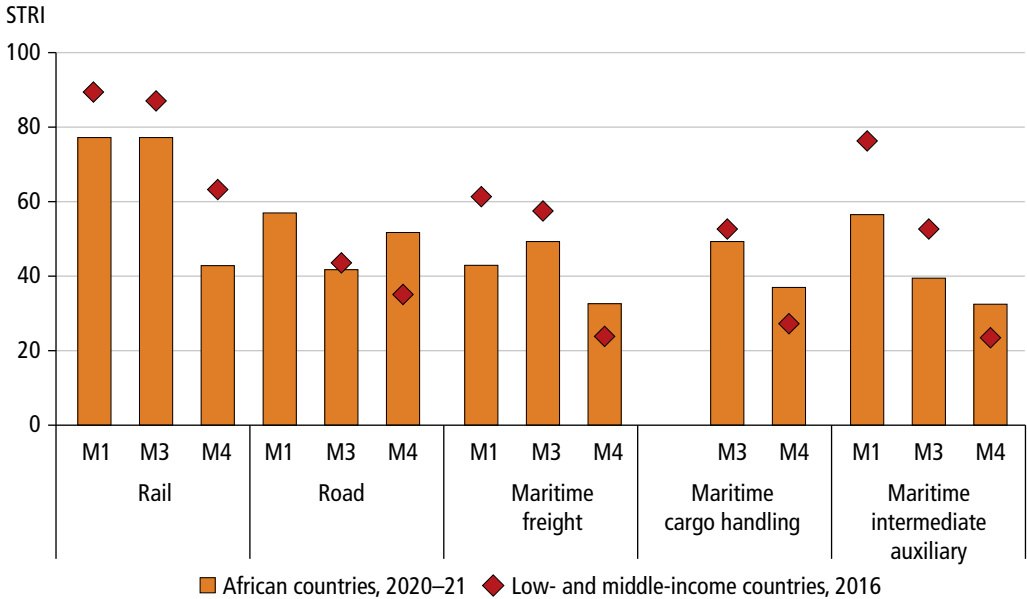
Figure 2.3 STRI in Transportation Subsectors, Landlocked versus Coastal Countries



Source: Baiker et al. 2023.

Note: STRI = Services Trade Restrictiveness Index.

Figure 2.4 STRI in Land and Sea Transportation for African Countries, by Mode of Supply



Source: Baiker et al. 2023.

Note: The sample for the maritime subsectors omits landlocked countries, and the sample for rail freight omits countries without rail tracks. M1 = Mode 1 (cross-border supply of services); M3 = Mode 3 (commercial presence); M4 = Mode 4 (presence of natural persons); STRI = Services Trade Restrictiveness Index.

According to the African Development Bank, transportation costs in Africa are significantly influenced by the degree of liberalization within regional economic blocs, with more liberalized environments generally resulting in greater efficiency and lower overall transportation expenses (AfDB 2021). In regions where cross-border truck movements face fewer restrictions and transportation policies, and where regulations and standards are more harmonized, transportation pricing is largely determined by market forces of supply and demand. Notably, the EAC Agreement on Road Transport and the EAC Vehicle Load Control Act 2016 have largely liberalized cross-border road transportation within the region, harmonizing key aspects of transportation governance, including vehicle registration and licensing, roadworthiness certification, vehicle and axle configuration, and transportation operator licensing. The EAC Agreement on Road Transport also outlines specific routes for international operations where market access is granted via permits or licenses, including key corridors such as Mombasa-Nairobi-Kampala, Dar es Salaam-Arusha-Nairobi, and other critical links connecting EAC partner states. These main corridors have more advanced and better enforced liberalization, whereas secondary or less traveled routes often experience weaker harmonization and more limited access.

Despite this progress, quantitative restrictions on freight transportation markets (for example, transportation quotas and limitations on the number of transportation service suppliers) remain the norm across several African regions and stifle competitive practices. The continued existence of nonmarket cargo allocation systems—such as the *tour de rôle* system in Central and West Africa (box 2.2)—and bilateral road transportation agreements directly contribute to higher transportation prices, poor quality, and a fragmented supply of freight within these regions (AfDB 2021). This economic inefficiency, in turn, discourages transporters from investing in modern truck fleets and higher-quality logistics services, reinforcing dependence on outdated and inefficient transportation systems.

The COMESA region also shows some degree of liberalization, though to a lesser extent. Several member states have adopted the COMESA Carrier's License (a regional licensing scheme designed to facilitate unrestricted commercial goods vehicle operations across all member states), but its implementation has not fully replaced preexisting bilateral road transportation agreements. Consequently, cross-border truck movement within some COMESA member states currently operates under a hybrid system, relying on both the regional license and a patchwork of bilateral cross-border road transportation permits. Such permits are typically issued by the authorities in the transportation company's country of registration and receive extraterritorial recognition in countries where cargo is delivered. This fragmented, permit-based system clashes with the highly mobile and dynamic demands of modern international road transportation. It creates significant inefficiencies, forcing transporters to navigate multiple overlapping agreements and comply with the freight quota restrictions that often accompany them, ultimately increasing operational complexity and limiting competitiveness.

BOX 2.2**Bilateral Transportation Quotas in Central and West Africa**

Despite recent developments, many countries in the Economic Community of West African States (ECOWAS) still rely on bilateral agreements for market access conditions for cargo and passenger vehicles. A notable example is the tour de rôle system, which governs cross-border cargo transportation between some ECOWAS coastal nations and the landlocked states of the Alliance of Sahel States (Burkina Faso, Mali, and Niger), as well as in parts of Central Africa, using bilateral agreements that allocate prenegotiated freight quotas among coastal and landlocked countries. In West Africa, all existing agreements reserve two-thirds of transit cargo arriving in a coastal country's seaport to transporters from the landlocked country that is the cargo's destination, and assign one-third to coastal transporters. For passenger traffic and nontransit cargo, the allocation uses a 50/50 distribution between operators from the coastal and the landlocked countries. Allocation is generally managed on a first-come, first-served basis, with drivers registering on a waiting list.

In Central Africa, similar arrangements exist between Cameroon and Chad, and Cameroon and the Central African Republic. Unlike in West Africa, however, the system applies only to transit cargo, with quotas structured as follows: in Cameroon/Chad, 35 percent for Cameroon and 65 percent for Chad; in Cameroon/Central African Republic, 40 percent for Cameroon and 60 percent for the Central African Republic.

The tour de rôle presents several challenges. For example, it does not comply with Article 19, par. 2(a) of the African Continental Free Trade Area Agreement, which mandates that state parties refrain from maintaining or adopting quantitative restrictions to transportation in the form of numerical quotas. Moreover, the system significantly restricts competition in the freight transportation sector. By allocating cargo solely on a first-come, first-served basis, the system prioritizes the order of arrival of vehicles at the port over efficiency factors such as service quality, reliability, cost-effectiveness, and operational performance. It also leads to oversupplies of transportation vehicles, long wait times, and increased transportation costs. Transportation companies face difficulty optimizing trip schedules, often being forced to return empty after delivering freight. Last, it fosters corruption, because transporters can offer bribes to jump queues or circumvent regulations.

A 2020 documentary by the University of Kassel illustrates the challenges faced by Burkinabé and Ghanaian truckers under the tour de rôle, particularly at Ghana's Tema port.^a

a. University of Kassel, "Trading Food across West African Borders" (<https://uni-kassel.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=fb9b0dbc-c36e-470a-af6a-af0100842a66>).

In the SADC region, cross-border road transportation is primarily governed by bilateral agreements between individual member states, which regulate the issuance of cross-border transportation permits. In addition, a subset of SADC countries—those belonging to SACU—implements a separate permit system governed by a Memorandum of Understanding on Road Transportation. This Memorandum of Understanding establishes a bilateral permit system that allows transportation operators to move cargo between their home country and a specific SACU member state indicated on the permit. However, these permits do not grant access to conduct cross-border transportation throughout the entire SACU region: each permit is limited to the specific bilateral route it covers, restricting broader regional mobility for transporters.

In addition to outright prohibitions and restrictions on foreign operators, complex licensing requirements and regulatory frameworks further hinder cross-border operations in Africa. These burdensome procedures create significant obstacles to the smooth movement of cargo trucks and commercial vehicles between origin and destination countries. The resulting administrative complexity discourages transportation companies from engaging in cross-border transportation operations, particularly those passing through multiple RECs.

A shift toward qualitative regulations of the transportation profession—focusing on the professional standards of operators, drivers, and vehicles—would foster greater competition and help lower transportation costs. Evidence from countries that have transitioned to this type of qualitative approach shows tangible improvements in services quality, more efficient cross-border road transportation systems, reduced costs, and enhanced intraregional trade (AfDB 2021). Achieving these results, however, requires reforming the current, fragmented, regulatory landscape, which entails phasing out bilateral agreements that rely on quantity-based permits and quotas, such as the *tour de rôle* system, and replacing them with harmonized, regional regulatory frameworks. These frameworks should span multiple RECs and establish unified standards for licensing, operations, and vehicle compliance, paving the way for a more integrated and efficient transportation system across the continent.

Regulatory Harmonization

RECs have made significant strides in enhancing regional transportation and trade facilitation through targeted initiatives focusing on the harmonization of technical standards (including vehicle specifications) and regional licensing systems. A series of continental initiatives led by the AU complements these regional efforts and provides a broader strategic framework for integrated transportation and trade development across the continent (ACBF 2024).

Earlier regional harmonization efforts include axle load and vehicle configuration limits across countries. Despite these measures, introduced to reduce the need for transshipment

of cargo at border crossings and to prevent excessive damage to road infrastructure caused by overloaded vehicles, significant disparities in regulations persist within and across various African regions. Notably, COMESA, EAC, SADC, and the Tripartite Agreement—through the Tripartite Vehicle Load Management Agreement—have adopted and broadly implemented harmonized standards for truck axle loading and maximum vehicle dimension in their region; however, implementation remains uneven. Countries with limited institutional and technical capacity, like the Democratic Republic of Congo and South Sudan, lag others, hindering the full benefits of regional harmonization. Efforts are under way in other African regions, such as ECOWAS, which has also initiated efforts to harmonize axle load limits and road transportation regulations through the ECOWAS Supplementary Act on the Harmonization of Standards and Controls of Axle Load of Heavy Goods Vehicles, adopted in 2012. Enforcement remains weak, however, and frequent overloading of trucks continues to present a major challenge in the region, undermining road safety and increasing transportation costs (World Bank 2018).

EAC has developed an ambitious framework for cross-border road transportation. This framework requires partner states to harmonize technical standards related to vehicle safety and fitness, vehicle dimensions and loads, traffic signs, and road and bridge design standards. Furthermore, it commits states to implement harmonized road transit charges. Although the agreement provides for mutual recognition of roadworthiness certificates, it does not currently extend to the mutual recognition of driving licenses or the harmonization of multimodal carrier licensing and liability regimes. Despite these limitations, transporters within EAC benefit from a particularly liberalized environment that allows them to move freely in the region, without restrictions. Some exceptions remain, however. Because of their recent accession to EAC, the Democratic Republic of Congo and Somalia have not yet fully integrated these frameworks into their national regulations, thus limiting the seamless application of EAC transportation protocols in their territories.

An innovative approach in EAC is the harmonized commercial licensing system. Under this system, all EAC partner states apply uniform licensing requirements, enabling transportation operators licensed in one member state to freely operate across the entire region with minimal additional requirements. This single regional licensing approach reduces administrative barriers, enhances regulatory coherence, and facilitates more seamless cross-border transportation services within EAC.

COMESA has also played a leading role in promoting regional integration and improving transportation services through the development of a range of innovative trade and transit facilitation instruments. These initiatives align with the COMESA Protocol on Transit Trade and Transit Facilities, which provides the legal and policy framework for improving cross-border transportation and trade efficiency within the region. Specifically, they aim to harmonize transportation regulations and simplify cross-border logistics among COMESA

member states. A key initiative, the COMESA Carrier's License launched in 1991, allows commercial transportation operators licensed in one COMESA country to operate in other member states using a single, regionally recognized license, thereby eliminating the need for separate cross-border road permits for each country. Although conceptually like EAC's harmonized commercial licensing system, the COMESA Carrier's License is less ambitious, because it does not seek to harmonize national regulatory frameworks across member states. Currently, 11 countries actively use the license, though some inconsistencies in implementation remain (AfDB 2021).

An important step toward deeper regulatory harmonization is the Multilateral Cross-Border Road Transport Agreement (MCBRTA), developed under the Tripartite Agreement. This agreement introduces qualitative criteria (such as good reputation, financial standing, and professional competence) that transportation operators must meet to be authorized for cross-border operations. By focusing on such standards rather than on quantitative restrictions (for example, quotas), the MCBRTA has the potential to lower transportation costs, enhance competition, improve service quality, and boost the efficiency of cross-border road transportation systems, ultimately contributing to increased intra-African trade. Unlike EAC's approach, which focuses on harmonizing technical standards and implementing a single regional license within its member states, MCBRTA's move to unify transportation regulations across multiple RECs using qualitative admission criteria makes MCBRTA a more ambitious and integrated effort to address fragmentation caused by numerous bilateral agreements across Africa, with promising potential for replication in other multiregional contexts.

Managing Interstate Transit

Africa's geography makes regional freight transit a critical component of trade and transportation systems. With 16 landlocked countries on the continent, a significant portion of imports and exports must pass through the territories of several countries before reaching their destination (AFC 2025). For instance, cargo arriving at the Port of Durban in South Africa and destined for Zambia must transit through Zimbabwe, and sometimes Botswana, before reaching its delivery point. Consequently, policies aimed at facilitating transit operations have become a central objective of regional integration efforts, particularly within RECs. Key regional and interregional measures for the management of transiting goods include regional transit bond systems (box 2.3), electronic cargo tracking technologies (box 2.4), and joint arrangements for managing transportation and transit operations along specific high-traffic interstate corridors. These efforts often involve the creation of corridor management authorities (CMAs) tasked with overseeing and streamlining operations, as exemplified by the Central and Northern Corridors in East Africa.

BOX 2.3**African Export-Import Bank Multiborder Transit Bond**

The African Export-Import Bank's African Collaborative Transit Guarantee Scheme (AACTGS), currently piloted in the Common Market for Eastern and Southern Africa states, is a flagship initiative at the continental level. The scheme seeks to streamline the movement of goods across the continent by replacing the current system of multiple, costly national transit bonds (which often cause significant delays at borders) with a more efficient and unified continental guarantee mechanism.

The bank issued the first AACTGS multiborder transit bond, valued at US\$10 million, on October 24, 2023. This bond served as a counterguarantee to Innovate General Insurance, a Zambian insurance company. It aimed primarily to enhance the capacity of the insurance company to issue bonds to clearing and forwarding agents, streamlining the transit of goods across Zambia's extensive 5,700 kilometers of shared borders with its eight neighboring countries. Once fully operational, the bond aims to gradually expand the AACTGS to other Regional Economic Communities (RECs) across Africa, with the goal of achieving continental coverage.

The AACTGS is offered as a solution to fragmented transit bond systems; however, the actual scale of continental-level transit trade in Africa remains very limited. Most cross-border flows still occur within subregional contexts (that is, within specific RECs), rather than across multiple RECs or the entire continent. Thus, the theoretical gains of a continental transit bond system (such as reduced delays, lower costs, and smoother inter-REC trade) remain largely aspirational at this stage. The East African Community destination model described in box 2.4 offers a valuable lesson for other RECs by demonstrating how the integration of transit solutions can enhance cross-border trade efficiency.

BOX 2.4**The East African Community Destination Model**

In 2014, the East African Community implemented a comprehensive customs framework called the Single Customs Territory. Under this framework, the assessment and payment of duties take place at the cargo's destination while goods are still at the first point of entry (so-called destination model). In practice, 48 hours before a vessel arrives at an East African port, it electronically transmits its cargo manifest to the customs authorities at that first port of entry. This information is then forwarded to customs in the country that is the cargo's destination. Upon receiving the information, the importer in the destination

(continued next page)

Box 2.4 The East African Community Destination Model (*continued*)

country must submit an import declaration and settle all applicable customs duties and taxes. Upon confirmation of these payments, customs authorities assign a risk profile to the cargo (red for physical examination, yellow for documentary control, green for no control, and blue for postclearance control). The risk profile guides the verification activities by the customs office in the port of first entry. Once it has completed the control, the office in the destination country issues a release note and the customs office at the first port of entry releases the goods. From the point of arrival to the destination point, goods move under the coverage of an electronic cargo tracking system to avoid being diverted while in transit.

Source: Calabrese et al. 2023.

According to UNCTAD (2023), transit systems implemented across all regions have recorded mixed results. The study concludes that solutions developed by some RECs offer possible models for the rest of Africa:

For COMESA, the Yellow Card, the COMESA Virtual Trade Facilitation System and regional bond guarantee systems may present important lessons for the AfCFTA. SADC has done well in document simplification through the SADC Single Administrative Document (SAD). The EAC has developed truck/cargo tracking and monitoring systems that ensure goods are offloaded where they are intended and declared to be. ECOWAS has gained experience with security, revenue guarantee and transit facilitation across the region. (UNCTAD 2023, 44)

Electronic Interconnection of Customs Systems

Examples of initiatives to connect border management systems to facilitate the management of transit include the Regional Customs Transit Guarantee scheme in COMESA, EAC's Customs System Interconnectivity (CSI), and the SIGMAT system in ECOWAS.¹² CSI covers multiple customs functions: not only information on transit cargo but also cargo manifests and transit bonds, which could offer an inspiration for other regions. CSI is also integrated with the EAC Regional Electronic Cargo and Driver Tracking System for the electronic tracking of cargo (discussed later in this section) along the Central and Northern Corridors in the region, via the use of electronic seals or radio frequency identification tags. Although of more limited scope, the COMESA Regional Customs Transit Guarantee scheme also allows for exchange between customs of electronic transit messages to confirm the entry and exit of cargo from their territories—but only for the issuance and release of transit bonds, not for the clearance of goods.

In CSI and SIGMAT, not all member states have connected, so implementation remains incomplete. For example, in EAC, only Burundi, Kenya, Rwanda, Tanzania, and Uganda have interconnected. Because ECOWAS has more member states than EAC, it will take more time to interconnect them all and fully implement SIGMAT, which was initially piloted in Benin, Burkina Faso, Côte d'Ivoire, and Togo, and then deployed in Mali and Senegal along

the Dakar-Bamako Corridor and Senegal and The Gambia along the Trans-Gambia Highway. More recently, Ghana and Nigeria have implemented SIGMAT along the Abidjan-Lagos corridor. Adding to implementation difficulties, interconnection arrangements also depend on differences in national customs information technology systems, leading to different solutions in different regions.¹³

Transit Documentation

The main developments with respect to transit documentation on the continent have been in their dematerialization, as discussed previously, as well as in harmonization to facilitate the exchange of information between border authorities of REC member countries. Under the AfCFTA, the principle of a unified Transit Document mandates that all consignments of transit goods moving under the AfCFTA framework must be accompanied by a standardized AfCFTA Transit Document. Additionally, these consignments must be covered by appropriate customs bonds and surety arrangements to guarantee compliance and secure customs duties in case of any irregularities. This document is designed to streamline cross-border transit, reduce administrative bottlenecks, and enhance customs cooperation among member states. Although the AfCFTA has legally established the AfCFTA Transit Document, practical implementation remains at an early stage. Full deployment will require harmonized customs procedures, digital infrastructure upgrades, and coordinated efforts among national authorities to ensure smooth adoption and enforcement.

Cargo Tracking

In East and Southern Africa, the Corridor Trip Monitoring System (CTMS), mandated by the MCBRTA, is a multi-REC electronic cargo tracking system designed to monitor the movement of vehicles, cargo, and drivers across the COMESA, EAC, and SADC regions. CTMS empowers customs, immigration, and other regulatory and law enforcement agencies to track driver, crew, and truck movements against preapproved route plans. The CTMS requires that all vehicles involved in cross-border transportation have either a satellite navigation system or a vehicle tracking system (for example, a Fleet Management System). These systems transmit real-time location data to a centralized CTMS electronic platform, hosted on servers based in Namibia. This setup allows authorities to access both real-time and historical data on vehicle routes and stopovers. At designated checkpoints along transportation corridors, customs and other authorized officers scan barcodes on transportation and driver documents. The CTMS project is being developed with a pilot test on a section of the Trans-Kalahari Corridor between Botswana, Namibia, and South Africa; a section of the Walvis Bay–Ndola–Lubumbashi Corridor; a section of the North-South Corridor; and the Beira and Nacala corridors. The system will be progressively rolled out across other corridors within the Tripartite region, depending on preparedness of individual member states.

Corridor Management Authorities

Historically, another CMA, the Permanent Secretariat of the Dar Corridor Committee, was established to manage the multimodal Dar es Salaam Corridor, connecting the port in Dar

es Salaam to landlocked Malawi, Zambia, and southern parts of the Democratic Republic of Congo. In 2016, that committee took proactive steps to establish a Corridor Performance Monitoring system and acquire the necessary equipment; however, because of financial constraints, the committee has since become inactive. Currently, the Central Corridor Transit Transport Facilitation Agency and the Northern Corridor Transit and Transport Coordination Authority are widely regarded as continental best practices in the management of cross-border transportation. Their efforts focus on harmonizing policies, improving infrastructure, and streamlining procedures to reduce trade costs and support deeper regional integration in EAC.

Experience in the two corridors reveals the complexity and challenges of establishing and maintaining CMAs. To function effectively, these authorities require a dedicated secretariat staffed with skilled personnel, including statisticians, data analysts, and information technology specialists. An essential component of the infrastructure is the transportation observatory, an innovative monitoring tool that collects and analyzes real-time data on corridor performance, helping to identify bottlenecks, track key performance indicators (such as transit times and border clearance delays), and provide actionable insights to policy makers and stakeholders. By enhancing transparency and accountability, they serve as critical enablers of corridor efficiency and informed decision-making (Mommen 2024). The long-term viability of CMAs also depends on stable and predictable funding. Common funding mechanisms include contributions by governments or traffic-based fees (for example, tonnage levies) collected from corridor users. CMAs are generally more sustainable when operating along corridors that serve many countries, because a broader contributor base allows for a more equitable distribution of financial responsibilities (AfDB 2021).

CMAs have emerged as a model for improving trade corridor efficiency across many African regions. Their structured approach to policy and regulatory harmonization, data-driven monitoring of trade corridors, promotion of trade facilitation tools, and coordination among stakeholders demonstrate their potential for unlocking the economic potential of regional trade in Africa. However, their ultimate success and efficiency depend on consistent political commitment, adequate funding and staffing, and robust enforcement mechanisms to overcome persistent challenges on the ground. With these conditions in place, CMAs can significantly contribute to reducing trade costs, boosting trade volumes, and accelerating regional integration.

In addition to these efforts, some RECs have worked to harmonize road transit charges. For instance, COMESA has implemented a harmonized road user charges system in nine of its member countries (Burundi, Ethiopia, Kenya, Malawi, Rwanda, Sudan, Uganda, Zambia, and Zimbabwe). EAC has, since 2022, taken steps to harmonize road charges, but its efforts have not yet resulted in the implementation of a unified system.

Regional Road Insurance

Road safety significantly affects transportation costs across Africa, particularly in regions afflicted by armed conflicts, banditry, violence, terrorism, and piracy.¹⁴ In such high-risk environments, insurance becomes a vital tool for managing risk and enabling economic activity. Insurance operates on the fundamental economic principle of risk pooling, with multiple agents contributing relatively small premiums into a collective fund. This fund protects against potentially catastrophic but statistically predictable losses, allowing businesses to participate in economic activities that would be otherwise too risky to undertake without such coverage.

In the context of regional transportation, establishing regional insurance pools offers two key advantages. First a larger regional pool can lower the cost of insurance premiums by spreading risk over a broader base. Second, regional insurance reduces transaction costs by eliminating the need to purchase and manage separate insurance policies in each country the consignment passes through. By promoting such regional insurance mechanisms, African countries can improve the resilience and affordability of transportation services, which is key to facilitating safer and more efficient cross-border trade. In this regard, across Africa, several RECs have established regional third-party motor insurance schemes—commonly referred to by the color of their respective cards—to facilitate cross-border transportation and provide a uniform liability coverage system.

- All Arab Maghreb Union (AMU) member states have adopted the Orange Card motor vehicle insurance scheme, which provides a unified insurance coverage system for regional transportation of goods.¹⁵ It suffers from limited information available to operators on its use.
- The Carte Internationale d'Assurance de Responsabilité Civile, commonly known as the CEMAC Pink Card, functions as an extension of national insurance coverage to other CEMAC countries with the aim of streamlining the process of claiming compensation for accidents that occur within CEMAC member states. Although mandatory, it has so far seen limited adoption by cross-border transportation operators in the region.¹⁶
- The COMESA Yellow Card—a regional motor vehicle insurance scheme designed to provide third-party liability coverage and compensation for medical expenses incurred in road traffic accidents within COMESA member states—is currently operational in 13 of the 21 COMESA member countries (box 2.5).¹⁷
- A regional motor vehicle insurance scheme, known as the ECOWAS Brown Card, covers third-party liabilities and medical expenses for drivers who incur body injuries due to road accidents.¹⁸ The ECOWAS Brown Card, further complemented by a convention for the indemnification of victims of road accidents (approved on October 2008), is currently implemented by all ECOWAS members except Cabo Verde.

BOX 2.5**The COMESA Yellow Card**

The following example offers a practical illustration of how the Common Market for Eastern and Southern Africa (COMESA) Yellow Card operates. A Tanzanian driver intends to travel to Kampala, Uganda, via Kenya. In the absence of the Yellow Card, he would typically be required to obtain separate national motor vehicle liability insurance policies for both Kenya and Uganda, because each country requires such coverage for foreign vehicles that enter and circulate in its territory. With the COMESA Yellow Card, however, the driver can acquire a single, comprehensive insurance policy from an accredited insurance provider in Tanzania. This card then extends the necessary liability coverage across the entire duration of his transit through both Kenya and Uganda. If a motor vehicle accident occurs within either Kenya or Uganda, the driver is required to report the incident only to the designated national focal point within that respective country.^a The focal point is then responsible for processing and settling any claims arising from the accident, which greatly simplifies the claims process for motorists involved in accidents occurring during cross-border travel.

This framework significantly enhances regional integration by mitigating financial risks associated with cross-border road travel, thereby facilitating trade and personal mobility. Furthermore, COMESA has developed an online Yellow Card Verification system on its website, enabling stakeholders to check the validity of a given Yellow Card.^b

a. A Yellow Card focal point is the agency, often an insurance company, that represents all the insurance companies issuing Yellow Cards in the various countries where the scheme is implemented.

b. COMESA Yellow Card, "Yellow Card Verification" (<https://comesayellowcard.com/yc-verification/index>).

Although several RECs have established regional third-party motor insurance, challenges related to fragmented implementation, limited geographic coverage, low adoption by transportation operators, and administrative inefficiencies continue to hinder their full potential. Consequently, RECs should prioritize the expansion and harmonization of these schemes across more countries and regions. Ensuring that all member states within each REC adopt the relevant insurance card—and, critically, enabling recognition of coverage between RECs—would greatly reduce the financial and administrative burdens associated with long-distance cross-border transportation. In the longer term, developing a continentwide third-party motor insurance framework, potentially integrated into the AfCFTA architecture, could help standardize coverage requirements and streamline claims procedures. Such a system would enhance the consistency, reliability, and efficiency of insurance protection for transportation operators involved in cross-regional trade, particularly those operating over long distances.

In parallel, RECs should work to digitalize and integrate insurance systems. Expanding such systems across RECs would not only enhance operational efficiency but also support real-time validation and monitoring by customs and law enforcement officials at borders (refer to box 2.5 for the example of the COMESA Yellow Card Verification system). Increased outreach and awareness among transportation operators are also necessary. Many cross-border drivers are unaware of the benefits of regional insurance schemes or unclear about how to enroll. Simplifying procedures and integrating insurance requirements into vehicle registration processes could encourage broader uptake, particularly among small operators. Finally, establishing regional risk-pooling mechanisms or reinsurance funds, potentially supported by development partners or blended finance arrangements, could help lower the cost of premiums and maintain the financial viability of these schemes.

Policy Implications for Reducing Trade Frictions

Reducing Africa's trade costs requires addressing both internal border wedges that segment domestic markets and bilateral frictions that constrain cross-border exchange. At the continental level, this commitment is reflected in the AfCFTA Protocol on Trade in Goods, particularly Annex 3 on customs cooperation, Annex 4 on trade facilitation, Annex 5 on nontariff barriers, and Annex 8 on transit. These annexes outline a comprehensive framework to ease the movement of goods across African borders. They reflect best practices that closely align with key provisions of the World Trade Organization Trade Facilitation Agreement and the standards set forth in the World Customs Organization's Revised Kyoto Convention, which promotes the simplification and harmonization of customs procedures. By incorporating these provisions, the AfCFTA lays the foundation for a more predictable, transparent, and efficient trade environment across the continent. RECs play a central role as well, with COMESA, EAC, and the Tripartite Agreement standing out for their success in developing and implementing regional coordination and harmonization mechanisms that enhance trade and transportation facilitation. Their achievements offer valuable models for other regions to emulate.

A critical priority for all regions is the liberalization of road transportation markets. Achieving this goal would foster competition and generate economies of scale, both of which play a significant role in reducing the costs associated with importing goods and inputs. Transportation operators would improve operational efficiency, leading to lower logistical costs that ultimately benefit consumers and businesses. In this regard, efforts undertaken by COMESA, EAC, and particularly the Tripartite Agreement illustrate how harmonized policies can enhance transportation efficiency. The AfCFTA's Protocol on Trade in Services, which prioritizes transportation as a key sector for liberalization, provides a solid platform to extend these reforms across the continent.¹² Through this framework, member states can harmonize regulatory standards, foster transparency, and elevate the performance of transportation services. Such measures will not only facilitate seamless cross-border trade but also strengthen regional integration, contributing to Africa's broader economic growth and development goals.

Regulatory liberalization alone is insufficient without robust implementation, including coordination between governments and RECs. Effective implementation of existing commitments necessitates strategic planning, sustained monitoring, and accountability frameworks. Supraregional frameworks such as the AfCFTA can catalyze these processes by tracking member state progress, encouraging peer learning, and facilitating the transfer of successful models across regions.

Digital transformation must be integral to these strategies. Technologies such as single-window systems, electronic transit data platforms, and cargo tracking solutions can significantly reduce procedural delays, diminish corruption risks, and expedite transportation, trade, and border operations. These tools also enhance collaboration between economic operators and customs and enforcement agencies, improving risk management and compliance. When integrated with digital systems for insurance and claims processing, they can further streamline compensation processes and reduce administrative burdens. Additionally, Trade Information Portals can reduce information asymmetries, enabling especially small and medium enterprises to navigate cross-border trade regulations, formalities, and documentation with greater ease and confidence. Realizing the full benefits of digitalization requires substantial investments in infrastructure, capacity building, and the harmonization of protocols across borders.

Finally, it is necessary to address Africa’s complex web of overlapping REC memberships, which introduces regulatory fragmentation and inefficiency. Doing so will require thoughtful supraregional coordination, not as a replacement but as a complement to existing regional initiatives. The Tripartite Agreement demonstrates how harmonized regulatory frameworks, shared standards, and cross-REC coordination can scale up integration efforts. Adopting continentwide solutions such as standardized customs data protocols can further amplify these gains.

Notes

1. “Behind-the-border” comprises all the transaction costs that have a unilateral country origin, including processes imposed by countries at their borders.
2. Economic and Social Commission for Asia and the Pacific, “ESCAP–World Bank Trade Cost Database.” <https://www.unescap.org/resources/escap-world-bank-trade-cost-database>.
3. According to data from the World Bank Enterprise Surveys. <https://www.enterprisesurveys.org/en/enterprisesurveys>.
4. United Nations, “UN Global Survey on Digital and Sustainable Trade Facilitation.” <https://www.untsurvey.org>.
5. To monitor their effectiveness, EAC developed an online platform called the OSBP-Performance Measurement Tool (<https://osbpinfra.eac.int>), which assesses OSBPs’ performances in six key areas, including cost and time of processing cargo, infrastructure, users’ satisfaction, volume/throughput, and interagency coordination.

6. The six are Seme-Kraké (Benin-Nigeria), along the Abidjan-Lagos Corridor; Akanu-Noepe (Ghana-Togo); Cinkassé (Burkina Faso-Togo); Laléraba (Burkina-Faso-Côte d'Ivoire); Malanville (Benin-Niger); and Boundou-Fourdou, (Conakry-Guinea-Sénégal). Joint border posts under construction are Zégoua (Côte d'Ivoire-Mali), Moussala (Mali-Sénégal), and Hèrèmakono (Burkina Faso-Mali); the Noé-Elubo border post (Côte d'Ivoire-Ghana), although complete, still operates as a two-stop facility. Moreover, the construction of the Jendema-Bo Waterside (Liberia-Sierra Leone) is under way, with detailed engineering designs finalized and sites handed over in May 2023. Prolo (Côte d'Ivoire-Liberia) is in the planning stages, with architectural and engineering designs completed.
7. AfCFTA, “Non-Tariff Barriers: Reporting, Monitoring and Eliminating Mechanism.” <https://tradebarriers.africa>.
8. At the time of writing this report, the web platforms <https://www.tradeobstacles.org/ecowas> and <https://www.tradeobstacles.org/uemoa> were not accessible.
9. Borderless Alliance, “Non-Tariff Barriers: Identifying, Reporting and Monitoring Mechanism.” <https://www.tradebarrierswa.org>.
10. COMESA, EAC, and SADC, “Non-Tariff Barriers: Reporting, Monitoring and Eliminating Mechanism.” <https://www.tradebarriers.org>.
11. For more on the ECOWAS Trade Information System, visit <https://ecotis.ecowas.int>.
12. SIGMAT (Système Interconnecté de Gestion des Marchandises en Transit) was launched in 2019 to replace the paper-based system with an automated community transit procedure based on the exchange between customs offices of electronic messages. SIGMAT draws inspiration from the New Computerised Transit System of the European Union (ECOWAS 2025).
13. A key difference between EAC and ECOWAS is that SIGMAT is a centralized solution, whereas CSI interconnects the information technology systems of customs through dedicated interfaces because each country runs customs management systems based on different software solutions. The use of middleware is much more complex than interconnecting systems based on identical software.
14. These areas include the Great Lakes region, the Horn of Africa, and the Sahel. Additionally, piracy is a concern in the Gulf of Aden and the Gulf of Guinea.
15. The Orange Card scheme is not an AMU achievement but was developed by the League of Arab States and is also operational in several African countries, including Somalia and Sudan.
16. Regulation no. 2/OO/U9AC-OO1-CTAPCA-CM-04 of July 21, 2000, established the conditions for the implementation of the CEMAC Pink Card.
17. Burundi, the Democratic Republic of Congo, Djibouti, Eritrea, Ethiopia, Kenya, Malawi, Rwanda, Sudan, Tanzania, Uganda, Zambia, and Zimbabwe.
18. Governed by the Protocol on Brown Card Third Party Motor Insurance (Protocol A/P1/5/82), as amended by the Supplementary Act A/SA. 1/6/20 of June 19, 2021.
19. The AfCFTA's five priority service sectors—transportation services, communication services, financial services, tourism services, and business services—were identified by the AU and its member states during the initial phases of the AfCFTA negotiations, specifically as part of the Protocol on Trade in Services negotiations. The prioritization reflects consensus among AU member states on key areas whose liberalization is deemed essential to boost intra-African trade and economic development.

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Deepening and Enforcing Agreements

Introduction: Africa, a World Leader in Regional Integration

Key message: *With the signing of the African Continental Free Trade Area agreement, African countries are expanding the remit of preferential trade agreements and have some of the highest numbers of preferred trading partners.*

African countries were early adopters of regional integration initiatives, dating back to well before independence in some cases. The Southern African Customs Union (SACU), formed in 1910, is the world's oldest customs union, and the East African Community (EAC) traces back to 1927 and the customs union between Kenya, Tanganyika, and Uganda. In 1962, the West African Monetary Union (Union Monétaire Ouest-Africaine, or UMOA) was established; in 1964, the Central African Customs and Economic Union, the precursor of the Economic and Monetary Community of Central Africa (CEMAC), formed. The Economic Community of West African States (ECOWAS) Treaty was signed in 1975.

In the past three decades, participation in preferential trade agreements (PTAs) around the world has accelerated. The number of new agreements doubled within the first five years of the 1990s and more than quadrupled by 2010. The growth of PTAs in Africa has followed that trend (figure 3.1). Of 373 agreements notified to the World Trade Organization (WTO) and in force by the end of 2024, 49 involve at least one African PTA partner, and 35 of those involve economies in Sub-Saharan Africa.

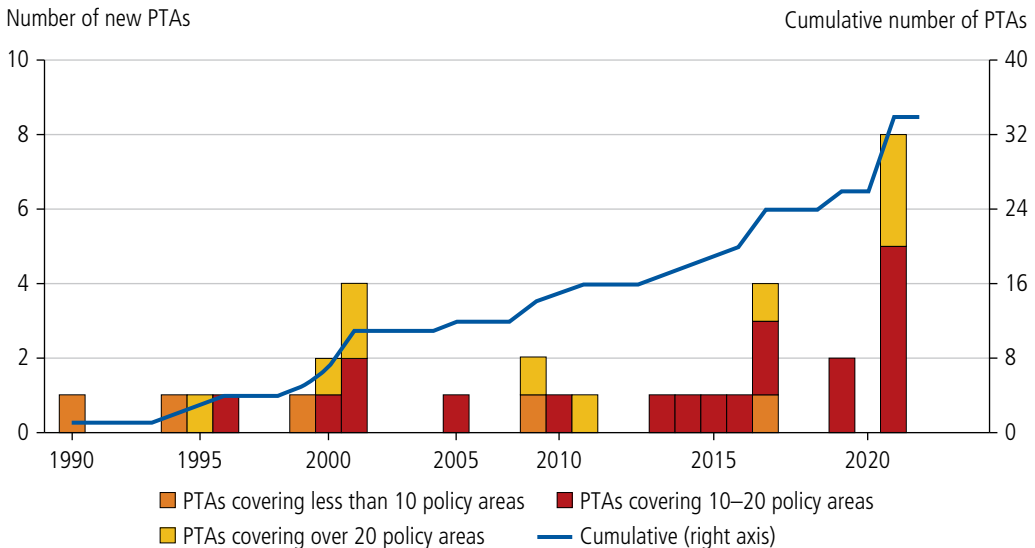
This recent increase in PTA participation among African countries has come about partly because of the necessity created by Brexit for the United Kingdom to renegotiate six preexisting agreements. As noted later in the chapter, these agreements are not entirely identical to European Union (EU) agreements and therefore may imply some change in the degree of liberalization between African countries and the United Kingdom. Nevertheless, because they do so only marginally, this increase in number of agreements does not really reflect an expansion of preferential trade for Africa. By contrast, the signing of the African Continental Free Trade Area (AfCFTA) agreement in May 2019 is recorded as only one additional

agreement in the tally and thus does not reflect the considerable increase in total number of preferential partners for African countries.

Since the mid- to late 2000s, many PTAs have gone deeper, including more policy areas than before, liberalization of services and investments, and regulatory areas such as competition and intellectual property. The nature and scope of the new agreements involving African countries present different characteristics, however. For African countries, the coverage of these agreements has appeared slightly less ambitious than observed worldwide, as illustrated by the rough metric of the number of policy areas covered in PTAs (figure 3.1).

Despite the increasing number of agreements, countries in Africa still participate in fewer agreements than other countries do; however, they have preferential trade relations with more partners. The number of PTAs signed by African countries, average by world standards, does not really compare with countries and regions that have made heavy use of preferential trade such as the EU and Chile, the Republic of Korea, Singapore, and Türkiye, as well as the EU and surrounding European countries. Since African countries signed the AfCFTA agreement, however, the number of trade partners with whom they have preferential trade relations has increased significantly. By this metric, African countries (North and Sub-Saharan African) lead the world (figure 3.2). The continental approach would simplify the overall preferential trade architecture African countries have to contend with and reduce so-called spaghetti bowl effects. Conversely, it may make it more complex to reach ambitious integration objectives among many members.

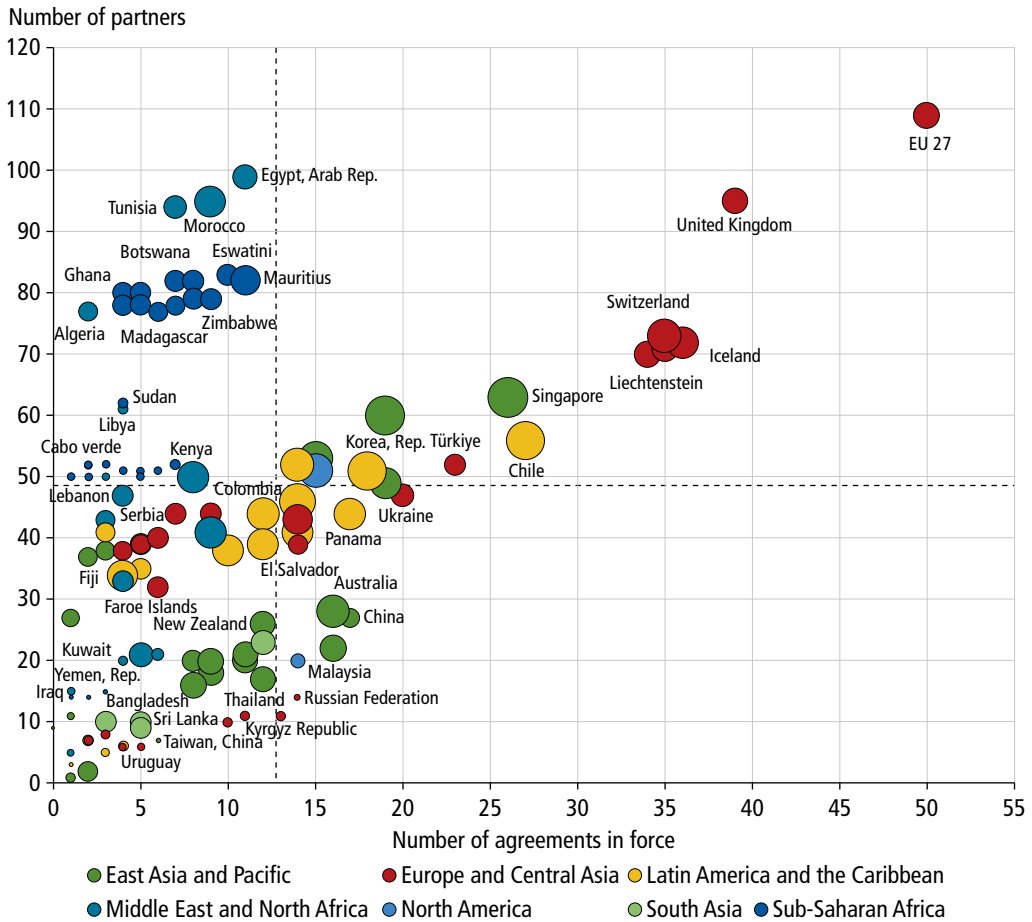
Figure 3.1 Number of New PTAs and Policy Areas Covered, Sub-Saharan Africa, 1989–2022



Source: World Bank compilation based on data from the World Bank Deep Trade Agreements database (<https://datatopics.worldbank.org/dta/table.html>).

Note: PTA = preferential trade agreement.

Figure 3.2 Number of PTAs, by Economy, 2022



Source: World Bank compilation based on data from World Bank Deep Trade Agreements database (<https://datatopics.worldbank.org/dta/table.html>).

Note: Size of circle shows the sum of partner's share of world GDP. The figure excludes unilateral and partial scope agreements. The two dotted lines indicate world averages. EU 27 = European Union 27 member states; GDP = gross domestic product; PTA = preferential trade agreement.

The high number of partners does not, however, translate into large market access. Trade agreement partners, despite their numbers, consist of other African countries and small African markets. African countries do not have bilateral agreements with the world's largest markets (although some have agreements with the EU). Mauritius's different strategy is noticeable here because it has larger market access through PTAs relative to other African countries.

Policies Pursued in Free Trade Agreements Signed by African Countries

Key message: Evidence on preference use in African PTAs is limited, but proxies suggest wide cross-agreement variation and significant unrealized potential. Rules of origin—key to accessing preferences—also vary in restrictiveness; on paper, the AfCFTA adopts more flexible, lower-cost rules that could boost intra-African goods trade.

The market-opening impact of agreements depends on enforcement and implementation. African agreements appear less legally binding than those elsewhere, raising enforceability concerns, and they include weaker governance provisions to support implementation and compliance.

African agreements also tend to cover fewer areas and specify less detailed provisions than the most ambitious agreements worldwide.

Political economy constraints help explain the implementation gap, but experience from stronger regions and agreements suggests remedies: start with coalitions of the willing that can later scale up, strengthen institutions, and engage the private sector more effectively.

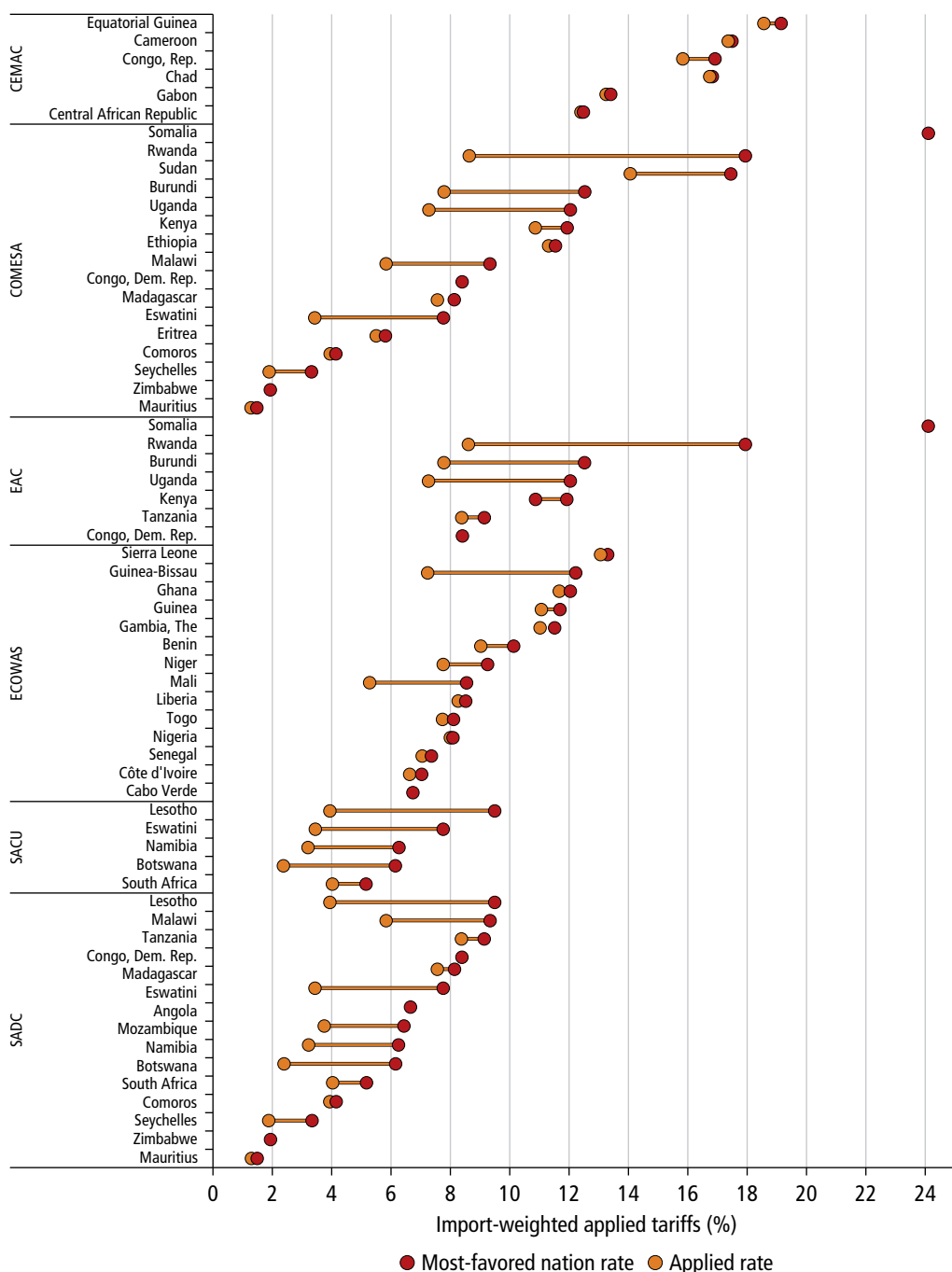
This section examines the architecture of trade agreements signed by African countries: the depth of tariff liberalization actually achieved, the design and implementation of rules of origin, the strength of enforceability provisions, and the degree to which deep integration commitments translate into operational reform. Together, these dimensions reveal a recurring pattern in which formal commitments outpace implementation and in which procedural and institutional gaps, more than the agreements' written content, constrain the value of preferential access.

Tariff Liberalization and Preferences Offered by African Countries

How does one assess the extent of the use of preferential liberalization across countries in Sub-Saharan Africa? Although international trade statistics offer a glimpse into the levels of formal trade among preferential trade partners, no official trade data exist on the actual use of the various preferential regimes. Regional Economic Communities (RECs) do not report on the use of preferences even though national customs routinely record precisely which trade and tax regime are applied to imported goods and which taxes and duties are levied on import shipments. That is, although the information is available, it is either not reported to RECs by national governments or not used by RECs to monitor and report on the implementation of trade agreements.

An indicator of the actual trade liberalization taking place in current agreements is the difference between the average trade-weighted most-favored nation (MFN) and preferential statutory tariff rates. The gap between MFN and the preferential rate average provides a measure of how much trade partners can take advantage of the preferential trade margin offered in the trade agreement. For most products covered by the agreements within African RECs reviewed here, preferential rates are zero for trade partners—that is, RECs grant nearly full liberalization to their REC partners, although sensitive product lists may retain some duties. Three broad groups of countries emerge from this examination (figure 3.3).¹

Figure 3.3 Import-Weighted Applied Tariffs, by REC, 2023



Sources: World Bank compilation based on data from the World Bank Deep Trade Agreements database (<https://datatopics.worldbank.org/dta/table.html>) and World Integrated Trade Solution (<https://wits.worldbank.org>).
 Note: Most recent information: Eritrea (2006); Sudan (2017); Democratic Republic of Congo (2020); and Ethiopia, Malawi, Mozambique, and Comoros (2021). CEMAC = Economic and Monetary Community of Central Africa; COMESA = Common Market for Eastern and Southern Africa; EAC = East African Community; ECOWAS = Economic Community of West African States; REC = Regional Economic Community; SACU = Southern African Customs Union; SADC = Southern African Development Community.

The first group consists of countries with very low preference usage given current patterns of formal trade: Benin (preferences to ECOWAS and the West African Economic and Monetary Union [WAEMU]), Cabo Verde (ECOWAS), Cameroon and the Central African Republic (CEMAC), and Ghana (preferences offered to ECOWAS and the EU). For these countries, the difference between trade-weighted MFN and applied tariff is very small, almost zero in some cases. That is, almost all their imports are subject to nearly nominal MFN regimes; by implication, countries do not use the duty preferences offered because the countries conduct very little formal import trade with preferential partners. In addition, these countries have high applied MFN tariffs, suggesting the potential for large preferences.

Many reasons may exist for these countries' low use of preferences, including the fact that these countries procure much of their imports from trade partners with which they do not have an agreement in place because those partners are the most competitive suppliers. Another explanation could be that countries have an agreement in place but key imported products are not eligible for existing preferential treatment. Moreover, although not reflected in figure 3.3, it could be the case that traders do not claim preferences.

A second group consists of countries that experience high volumes of imports from preferential trade partners, but the import-weighted applied tariffs remain high.² This situation suggests that these countries potentially grant substantial preferences to trade partners but also import significantly from nonpreferential trade partners. Countries with these characteristics include Burundi and Rwanda (Common Market for Eastern and Southern Africa [COMESA] and EAC). For these countries, a large (several percentage points) difference exists between the average weighted MFN and applied tariffs, implying that substantial amounts of imports take place under a preferential regime that offers a much lower duty rate. Their average applied duty rate remains high (over 9 percent in the case of Rwanda), however, indicating further scope for increasing preferential take-up or for further liberalizing the MFN tariff.

The third group comprises countries that offer very low to zero preferential duty rates to trade partners from which they import. Botswana (preferences to the EU, SACU, and SADC), Mauritius (COMESA and SADC), and Namibia (SACU and SADC) offer the three most striking examples. These countries trade almost entirely with their preferential partners, theoretically benefiting from duty-free treatment. In the case of Mauritius, an MFN tariff that averages close to zero supersedes the preferential tariff.

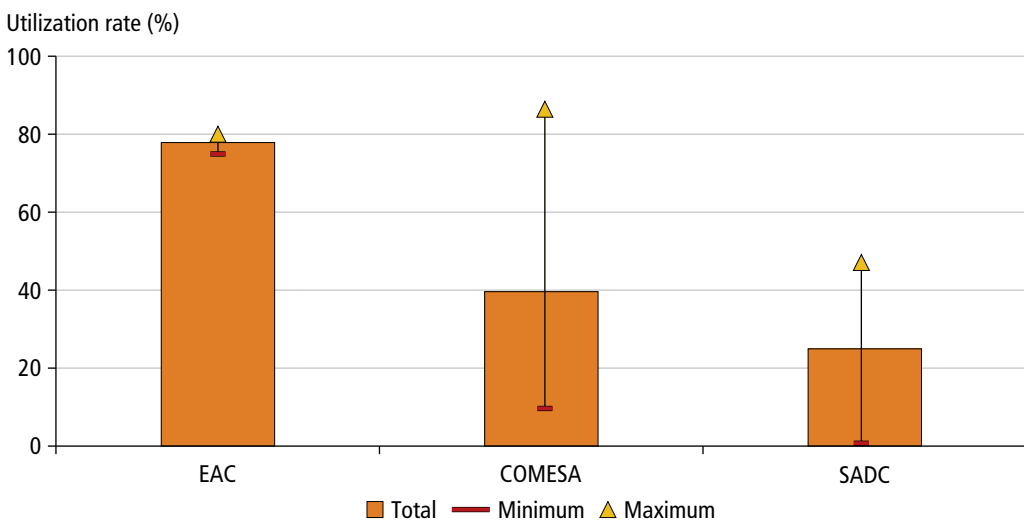
The margins of preference for duties at the country level point to very significant differences in the levels of imports with preferential trade partners that are eligible for duty-free treatment across African countries and RECs. Importantly, these differences highlight untapped potential in preferential trade among African partners. In some instances, evidence points to the near absence of trade on a preferential basis; in others, preferential trade partners have actual duty-free trade access.

Rules of Origin in African Agreements: Liberal Design but Costly Implementation

Evidence suggests that African regional agreements do not make full use of preferences. UNCTAD and COMESA (2023) report substantially lower rates of preference use in COMESA, EAC, and SADC than in unilateral preferential agreements such as the African Growth and Opportunity Act (United States), the EU's Everything but Arms initiative, exports to the EU in the context of the Economic Partnership Agreements, and the US Generalized System of Preferences. The study also finds significant differences in the rate of preference use among regional PTAs, with EAC showing on average higher use (77.9 percent of exports to regional partners), followed by COMESA (39.8 percent) and finally SADC (25.3 percent; refer to figure 3.4). The high rate of use of EAC preferences coincides with that community's opting in 2015 to reform its rules of origin by aligning them with the EU Economic Partnership Agreements rules of origin negotiated at the time. Previously, EAC had adopted the same regime as COMESA. This reform resulted in less strict rules of origin as well as simpler administrative procedures, in addition to simplifying transactions for firms by having identical regimes for exports to both EAC and the EU.

A possible reason for the low use of preferences can be the design of preferential rules of origin that determine which imported products can benefit from the more liberal regime. Rules of origin are necessary in PTAs to avoid trade deflection—that is, when products from third countries unduly benefit from the more liberal import regime by being rerouted through the preferential trade partner. Rules of origin can make benefiting from preferential duty rates more difficult in two ways. First, the restrictiveness of rules of origin may limit the imports from partner countries that benefit from the advantageous preferential trade regime. Second, the design of the rule itself and the administrative requirements needed to prove origin may be complex and costly for traders to implement.

Figure 3.4 Rates of Preference Use by COMESA, EAC, and SADC in Intraregional Trade



Source: Based on UNCTAD and COMESA 2023, Table 60.

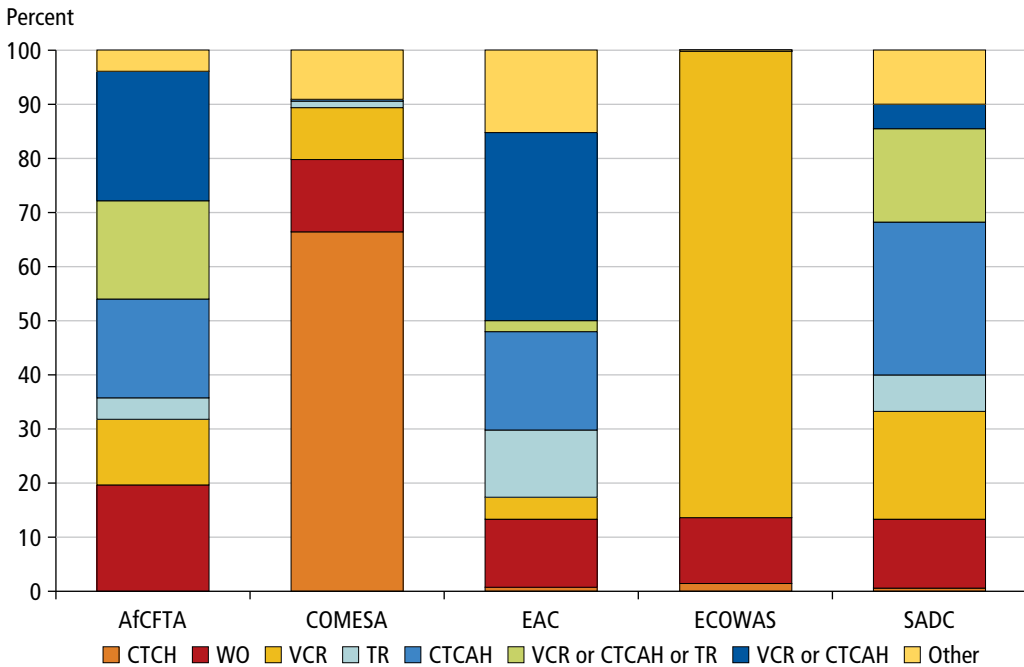
Note: COMESA = Common Market for Eastern and Southern Africa; EAC = East African Community; SADC = Southern African Development Community.

Rules of origin require that a minimum degree of substantial transformation take place in the partner country to make it eligible for the tariff preference. Determining the minimum level of transformation (the restrictiveness of the rule of origin) depends on the liberalization objectives that the countries participating in the preferential agreement wish to pursue. More restrictive rules may be designed with industrial policy objectives for the preferential trade area. Even in that case, the relationship between the restrictiveness of the rule of origin and the regional value added is not linear but has an inverted U shape—that is, it increases and then decreases (Head et al. 2024). Thus, a too-strict local transformation criterion would be counterproductive because local firms could not meet the threshold. Research finds for instance that the optimal value-added rule for Uganda would be as low as 10 percent for regional exports (Ticku et al. 2025). Industrial policy is generally the prime motive presiding over the design of rules of origin; by contrast, the prevention of trade deflection would not normally require very restrictive rules (in other words, trade deflection is quite costly).

Rules of origin in PTAs are usually quite complex, because they potentially vary for each product tariff line. They can take various forms in terms of defining substantial transformation, most commonly using the following criteria (alone or in combination): amount of value addition, change of tariff heading, and technical requirements that describe the type of necessary transformation needed to qualify. Furthermore, these criteria may be combined: either compounded (requiring more than one) for more restrictiveness or listed as alternatives (requiring only one of several mentioned) for added flexibility. Because rules of origin involve costs to implement, and because they may have industrial policy objectives, it is important to have a good understanding of whether their design is appropriate.

The analysis in this chapter compares the regimes of the AfCFTA and four of the pillar RECs (COMESA, EAC, ECOWAS, and SADC). It follows the accepted method in the literature for comparing different rules of origin regimes by codifying the rules applied at the product level and scoring them on their level of restrictiveness from a score of 1 for the least restrictive product rules to 7 for the most restrictive ones (Ayele 2024; Cadot et al. 2006; Estevadeordal and Suominen 2005).

This comparison reveals significant differences in the types of rules of origin required in African agreements (figure 3.5). COMESA's regime is dominated by a single standalone rule—change of tariff classification heading—applied in over 66 percent of cases. One criterion also dominates the ECOWAS regime, but with a seemingly more flexible approach that provides the option of a 30 percent value content requirement or a substantial transformation rule for 86 percent of tariff lines. In contrast, the AfCFTA, EAC, and SADC opt for more diverse rules but follow distinct paths. EAC shows a high use of hybrid rules, with 35 percent of tariff lines subject to a hybrid rule offering a choice between a 35 percent value added requirement and change of tariff classification at any heading (CTCAH). SADC applies a relatively balanced but complex regime, relying heavily on CTCAH (28 percent) and value content requirement (20 percent), with 17.3 percent of rules relying on a combination of alternative criteria. This structure, although

Figure 3.5 Rules of Origin in the AfCFTA and African RECs, by Type of Criterion

Source: World Bank calculations based on data from the schedule of rules of origin of AfCFTA, COMESA, EAC, ECOWAS, and SADC agreements and treaties.

Note: AfCFTA = African Continental Free Trade Area; COMESA = Common Market for Eastern and Southern Africa; CTCAH = change of tariff classification at any heading; CTCH = change of tariff classification heading; EAC = East African Community; ECOWAS = Economic Community of West African States; SADC = Southern African Development Community; TR = technical requirement; VCR = value content requirement; WO = wholly obtained.

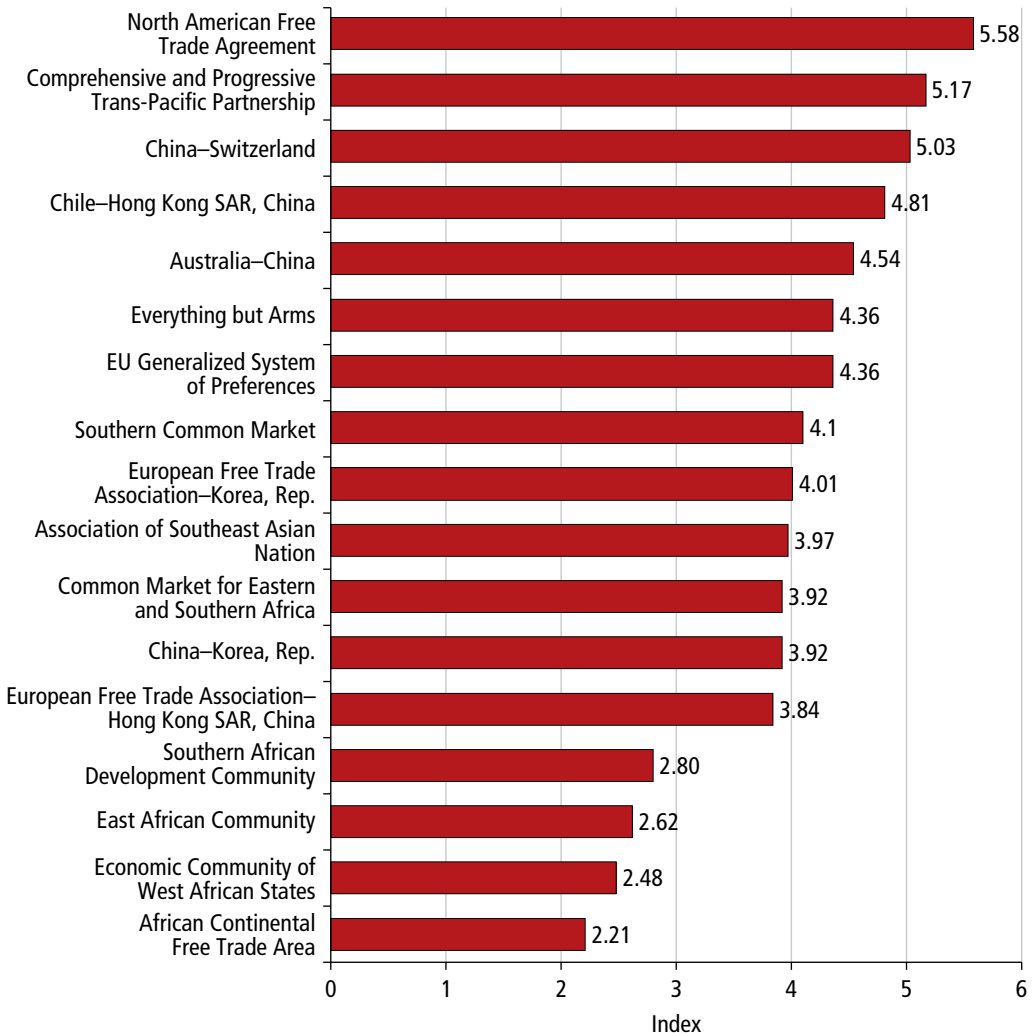
complex, appears relatively more flexible than in some RECs, because it offers diverse options to meet the origin criteria. Finally, the AfCFTA is distinguished by the high prevalence of the wholly obtained (WO) rule (19.7 percent), which requires goods to be fully produced in the partner country. Although this rule is generally reserved for agriculture, livestock, and fishery products, the AfCFTA uses it more widely. Beyond this rule, the AfCFTA relies heavily on alternative rules (24 percent).

The possibility of choice between different rules of origin regimes when countries belong to overlapping agreements is already well established in East Africa. That possibility should also now become available to all African countries because of the overlap of the AfCFTA with regional agreements. In theory, international traders should be able to choose the most advantageous regime to them, and the choice of regime may contribute to facilitating trade across the continent.

The chapter also compares the restrictiveness of rules of origin across African RECs using the Rules of Origin Restrictiveness Index, which scores each rule from 1 (least restrictive) to 7 (most restrictive).³ On average among the rules examined for this report, COMESA's appear

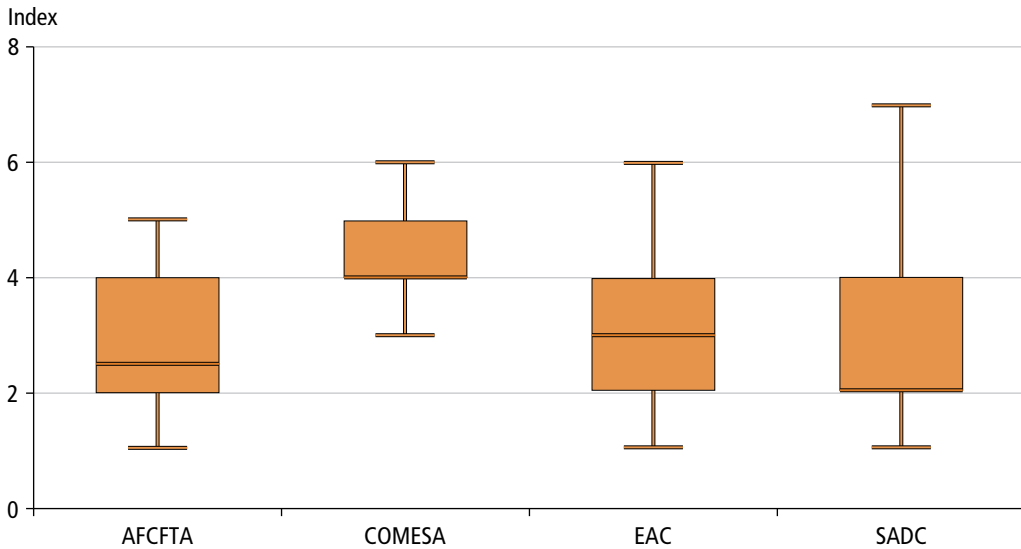
the most restrictive, with an average index of 3.92 out of 7 (figures 3.6 and 3.7), mainly because of the prevalence of change of tariff classification heading criteria, which is considered quite restrictive. Comparatively, ECOWAS, EAC, and SADC have more moderate average scores of 2.48, 2.62, and 2.80, respectively. SADC's low restrictiveness score is at odds with the fact that SADC has the lowest use of preferences, as discussed earlier. By contrast, EAC's low restrictiveness score is in line with the region's high use of preferences. The analysis reveals that the AfCFTA rules of origin have the lowest average restrictiveness (2.21), driven by the heavy reliance on flexible alternative rules (value content requirement or CTCAH), suggesting a deliberate objective of facilitating trade integration across African countries.

Figure 3.6 Average Rules of Origin Restrictiveness Index, African PTAs versus Other Trade Agreements



Source: World Bank calculations based on data from the schedule of rules of origin and the World Bank Deep Trade Agreements database (<https://datatopics.worldbank.org/dta/table.html>).

Note: EU = European Union; PTA = preferential trade agreement.

Figure 3.7 Box Plot of Rules of Origin Restrictiveness Index Across AfCFTA, COMESA, EAC, and SADC

Source: World Bank calculations based on data from the schedule of rules of origin.

Note: This boxplot whiskers are set at 1.5 times the interquartile range and thus exclude some outlier values in the case of AfCFTA and COMESA. AfCFTA = African Continental Free Trade Area; COMESA = Common Market for Eastern and Southern Africa; EAC = East African Community; SADC = Southern African Development Community.

African trade agreements have less restrictive rules of origin than other world PTAs. The AfCFTA and ECOWAS, with the two lowest scores among African PTAs, show significantly lower restrictiveness compared to agreements like the North American Free Trade Agreement (5.58) and the Comprehensive and Progressive Trans-Pacific Partnership (5.17), in part because African PTAs have less complex product rules of origin than other agreements (Gourdon et al. 2021). According to those authors, rules of origin in African PTAs differ mostly along two dimensions: first, African PTAs do not use the most restrictive rules (change in chapter) and use fewer compounded rules that add restrictiveness. Second, African PTAs rely more on the WO criterion. Although the WO criterion is obvious for certain products (live animals, mineral resources, and so on), one can question the implied restrictiveness from its more pervasive use in the AfCFTA compared to other PTAs.

With a general tendency not to be restrictive, the design of rules of origin in African agreements, including those of the AfCFTA, reflects the deliberate effort by African RECs to lower barriers and promote regional integration across the continent. Individual product rules vary widely, which could reflect different industrial policy objectives but which also means that further relaxation of rules remains possible. Implementation of the AfCFTA protocol, which comes with liberal rules of origin on average, could make this relaxation a reality.

Beyond the technical criteria themselves, several other dimensions of rules of origin can ease—or impede—firms' ability to meet origin requirements and benefit from preferential access.

Provisions such as de minimis thresholds, cumulation across territories participating in an agreement, absorption, and roll-up rules can loosen origin requirements. Conversely, procedural requirements imposed by customs authorities to produce evidence that origin has been met can add significantly to compliance costs.

Compliance with rules of origin relates closely to the question of trade facilitation but also requires specific administrative and documentation procedures that can be costly enough to disincentivize the use of preferences. For instance, a very important facilitation aspect is whether exporters or their representatives can self-certify or whether certification must be carried out by a competent governmental authority, a more restrictive approach. In this domain, AfCFTA rules of origin—which foresee a regime of approved exporters (as already exists in EAC) that will have the ability to self-certify—offer some innovation relative to most RECs. Similarly, the AfCFTA does not require preregistration to obtain certificates of origin, the very restrictive practice used within ECOWAS (table 3.1).⁴

Table 3.1 Regimewide and Documentation Requirements for Rules of Origin in RECs

Regimewide rules	AfCFTA	COMESA	EAC	ECOWAS	SADC
Cumulation	Yes	Yes	Yes	No	Yes
Tolerance/de minimis	Yes	No	Yes	No	Yes
Absorption	Yes	Yes	Yes	No	Yes
Documentary requirements: Certification and direct transportation					
Certificate of origin	AfCFTA certificate of origin	COMESA certificate of origin	EAC certificate of origin	ECOWAS certificate of origin	SADC certificate of origin
Certifying authorities	Yes; specimen impressions of stamps and specimen signatures of officials required	Yes; specimen impressions of stamps and specimen signatures of officials required	Yes; specimen impressions of stamps and specimen signatures of officials required	Yes; specimen impressions of stamps and specimen signatures of officials required	Yes; specimen impressions of stamps and specimen signatures of officials required
Notification requirement to certifying authorities	Yes	Yes	Yes	Yes	Yes
Exporter declaration (self-certification)	No	No	No	No	No
Approved exporter	Yes	No	Yes	No	No

(continued next page)

Table 3.1 Regimewide and Documentation Requirements for Rules of Origin in RECs (*continued*)

Regimewide rules	AfCFTA	COMESA	EAC	ECOWAS	SADC
Exporter declaration for small consignments	Yes; maximum \$500 for person-to-person shipment; or maximum \$1,200 as traveler luggage	No	Yes; maximum \$500 for person-to-person shipment; or maximum \$1,200 as traveler luggage	No	No
Direct shipment requirement	Yes	Yes	Yes	No explicit terms in legal text, but definition of consignment is provided	Yes
Documentary evidence of direct shipment requirement	Single transport document or document certified by customs authorities of third country	No clear provision in legal text	No clear provision in legal text	No explicit terms in legal text, but definition of consignment is provided	Single transport document or document certified by customs authorities of third country
Obligation of preregistration and approval of manufacturer and/or exporter	No	No	No	Yes	No; recommended but not compulsory

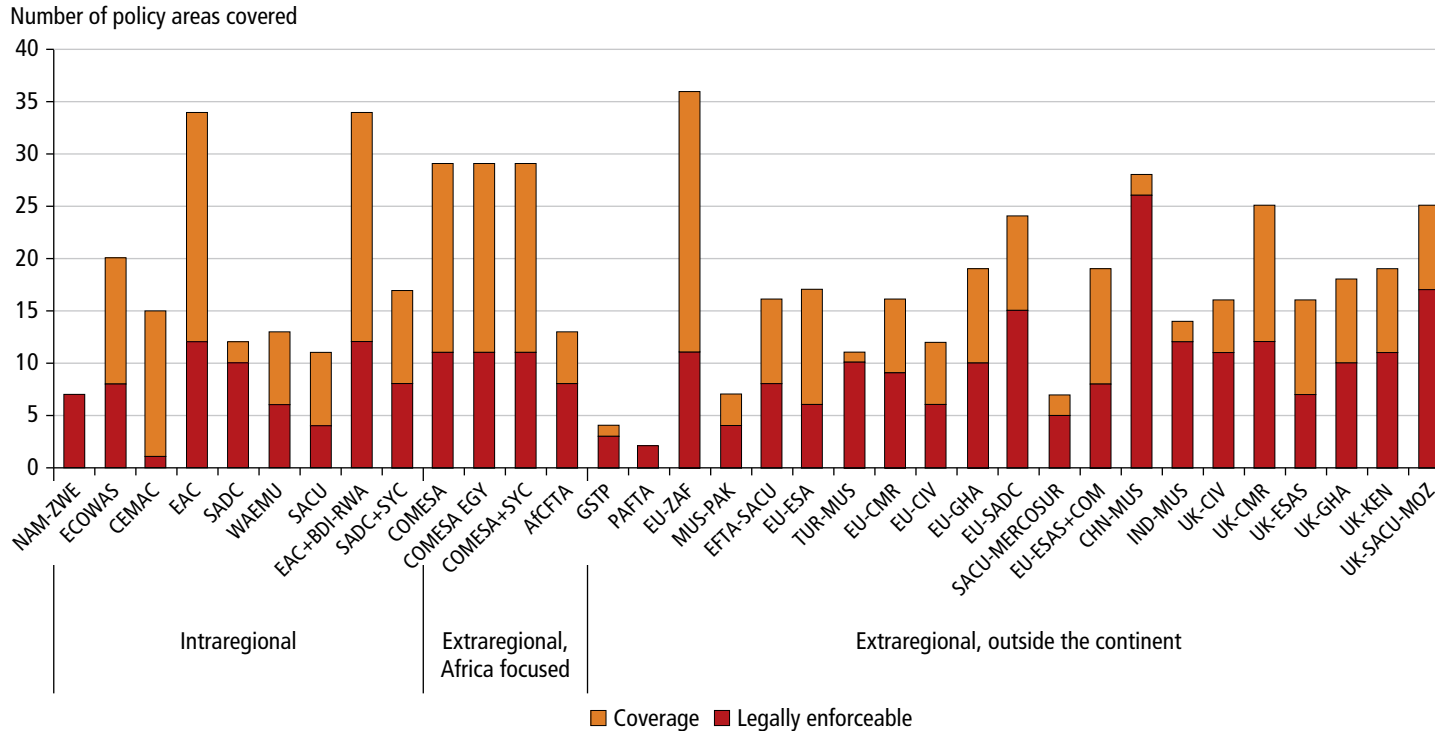
Sources: World Bank compilations from the schedule of rules of origin, Okoroma 2024, and UNCTAD 2019.

Note: AfCFTA = African Continental Free Trade Area; COMESA = Common Market for Eastern and Southern Africa; EAC = East African Community; ECOWAS = Economic Community of West African States; SADC = Southern African Development Community.

Enforceability and Governance Provisions

African regional agreements are generally less binding than the most ambitious agreements with partners outside of the continent, such as the EU and the United Kingdom. Among African RECs, the COMESA and EAC agreements have the most legally enforceable provisions, similar in number to agreements with third-country partners. By contrast, CEMAC, SACU, and WAEMU signal less ambition, with a small number of areas that have binding provisions (figure 3.8). Although SACU covers a narrower set of policy areas compared to most agreements, it has high levels of regional trade integration. This reflects both geographic and historical factors; small contiguous (and in one case enclaved) economies trading with a much larger anchor economy and very effective implementation of existing rules. The original SADC agreement has a high proportion of policy areas with binding commitments. Finally, the

Figure 3.8 Levels of Enforceability Across Selected Agreements, Sub-Saharan Africa



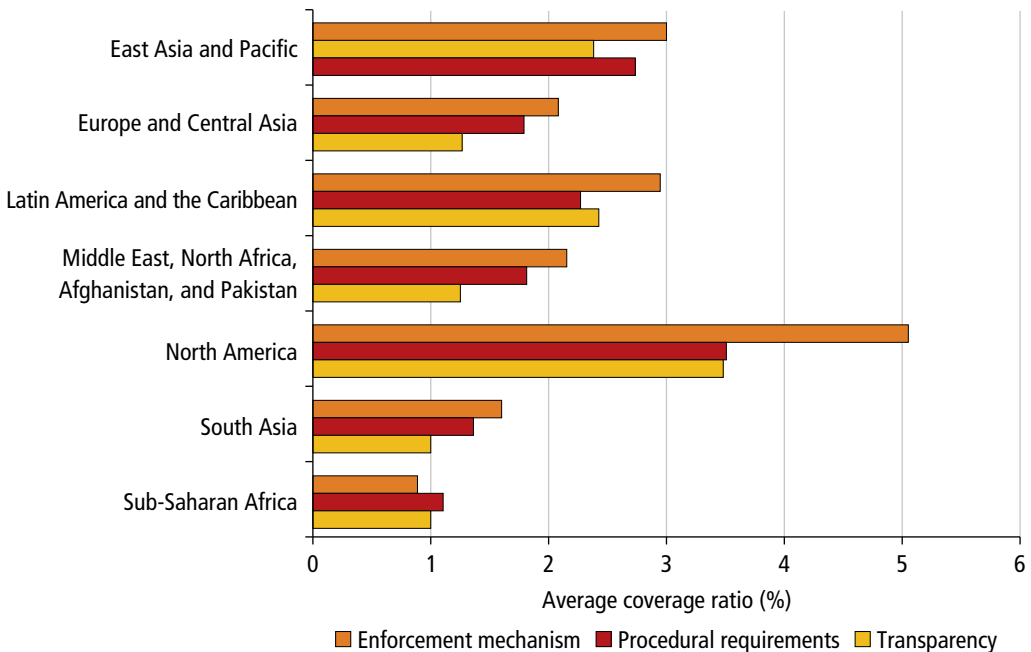
Source: World Bank compilation based on data from the World Bank Deep Trade Agreements database (<https://datatopics.worldbank.org/dta/table.html>).

Note: For this table, legal enforceability is determined by the agreement’s legal language and the availability of dispute settlement or other redress mechanisms under the PTA framework (following the methodology of Hofmann et al. 2019). For AfCFTA, the provisions included in the World Bank Deep Trade Agreements database are based on the text of the agreement as of 2023. AfCFTA = African Continental Free Trade Area; CEMAC = Economic and Monetary Community of Central Africa; CHN = China; CIV = Côte d’Ivoire; CMR = Cameroon; COMESA = Common Market for Eastern and Southern Africa; EAC = East African Community; ECOWAS = Economic Community of West African States; EFTA = European Free Trade Association; ESA = East and Southern Africa; EU = European Union; GHA = Ghana; GSTP = Global System of Trade Preferences; IND = India; KEN = Kenya; MERCOSUR = Southern Common Market; MOZ = Mozambique; MUS = Mauritius; NAM = Namibia; PAK = Pakistan; PAFTA = Pan-Arab Free Trade Area; PTA = preferential trade agreement; RWA = Rwanda; SACU = Southern African Customs Union; SADC = Southern African Development Community; SYC = Seychelles; TUR = Türkiye; UK = United Kingdom; WAEMU = West African Economic and Monetary Union; ZAF = South Africa; ZWE = Zimbabwe.

AfCFTA appears closer to SADC in nature, combining a higher proportion of binding commitments with coverage of an average number of policy areas.

African agreements also contain a lower proportion of governance provisions than equivalent agreements elsewhere. Figure 3.9 focuses on the three provisions in PTAs: procedural rules, transparency, and enforcement mechanisms. The deepening of trade agreements and the expansion of substantive rules coverage have been accompanied by an increase in the number of provisions, suggesting that achieving deeper commitments may require more procedural rules for implementation, transparency, and enforcement (Rocha et al. 2020). The low frequency of such provisions does not appear to correlate with the substantive coverage of African agreements; in several instances, African agreements cover a high number of policy areas while still featuring fewer governance provisions. Instead, it may be linked to the depth and binding nature of commitments in each policy area. More developed governance rules for the administration of an agreement typically reflect and reinforce a stronger commitment to the effective execution of the liberalization

Figure 3.9 Presence of Governance Provisions in PTAs, by Region



Sources: World Bank compilations from the World Bank Deep Trade Agreements database (<https://datatopics.worldbank.org/dta/table.html>) and Mattoo et al. 2020.

Note: Governance provisions refer to procedural-, transparency-, and enforcement-related provisions considered essential for implementing the substantive commitments of a trade agreement. The average coverage ratio is the percentage of governance provisions across agreements in each region. PTA = preferential trade agreement.

provisions in the agreement. Their relative absence in many African agreements suggests that liberalization commitments may not yet be matched by the institutional architecture needed to make them operational.

Deep and Patchy Integration

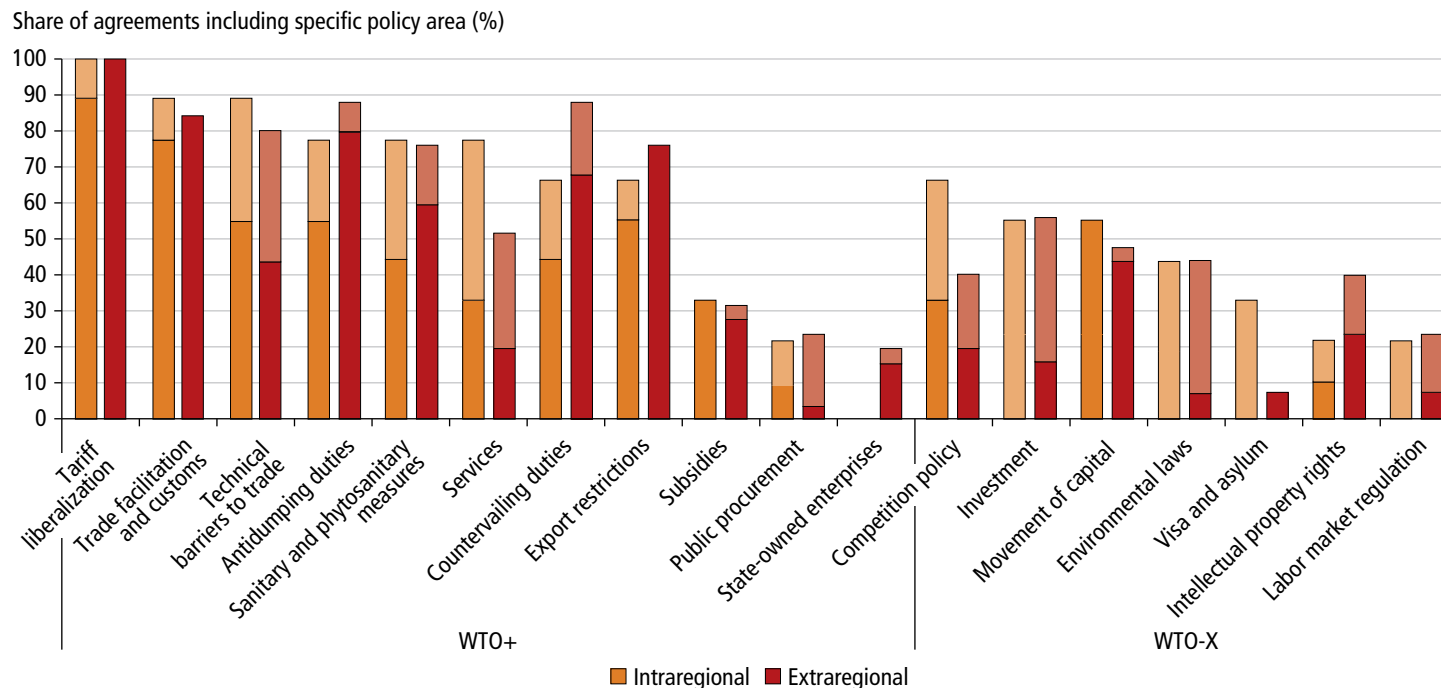
Agreements differ significantly across the continent. Among the regional agreements in Africa, COMESA appears the most comprehensive. The AfCFTA, although not yet as ambitious, offers the prospect of deeper integration in some areas such as nontariff measures, services, and export restrictions.

African RECs have aspired from their creation to deeper models of integration. Most aim to establish a customs union and a common market with free circulation of goods, services, persons, and capital—as reflected, for instance, in Article 12 of the ECOWAS Treaty of 1975, Article 4 of the Economic Community of Central African States (ECCAS) Treaty of 1983, Article 2 of the CEMAC Treaty of 1994, Article 4 of the COMESA Treaty of 1994, Article 5.2 of the EAC Treaty of 1999, and Article 4.c of the Modified Treaty of WAEMU of 2003. Although so far only partially realized, these higher objectives are reflected in the higher coverage of policies relating to, for instance, the movement of capital and to visas and asylum.

Agreements most frequently include the policy areas related to the core areas of trade policy integration covered by WTO agreements (General Agreement on Tariffs and Trade, General Agreement on Trade in Services, and related instruments). Unsurprisingly, all agreements address tariff liberalization and around 80 percent include provisions on trade facilitation and customs regulations, technical barriers to trade (TBT), sanitary and phytosanitary (SPS) measures, and trade defense with antidumping regulations (figure 3.10). Deep agreements include commitments on regulations that fall under the current mandate of the WTO (referred to as WTO-plus or WTO+), such as those regarding trade defense and services, and commitments on domains outside the current WTO mandate (referred to as WTO-extra or WTO-X).⁵ Some agreements in the continent cover policies typically associated with deeper trade and economic integration.

Notable differences exist in the scope and ambition of intraregional agreements relative to agreements with partners outside of Africa. For instance, despite greater appetite for incorporating more policy areas in RECs, subregional agreements have fewer binding commitments on average, translating to overall weaker ambition in intra-African agreements. They also have lower frequency of binding language on SPS measures (but not TBT measures), services, competition policies (albeit still more ambitious than with other partners), and investment policies. Moreover, RECs have more coverage of trade in services, state-owned enterprises, and competition policies, whereas agreements with third countries tend to incorporate more trade defense-type disciplines: antidumping, countervailing duties, and measures on the use of export restrictions.

Figure 3.10 Frequency of the Most Common Policy Areas in Agreements Signed by African Countries



Source: World Bank compilations from the World Bank Deep Trade Agreements database (<https://datatopics.worldbank.org/dta/table.html>).

Note: Orange and red colors indicate share of legally enforceable provisions in each policy area. PTA = preferential trade agreement; WTO = World Trade Organization; WTO+ = WTO-plus provisions in areas already covered by WTO and strengthened or deepened by PTAs (for example, tariff reductions beyond most-favored nation levels, more rigorous sanitary and phytosanitary/technical barriers to trade provisions); WTO-X = WTO-extra provisions in areas not currently covered by WTO multilateral rules (for example, investment, competition policy, labor standards, environmental laws, and visas).

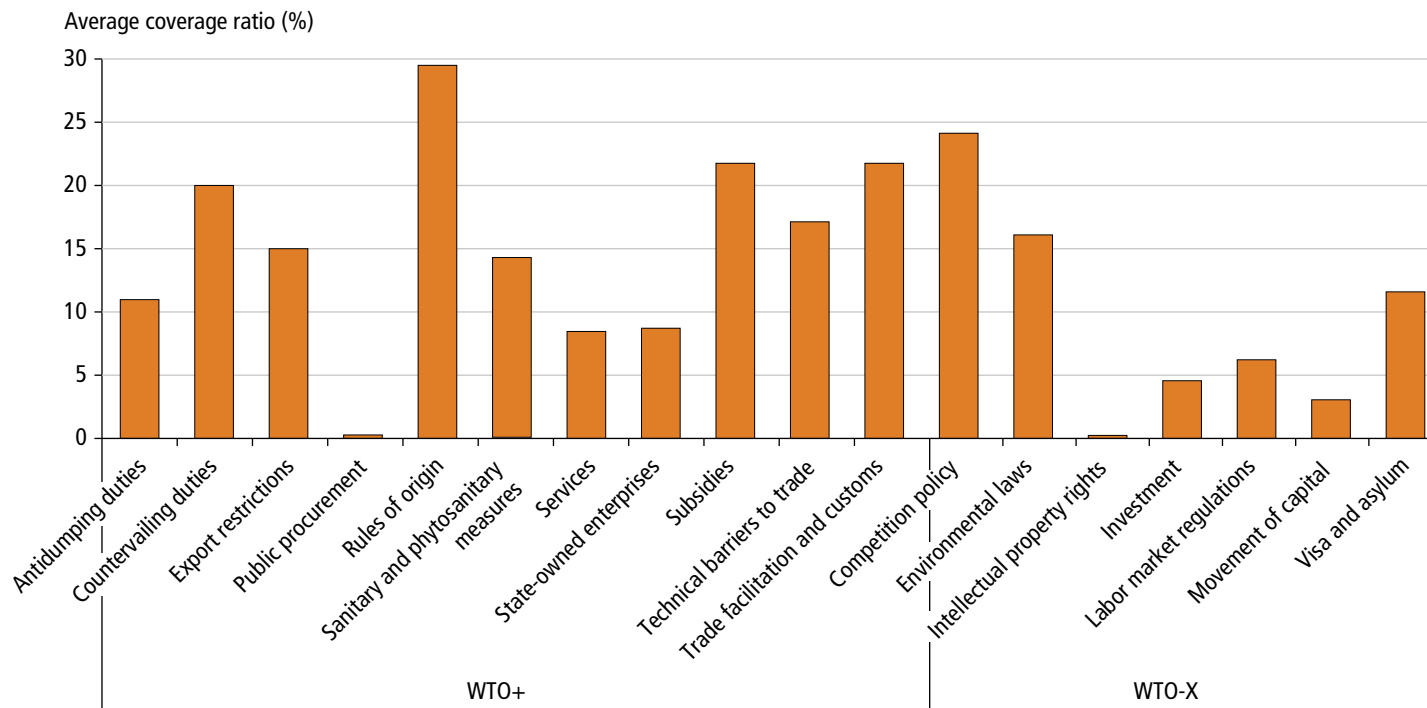
Overall, for WTO-X policies, agreements among African countries also tend to be more ambitious in scope than other agreements. More marginal differences between regional and extraregional agreements appear in the incorporation of provisions relating to visas and asylum for regional agreements and relating to intellectual property rights for extraregional agreements. The broader policy coverage of subregional agreements could relate to the ambition of regional integration under RECs, which often goes beyond the simple objective of free trade areas to common markets and monetary unions, together with political, social, and security cooperation (Hartzenberg 2011).

The relative depth of detailed provisions included for each policy area covered in African regional trade agreements remains shallow. Compared to agreements with more extensive and detailed provisions, African regional trade agreements, on average, show large gaps, including on common provisions such as those relating to the administration of rules of origin (figure 3.11). Arguably, the values shown in the figure could reflect an underestimation, because potential underreporting of some provisions could affect the coverage of the World Bank Deep Trade Agreements database. For instance, the data may not capture provisions supplemented in secondary legislation or even administrative acts, which might be the case in selected instances but is unlikely across the board. Even assuming that these provisions exist elsewhere, the difficulty accessing them (for instance, because no consolidated legal text or repository is available) would demonstrate lack of transparency and easy access of these rules.

The degree to which the AfCFTA and RECs cover policy areas, as well as the depth of disciplines concerning these policies, varies. The heatmap in table 3.2 expands on figure 3.11 for 18 key policy areas, showing which policy areas regional agreements cover comprehensively (green shading), cover more lightly (yellow to orange shading), or do not cover at all (red shading). The table shows a clear hierarchy among African RECs; COMESA, the most comprehensive of African RECs, has at least some coverage of 17 of the policy areas, followed by EAC, SADC, and ECOWAS. WAEMU, CEMAC, and SACU cover the fewest policies and disciplines.

The signing of the AfCFTA agreement brings more ambition in several areas, including policies addressing subsidies, state-owned enterprises, and competition, as well as nontariff measures (SPS and TBT), trade facilitation, services, and export restrictions. Regarding services liberalization, AfCFTA has invited its members to submit schedules of offers and has drawn a protocol on investment, much of which is unprecedented in most existing African RECs. RECs, in the context of common market objectives, have touched on some aspects of liberalization that concern trade in services, such as freedom of movement and establishment of persons and freedom of capital movements; however, services trade liberalization continues to progress slowly.

Figure 3.11 Average Coverage Ratio of PTAs, Sub-Saharan Africa



Source: World Bank compilations from World Bank Deep Trade Agreements database (<https://datatopics.worldbank.org/dta/table.html>).

Note: Coverage is defined as the share of possible provisions covered by an agreement. PTA = preferential trade agreement; WTO = World Trade Organization; WTO+ = WTO-plus provisions in areas already covered by WTO and strengthened or deepened by PTAs (for example, tariff reductions beyond most-favored nation levels, more rigorous sanitary and phytosanitary/technical barriers to trade provisions); WTO-X = WTO-extra provisions in areas not currently covered by WTO multilateral rules (for example, investment, competition policy, labor standards, environmental laws, and visas).

Table 3.2 Comparison of Policy Coverage, AfCFTA and RECs

	Policy area	AfCFTA	CEMAC	COMESA	EAC	ECOWAS	SACU	SADC	WAEMU
WTO+	Antidumping duties								
	Countervailing duties								
	Export restrictions								
	Public procurement								
	Rules of origin								
	Sanitary and phytosanitary measures								
	Services								
	State-owned enterprises								
	Subsidies								
	Technical barriers to trade								
	Trade facilitation and customs								
WTO-X	Competition policy								
	Environmental laws								
	Intellectual property rights								
	Investment								
	Labor market regulations								
	Movement of capital								
	Visa and asylum								

Source: World Bank compilations from World Bank Deep Trade Agreements database (<https://datatopics.worldbank.org/dta/table.html>).

Note: Color indicates the share of provisions covered by an agreement (red indicates 0, orange to yellow indicates greater than 0 but less than 1, and green indicates 1). For AfCFTA, the provisions included in the World Bank Deep Trade Agreements database are based on the text of the agreement as of 2023. AfCFTA = African Continental Free Trade Area; CEMAC = Economic and Monetary Community of Central Africa; COMESA = Common Market for Eastern and Southern Africa; EAC = East African Community; ECOWAS = Economic Community of West African States; SACU = Southern African Customs Union; SADC = Southern African Development Community; WAEMU = West African Economic and Monetary Union; WTO = World Trade Organization; WTO+ = WTO-plus provisions in areas already covered by WTO and strengthened or deepened by PTAs (for example, tariff reductions beyond most-favored nation levels, more rigorous sanitary and phytosanitary/technical barriers to trade provisions); WTO-X = WTO-extra provisions in areas not currently covered by WTO multilateral rules (for example, investment, competition policy, labor standards, environmental laws, and visas).

Political Economy Challenges to Trade Liberalization: What Role Can Regional Integration Efforts Play in Africa?

The uneven implementation of regional integration in Sub-Saharan Africa, which has led to missed opportunities for more regional trade, may result from political economy forces at play. This section reviews the nature of these factors and assesses what lessons this analysis offers for taking regional integration forward.

A challenge of regional integration is that forging agreements across several nations may lead to increasing sources of opposition to the opening of markets. Larger and more diverse regional markets, as well as deeper agreements, increase the potential numbers of opponents from governments, parliaments, agencies, and professional bodies across countries (Mansfield et al. 2008). Regulatory complexity arising from the intersection of various nontariff measures, services regulation, and overlapping memberships provides gate-keeping players (customs, standards agencies, professions, and cartels) opportunities for rent-seeking and opposition to implementation (Brenton and Isik 2012; Schiff and Winters 2003).

Furthermore, bringing diverse (in size or economic development) economies together may create more distributional asymmetries in terms of who gains or loses from tariffs cuts and regulatory liberalization, and thus resistance to it (Venables 2003). In the case of these higher transaction costs, liberalization may be watered down relative to initial objectives of deeper integration (Brenton and Hoffman 2016). Additionally, in economies more subject to shocks (such as food security in many African countries), potential losers have additional incentives to oppose integration—unless mechanisms exist at the regional level to solve collective action problems and mitigate such crises (Brenton and Hoffman 2016).

An additional cause for limited regional liberalization resides in difficulties balancing the roles of national governments and regional institutions. Delegation of authority to regional bodies triggers sovereignty concerns, illustrated in the limited power given to regional communities and secretariats in Africa. The resulting weaker enforcement of regional commitments than of national ones leads to implementation deficits. Relatedly, credible commitments require strong regional institutional design in order to make it costly to renege on commitments (Brenton and Hoffman 2016; Mattli 1999; World Bank 2018).

The neofunctionalist theory of regional cooperation posits that regional cooperation builds on initially narrow mechanisms of cooperation that then spill over into more politically challenging areas and more complex domains of cooperation (Haas 2004). Think for instance of the differences between a free trade agreement and a customs and monetary union. With a free trade agreement, integration into specific domains creates technical or political spillovers that may trigger cooperation in other areas. By contrast, regional integration initiatives that set politically ambitious objectives and agreements early on may not benefit from this accumulation of positive effects.

Despite these challenges and the uneven progress, regional integration has encountered successes in Africa. An examination of successful episodes of regional integration in Africa—such as reforms and cooperation along transit corridors and banking and energy pools—shows that substantial and pragmatic progress has occurred through flexible,

incentive-compatible, and private sector-driven pathways (Brenton and Hoffman 2016). It also shows that targeted, incremental reforms anchored in practical coalitions outperform grand regional blueprints. The following policy recommendations arise from this review for Africa:

- *Back “coalitions of the willing” and variable geometry.* Enable smaller groups of motivated countries to advance specific reforms (for example, corridor management and customs bonds), and scale success regionally.
- *Prefer mutual recognition over full harmonization.* Lower reform barriers by recognizing standards and qualifications across borders rather than seeking comprehensive alignment at once.
- *Make the private sector a primary driver.* Identify firms and associations with cross-border commercial interests (transporters, regional banks, and manufacturers), and empower them to champion reform.
- *Pair hard infrastructure with soft facilitation.* Invest in corridors, ports, and energy networks alongside streamlined customs, one-stop border posts, and digital processes that reduce time and cost.
- *Strengthen regional institution capabilities.* Equip secretariats and observatories to monitor compliance, publish performance data, and convene stakeholders to sustain reform momentum.

Exploring What Makes a Trade Agreement Deep

Key messages: Trade agreement depth has two dimensions: the breadth of policy areas covered and the legal enforceability of commitments. Cross-country comparisons of African trade agreements reveal consistent design gaps, though simple “more is better” benchmarking can mislead; what matters is the choice of liberalization areas and enforceability. Empirical evidence shows that deeper agreements yield substantially larger trade and welfare gains, and new analysis for this report identifies enforceability and the inclusion of key disciplines, particularly services liberalization, investment, and regulatory coordination, as the main drivers of depth. Many African agreements remain shallow, with few binding commitments, limited institutional empowerment, and few deep integration provisions, and progress is uneven across the continent with restrictions remaining high by global standards. AfCFTA’s gradual, sector-first design is pragmatic given capacity constraints, and its progress could accelerate through plurilateral coalitions that let willing countries move first, as in the WTO joint statement initiatives on e-commerce, services domestic regulation, and investment facilitation, with others acceding when ready. AfCFTA’s ambition on investment facilitation could be a defining step for Africa’s integration agenda by offering a stronger enabling environment for investment, while international dispute settlement strengthens impartiality and credibility, and common licensing and authorization standards improve transparency and reduce transaction costs.

This section investigates in more detail what could lead existing regional integration agreements in Africa, and the AfCFTA, to contribute to deeper levels of integration. It starts by examining recent evidence suggesting that the content in depth, composition, and quality of liberalizing policies of agreements has an important bearing on the impact of these agreements on trade and welfare. It then pursues this exploration by reviewing policy initiatives taken by the AfCFTA and the different RECs in some of the most important policy areas.

Reviewing New Empirical Evidence on the Nature of Deep Agreements: Lessons for African Integration Efforts

The previous section compared the breadth and provision content of the agreements signed by African countries to other agreements. That benchmarking may be interpreted as “more is always better”; arguably, the tendency has been toward broader and deeper agreement across the world, as noted earlier. Assessing complex trade agreements—and finding the optimal policy content that they must cover to meet their objectives of promoting trade and welfare—is not simple. Core to the question of regional integration is whether agreements that are broader in scope and that go deeper in detail in their liberalizing provisions will create stronger regional trade ties. Recent empirical work provides new insights into the nature of free trade agreements by classifying them in three categories—shallow, medium, and deep—based on the impact the agreements have on trade and welfare, which correlates with the detail of provisions that they cover in key policy areas (Fontagné et al. 2023; Fontagné et al. 2026).

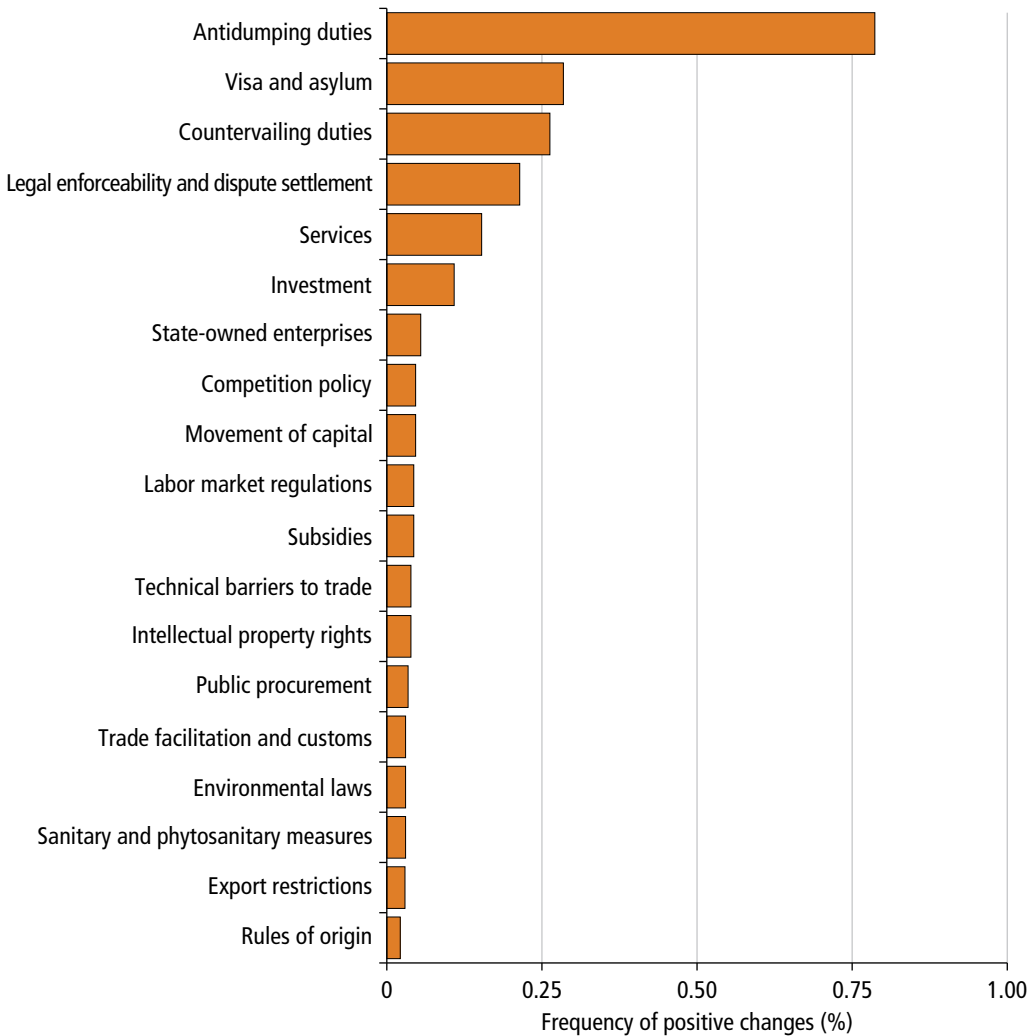
Deep trade agreements are uncommon, representing 8.3 percent of occurrences (from a survey of 372 agreements notified to the WTO), and only one African PTA (COMESA) classifies as a deep trade agreement.⁶ Fontagné et al. (2023) and Fontagné et al. (2026) also show that deep trade agreements are associated with a much larger increase in goods trade between preferential trade partners (56 percent) relative to medium PTAs (35 percent) and shallow ones (16 percent). For agricultural products, the difference is starker, with deep agreements associated with a 151 percent increase in trade and medium and shallow agreements appearing to have no statistically significant impact. The AfCFTA as it currently stands is classified as a medium PTA, like most subregional agreements in Africa (Fontagné et al. 2023; Fontagné et al. 2026).⁷

Categorizing agreements according to their depth provides some information as to the nature of agreements that are believed to foster deeper trade: investigating the pool of agreements classified as deep because of their impact on trade and welfare allows for inferring the type of policy areas and measures missing from the text of existing agreements and that could foster more regional trade. The variety of policy areas, their level of detail in individual trade agreements, and the vast differences (that is, gaps) across agreements make this identification complex. A first step toward this identification uses the information contained in the 19 policy areas codified in the World Bank Deep Trade Agreements database to assess which of these policy areas, if added to existing agreements, would make them more similar in design to existing deep agreements. This step should be done not simply for individual policy areas but also for policy compacts, thus accounting for the interactions that separate policy areas have with each other (Fontagné et al. 2026).

This exploration finds, for instance, that contingent protection measures and legal enforceability are associated with deeper agreements (figure 3.12). Contingent provisions, widely present

in many agreements, often simply reference the WTO agreements governing them. Some agreements, however, go much further and limit or further discipline the recourse to trade defense instruments, in effect making it more difficult to create restrictions to trade with preferential trade partners.⁸ This result could indicate that more disciplined language on contingent protection supports the implementation of liberalization commitments. Preserving contingent protection as a safeguard provides recourse if liberalization has unexpectedly damaging effects. Less surprising is that the inclusion of legally binding language and dispute settlement mechanisms in the language of agreements will bring them closer to agreements that create more trade (a dimension highlighted earlier as less present in African agreements). Interestingly, deep agreements include three other policy areas with more frequency—visas, services, and investment—suggesting the potential central role of these policies as enablers for goods trade.

Figure 3.12 Frequency of Association of Individual Policy Area with Deep Trade Agreement



Source: Fontagné et al. 2026.

Although these results point to features that confirm previous analysis, they present only a partial picture, which should not suggest that other policies are irrelevant. First, because the assessment focuses on goods trade only, it likely underidentifies policies linked with services trade. Second, the policies revealed in this analysis are also determined by the nature of the sample of PTAs across the world, which may be influenced by certain models of preferential integration, such as the European model. As such, it will tend to point to policies favored by the (in large part advanced) economies that drive numerous PTAs—that is, policies that may be less adapted to the context of African economies. Third, each agreement and the partners signing it have unique characteristics that may require different policy interventions at the margin.

Services

This chapter has noted the gaps in existing agreements relating to the coverage of services and has highlighted services policies as a potentially important component of deep trade agreements. This subsection presents a more complete and detailed analysis that considers this increasingly important economic sector in the context of regional integration. It takes advantage of recently updated information from surveys of services policies, covering a broader range of sectors, and regulations by modes of services delivery.² These data, compiled for 54 African economies, measure the state of applied services trade policy over the 2020–21 period and distinguish by mode of services provision.

According to a recent survey of the services trade restrictions in African countries for nine broad services sectors and 34 subsectors, the AfCFTA has high restrictiveness to trade in services, particularly in professional and transportation services, followed by communications and financial services (Baiker et al. 2023). In general, it has a high level of policy restrictiveness toward foreign services suppliers in Africa but with significant variations within specific sectors. The least restricted sectors are distribution services and computer services. Air transportation, an area where intra-African liberalization has long been a stated objective, illustrates the gap between aspiration and implementation (box 3.1).

BOX 3.1

The Single African Air Transport Market

Air transportation, with slower growth in Africa than in the rest of the world (30 percent versus 137 percent in East Asia and Pacific), represents only a minor portion of goods freight (0.9 percent of goods transported within the continent, according to UNECA 2022). Liberalizing air transportation has long been an objective of African integration, as reflected in the Abuja Treaty, but the process has been difficult. The Yamoussoukro Declaration, initially launched in 1988 and relaunched under the Yamoussoukro Decision in 1999, provides for the full liberalization of intra-African air transportation services in terms of the free exercise of first through fifth freedom traffic rights for scheduled and freight air services by eligible airlines. Fifth freedom rights, for instance, allow airlines to

(continued next page)

Box 3.1 The Single African Air Transport Market (*continued*)

carry passengers between two foreign countries if the operations there represent an extension of services connected to the airline's home country.

The Single African Air Transport Market (SAATM), the ultimate objective of the Yamoussoukro Declaration and a flagship project of the African Union 2063 agenda, would realize the liberalization of air transportation markets through fifth freedom rights and would eliminate bilateral air services agreements in favor of a continental multilateral agreement. Progress has been slower than expected: in 2025, eight years after the 2017 initial deadline, Africa still had not reached the objective. Countries have recently renewed commitments, however, as of early 2026, 38 countries have committed to SAATM (up from 35 in 2021 and 21 in 2017). According to the African Civil Aviation Commission, in 2021, only half of the 600 bilateral air services agreements governing air transportation liberalization among the 54 African countries were compliant with the Yamoussoukro Decision.

SAATM, although formally distinct from the African Continental Free Trade Area agreement, shares the objectives of liberalizing services and focusing on transportation as one of five priority services sectors. Agreements reached under SAATM could be consolidated within the African Continental Free Trade Area commitments on services liberalization.

Sources: African Union 2020, 2021; UNECA 2022.

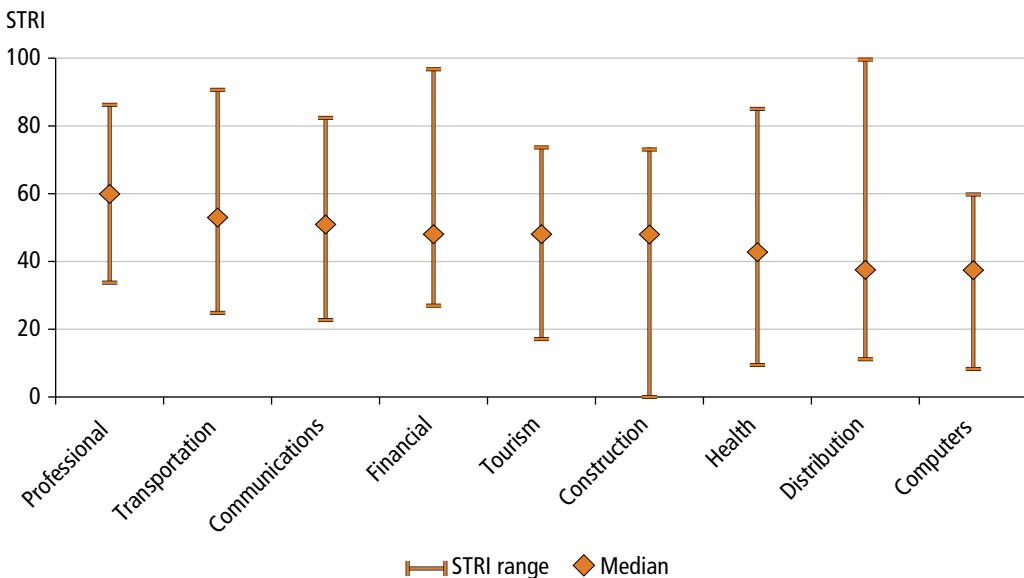
Some regional groupings have led to services policy alignment among their parties, such as common banking regulatory frameworks in CEMAC and in WAEMU, and common insurance regulation in the International Conference on Insurance and Financial Markets (which includes CEMAC and WAEMU countries); however, restrictions on services trade still show larger dispersion and heterogeneity, notably for members of COMESA, EAC, and SADC (Baiker et al. 2023). Heterogeneity of restrictions also appears across sectors, with wide differences in distribution, construction, health, and financial services. Restrictions on cross-border trade in services within AfCFTA include multiple dimensions: regulatory heterogeneity in licensing, qualification, and educational requirements; discrimination against foreign service providers; lack of transparency and predictability; limited access to technology; and restrictions on movement of people (Dairabayeva-Croci et al. 2026).

Services that trade through mode 3 (commercial presence) tend to be more open on average compared to those that trade through mode 1 (cross-border supply), such as digital services. Although it appears relatively open, mode 4 (presence of natural persons) is in fact very restrictive, with a significant number of restrictions related to nationality and residency, as well as qualification requirements. Ethiopia and Libya have the highest levels of restrictions, whereas the most liberal economies are The Gambia, Mauritius, and Sierra Leone. Economies with larger market sizes tend to be more restrictive toward trade in services. Conversely, economies with better regulatory quality of institutions are generally more liberal in this respect (Baiker et al. 2023).

Predictably, heterogeneity occurs in the levels of openness of services at the country level, with broad ranges of restrictiveness across all sectors in Africa (figure 3.13). For instance, the construction services sector ranges from totally open to mostly closed, which is not surprising given the minimal concerted effort at the regional level to liberalize the sector and the different capacity levels that have led to the varied outcomes observed. Going forward, regional and continental efforts can certainly be strengthened to reduce restriction levels, using a consensus built around priority sectors within AfCFTA. A flexible coalition-based model of liberalization, in which countries with specific interests and abilities conduct reform, could also be considered.

Pursuit of plurilateral cooperation has become more prominent in the past decade. Examples include the so-called joint statement initiatives pursued in WTO since 2017, addressing e-commerce, domestic services regulation, and investment facilitation, among other subjects. Talks on services regulations resulted in an agreement among some 70 WTO members covering matters associated with the authorization and certification of foreign services providers (licensing, qualification, and technical standards) rather than the substance of the regulations. The agreement aims to reduce the trade-impeding effects of domestic regulation by improving administrative practices in implementing national regulatory regimes. Talks on an e-commerce agreement, concluded in July 2024, span 91 WTO members. That agreement includes provisions to promote digital trade by accepting electronic signatures and invoices, enhancing consumer protection for online transactions, cooperating to address cybersecurity risks, and committing not to impose customs duties on electronic transmissions. The agreement does not address trade restrictive policies pertaining to regulation of cross-border data flows or data localization requirements. Instead, it focuses on facilitation of digital trade (Hoekman 2025).

Figure 3.13 Median, Minimum, and Maximum STRI for 54 African Countries, by Broad Sector



Source: Baiker et al. 2023.

Note: STRI = Services Trade Restrictiveness Index.

Investment

In terms of investment, Africa is a patchwork of bilateral investment treaties, subregional and regional instruments (for example, COMESA, ECOWAS, and SADC), domestic codes, and soft law texts such as the Pan African Investment Code. Individually, African countries are signatories of multiple bilateral investment treaties, with the Arab Republic of Egypt having signed as many as 100 such treaties (UNCTAD 2024).

Among Africa's RECs, ECOWAS appears the most developed in investment governance. It has adopted binding, regionwide instruments—the ECOWAS Common Investment Code and the ECOWAS Investment Policy—that harmonize core investor protections (national treatment, free transfer of funds, fair compensation for expropriation) and establish dispute prevention and settlement mechanisms across all member states, creating a relatively homogeneous regional investment regime (Carreras et al. 2020; Diamond 2021; World Bank 2022). By comparison, CEMAC and WAEMU are among the most advanced in sectoral regulatory convergence—particularly in finance and professional services, supported by the Organization for the Harmonization of Business Law in Africa and regional supervisors—but they have framed their investment rules more through sectoral and market integration instruments (financial markets, payments, and consumer protection) than through a single, unified investment code covering all members (Chatain and Lobet 2023; IMF and World Bank 2022). COMESA, EAC, and SADC exhibit deeper trade integration (customs unions and free trade agreements) and active facilitation agendas, yet their investment provisions tend to be more fragmented or guidance based, rather than unified by a single binding investment code across all members (World Bank 2023, 2024).

The AfCFTA's Investment Protocol, adopted in February 2023, proposes several shifts in the approach to investment and investor protection, aiming to recenter investment governance on intra-African investment, provide more policy space to government, harmonize rules across the continent, and strengthen institutions (UNECA 2021). First, the protocol shifts the objective of investment provisions from protection first to allowing more exceptions linked to sustainable development, industrial policy, and structural transformation, with safeguards for the right to regulate public health, environment, and social policy objectives. Additionally, it requires investors to meet human rights, anticorruption, and climate obligations. With respect to treatment standards (national treatment, fair and equitable treatment, and MFN clauses), the AfCFTA protocol seeks to apply them more narrowly—that is, moving from broader fair and equitable treatment, which some found to be interpreted too expansively, to a concept of administrative and judicial treatment that allows for some level of regulatory autonomy, with proposed limitations to MFN and National Treatment principles. In investment arbitration, broad MFN drafting has sometimes been used to “import” more favorable protections or procedures from other treaties (“treaty shopping”), and defining indirect expropriation thresholds avoids broad interpretation of those protections. Finally, the protocol requires countries to update their domestic investment laws to align with AfCFTA standards, which will ensure a balance between investor protections and a country's right to regulate in the public interest.

Another major institutional change in the AfCFTA protocol relates to the management of disputes. It prioritizes prevention and early resolution through the use of national focal points and investor grievance bodies with the objective of reducing reliance on arbitration-led investor-state dispute settlements. These lengthy disputes can last 3.7 years, on average, and involve average claimant costs of US\$6.1 million and respondent costs of US\$5.2 million (UNECA 2021).

Another objective of the AfCFTA protocol is to promote harmonization of investment protection and rationalization of the web of treaties across Africa. It aims to align subregional norms (COMESA, EAC, ECOWAS, SADC, and WAEMU) within 5–10 years, eliminate intra-AfCFTA bilateral treaties, and review extra-African treaties to avoid conflicts. The protocol also specifically includes investment promotion and facilitation measures, generally absent from existing agreements (although the COMESA, ECOWAS, and SADC frameworks contain facilitation measures). It simplifies and speeds up administrative procedures (licensing, authorizations, work permits, and visas) for establishment and operation of investment; strengthens investment promotion agencies with electronic access to laws and regulations, and service-level commitments technology transfer; and establishes national focal points to guide investors. AfCFTA member states offer examples of good practices in these areas: Benin and Cameroon's digital single windows; ECOWAS's fast-track processes for work permits; Rwanda's online iGuide and one-stop shop; proactive aftercare services such as in Rwanda and Togo; and public dashboards tracking processing times (UNECA 2021).

The AfCFTA protocol on investment follows a trend of new investment agreements by setting an ambitious agenda for the intra-African investment agreement framework. It aims to replace 183 intra-African bilateral investment treaties, unify investment protection at the continental level, redefine the balance between investment protection and government objectives, and facilitate investment. Doing so will require AfCFTA members to align their domestic regulations with these new substantive requirements. Most of the new substantive measures rebalance rights in favor of state prerogatives, raising the question of how such changes will affect incentives for African investors. Strong implementation of measures to facilitate investment would certainly help mitigate any adverse incentives.

Related to the question of mode 4 is that of free movement of persons within signatories of PTAs in Africa. As noted in the literature, agreements vary widely with respect to the objective of marrying harmonization of border procedures with respect to delivery of services and travel documentation (Panizzon and Bisong 2025). Whereas many agreements do not incorporate these broader issues, others such as EAC, ECOWAS, and WAEMU have deep provisions in place relating to the movement of persons, including regional passports and the right of establishment abroad within the RECs. Overall, however, PTAs signed by African countries that include provisions for the free movement of persons frequently lack provisions on visas and asylum. As expected, agreements signed by African countries outside the continent treat issues related to movement of persons very differently than do ones signed for African RECs. The former agreements tend to include extensive provisions, albeit largely nonbinding, relating

to these issues (figure 3.10). COMESA, EAC, ECOWAS, and SADC have among the broadest coverage of these issues in the world (table 3.2).¹⁰

In the case of AfCFTA, these issues raise the question of linking the commitments under the African Union (AU) Protocol Relating to the Free Movement of Persons, Right of Residence and Establishment and those under the AfCFTA Protocol on Trade in Services. Linking commitments relating to both travel documentation and movement of individuals with those relating to mode 4 delivery of services—as well as mode 3 and investment rules, which often require foreign individuals to travel in the context of the establishment of subsidiaries—could considerably contribute to facilitating the opening of markets in Africa.

Cross-Border Payments

Outside of common currency regions such as CEMAC and WAEMU, international cross-border payments among African trade partners are slow and costly because of the weakness of compensation mechanisms between African currencies. Consequently, payments must use third-party currencies such as the euro or the US dollar, both already much more prevalent in international trade transactions in these countries.

The Pan African Payment and Settlement System (PAPSS), launched in 2022, is one of the flagship initiatives of the AfCFTA in collaboration with the African Export-Import Bank and the AU. PAPSS aims to facilitate international cross-border payments across Africa by offering a compensation mechanism at the continental level, allowing direct transactions in different currencies between African banks without having to rely on external currencies (mostly the US dollar) or resort to intermediary banks in Europe or the United States as currently happens in most instances.

By the end of 2027, PAPSS aims to lower costs to an average of 1 percent of the transaction value, with all transactions effected within 24 hours and 75 percent effected within an hour. It also intends that all users, including individuals and micro, small, and medium enterprises, will have access to at least one system for cross-border payments (TRALAC 2025). The result would be a considerable reduction of the time (currently several days) and costs (multiplication of banking fees) required to make such transfers.

PAPSS builds on payment systems developed by some African RECs in the past decade: COMESA's Regional Payment and Settlement System, EAC's East African Payment System, and the SADC Integrated Regional Electronic Settlement System. Except in SADC, however, only a few member states have so far embraced such systems; in SADC, its application is particularly widespread (Desiderio Consultants 2023).

As of the end of 2025, PAPSS has had gradual take-up across the continent, with 76 commercial banks in 12 countries currently participating (TRALAC 2025) and 15 central banks having joined. Large banking systems such as South Africa's do not yet participate.

The success of PAPSS will rely on the ability to form a sufficiently large network of financial institutions that provides reliable services at low cost. One challenge that PAPSS will face is that

economic actors may still prefer dollar- or other foreign-denominated transactions to shield against foreign exchange risks. Another challenge will be the need to balance transactions throughout the system when trade and other economic flows (remittances, capital transactions, and so on) are not necessarily symmetrical.

SPS and TBT

The AfCFTA follows the approach taken in the WTO SPS and TBT agreements promoting regulatory cooperation, transparency, and good regulatory practices, including adherence to international norms. Generally, it has relatively little value added relative to what has been already agreed to at the WTO. PTAs can make a difference on joint approaches to facilitation implementation of SPS and TBT, an area largely incomplete in African RECs. In terms of SPS, EAC and SADC are the most active players on the continent; however, some measures have also been used to discriminate against regional partners' imports (Ndobyia 2022).

African RECs reveal varying levels of development in terms of food safety governance structures, SPS coordination mechanisms, and capacity-building initiatives. Trade in agrifood products is particularly important in Africa, as is food and plant safety, because the continent has the highest burden of disease in the world (WHO 2015); border controls also have an important role to play in this respect. Only four of the eight pillar RECs of the AfCFTA had operational regional SPS committees or working groups and regional SPS policy frameworks (African Union 2019) and clarity is lacking on how much progress has been made since.

African RECs have made the following efforts to harmonize SPS:

- COMESA has established an SPS Subcommittee and adopted COMESA SPS Regulations, including a Green Pass certification scheme for some products and the development of regional accreditation bodies and reference laboratories (plant health in Kenya and veterinary residues in Zambia).
- The Community of Sahel-Saharan States (CEN-SAD) has not yet developed a formal SPS policy framework but has adopted a regional guide for the establishment of National SPS Standards Committees.
- EAC adopted an SPS Protocol in 2013, now ratified by Burundi, Kenya, Rwanda, South Sudan, Tanzania, and Uganda. This protocol requires the establishment of regional institutions, including a regional SPS Office and an SPS Committee. EAC has also adopted harmonized measures and procedures for plants; mammals, birds, and bees; fish and fishery products; and feed safety (Kolié 2020). The Phytosanitary (Plant Health) Measures Act, adopted in 2016 but not yet enacted, aims to harmonize regional procedures in the areas of inspection and certification, movements of plants and plant products, and import and export requirements. Finally, an EAC SPS information-sharing platform is under development.
- ECCAS has established National SPS Committees and SPS Focal Points to facilitate participation in international standards-setting bodies. However, ECCAS and its subregional

grouping, CEMAC, have not yet reported the existence of a formal SPS institutional or regulatory framework.

- ECOWAS has adopted an SPS Regulation on the Harmonization of the Structural Framework and Operational Rules Pertaining to the Health and Safety of Plants, Animals and Foods. ECOWAS coordinates SPS activities among member states through harmonization of standards and support in the implementation of specific programs, but beyond that effort it does not seem to have regional standards and institutions.
- The Intergovernmental Authority on Development (IGAD) has the lowest economic development level of all African RECs and a less developed legal framework and legislative capacity. IGAD member states, however, have signed a Regional Policy Framework on Animal Health in the Context of Trade and Vulnerability and developed a Regional SPS Five-Year Strategy and Plan of Action.
- The SACU agreement provides for the harmonization of technical regulations and product standards, and SPS measures. Because SACU countries, such as Lesotho and Namibia, tend to unilaterally adopt South Africa's standards, SACU has not yet established a regional framework (Kolié 2020).
- WAEMU adopted SPS regulations in 2007, the first REC to do so. In 2009, it added a regulation regarding the harmonization of quality control, certification, and marketing rules for pesticides and seeds, and calling for mutual recognition among member states. Implementation into national legislation was still under way as of late 2025. WAEMU countries have also made some progress toward harmonization of veterinary regimes for animal health (Kolié 2020).
- In addition, the Tripartite Free Trade Area between COMESA, EAC, and SADC has no SPS coordination mechanism, despite the existence of an article on SPS measures and implementation arrangements in the agreement.

This list of initiatives indicates that Africa can do much more to leverage the benefits from regional cooperation. Regional bodies and committees help to build common trust and exchange information, possibly contributing to more transparency in the administration of these regulations or promoting the adoption of international standards. Joint approaches to risk and border management, or quality infrastructure requiring economies of scale such as accredited laboratories for testing and certification, would go further in facilitating trade. Rather than harmonizing rules and regulations (which implies sameness), regional bodies could do more to promote mutual recognition agreements, notably of testing and certification. Shared concerns and incentives to fight the spread of communicable diseases offer strong reasons for regional cooperation on SPS.

The heterogeneity of commitments in terms of policy areas covered and depth of provisions applying to them, as well as the deficit in strong governing measures for their implementation, suggests limited delegation of national sovereignty at the regional level. It also suggests the need for models of integration based on the willingness (and ability) of individual parties to commit

to specific policy areas. Arguably, regional cooperation and harmonization of standards should adopt a variable geometry approach given that supranational cooperation needs will vary: considerations of economies of scale (such as in the AU where the large South African market tends to dictate the regulatory landscape) and of the specific geography of SPS issues (such as regions where pastoralism is important) mean that developing solutions bilaterally or at the subnational level, rather than at the continental level, may bring more success.

At the continental level, however, Africa continues its efforts. A unified SPS framework is under discussion, with statutes of an African Food Agency agreed upon during the last AU Summit. Among its objectives, the agency aims to establish a rapid alert system for food and feed at the continental level. Earlier efforts at the AU level included the establishment of the AU Continental SPS Committee in 2014 with the goal of supporting AU members' development of SPS policies in line with WTO commitments, and of the Standards and Trade Secretariat for Animal Health and Food Safety in 2012 (African Union 2019). The AfCFTA agreement annex on SPS goes beyond the provisions of most RECs. The AfCFTA builds on AU institutions, with the AfCFTA Committee on SPS replacing the Continental SPS Committee.

Although this subsection has focused on SPS measures, Africa has also made progress in the area of TBT. On TBT, the analytical question is not whether African RECs harmonize standards but whether harmonization actually reduces trade costs without an underlying conformity assessment infrastructure. EAC has gone furthest on paper, harmonizing 1,878 regional standards under the Standardization, Quality Assurance, Metrology and Testing Act, and with two pending bills on accreditation and metrology that would enshrine principles of equivalence and mutual recognition into binding law. Yet harmonized standards without accredited laboratories, certified metrology institutes, and operational conformity assessment bodies amount to common rules without common machinery to verify them, a gap that pushes African exporters toward distant Asian or European testing facilities at significant cost. The deeper lesson cuts across SPS and TBT: in a continent of heterogeneous economies, mutual recognition (different rules, common acceptance) and shared regional infrastructure (accredited laboratories, joint testing facilities) may deliver more trade than the pursuit of harmonization itself. Regulatory uniformity is one path; recognition and infrastructure are often the faster and more durable one.

The Dividends of Deep Integration: Insights from Quantitative Studies

The signing of the AfCFTA agreement marks a renewed impetus for regional trade liberalization in Africa.

A deep agreement, the AfCFTA aims to liberalize trade and investment in Africa through gradual implementation of a package of policy reforms. The first phase of negotiations, largely concluded, covers goods tariffs, rules of origin, nontariff measures, trade facilitation, trade in services, and rules and procedures for settlement of disputes. The second phase of negotiations, now well under way, focuses on investment, competition, intellectual property rights, digital trade, and women and youth in trade.

Most recent assessments about regional integration have focused on fulfilling the promise of the AfCFTA and on the expected impact of liberalization. Several studies have carried out simulations, finding that AfCFTA should result in benefits for the trade and welfare prospects of Africa as a whole and that intra-African trade should benefit most (Echandi et al. 2022; UNECA 2025; World Bank 2020). The analysis also agrees broadly that the gains will arise from the deeper reforms and that tariff liberalization alone would bring only modest effects. For instance, UNECA (2025) and World Bank (2020) estimates concur in finding only modest (albeit not negligible) contributions of AfCFTA preferential tariffs to increased exports from the continent—about 2 percent for total trade. The studies highlight the critical importance of lowering nontariff barriers, estimating much higher gains in exports (14–19 percent) with full removal of nontariff measures (table 3.3).¹¹ In related scenarios of reducing tariff and nontariff measures, the studies find even more important gains for intra-African exports—between 44.5 and 52.0 percent (UNECA 2025; World Bank 2020).

These estimates leave out several key areas integral to the AfCFTA agreement and the ambitious continental integration agenda. Adding ambitious trade facilitation efforts would bring total African export growth to 29 percent and intra-African export growth to 81 percent. Adding investment liberalization would lead to a more than doubling of intra-African exports, to 109 percent (World Bank 2020). Other methodologies assessing the impact of AfCFTA add to this consensus view. An econometric assessment estimates that exports from Africa to the rest of the world would increase by 29 percent, and intra-African exports would increase by 53 percent in their more ambitious scenario of tariff and nontariff measure liberalization, accompanied by trade environment improvements, which assumes progress in financial development, trade infrastructure and facilitation, and security improvements (ElGanainy et al. 2023).

Table 3.3 Summary Results From Computable General Equilibrium Studies Relative to Business as Usual Scenario

Indicator	World Bank (2020)		Echandi et al. (2022)			UNECA (2025)			
	Tariffs only	Tariffs + NTBs	Tariffs + NTBs + TF (full AfCFTA)	AfCFTA, FDI broad	AfCFTA, FDI deep	Tariffs only	Tariffs + services NTMs	Tariffs+ all NTMs (50%)	Tariffs+ all NTMs (100%)
Total export growth (%)	1.8	18.8	28.6	31.0	32.0	2.4	2.5	7.3	14.3
Intra-African export growth	21.8	51.9	81.0	n.a.	109.0	n.a.	n.a.	44.5	n.a.
Base year	2014	2014	2014	2014	2014	2014	2014	2014	2014
Target year	2035	2035	2035	2035	2035	2045	2045	2045	2045

Sources: World Bank compilations based on Echandi et al. 2022; UNECA 2025; World Bank 2020.

Note: Table shows growth relative to the baseline scenario in each case. World Bank and Echandi et al. 2022 estimates refer to results by 2035 and UNECA estimates refer to results by 2045. AfCFTA = African Continental Free Trade Area; FDI = foreign direct investment; NTB = nontariff barrier; NTM = nontariff measure; TF = trade facilitation; n.a. = not applicable.

This review concludes with novel estimates of the impact of AfCFTA implementation using the methodology that classifies trade agreements in terms of the depth of their commitments. Based on the level of its provisions negotiated so far, the AfCFTA is a medium-category agreement. Simulating the impact of the implementation of the negotiated agreement on the exports of African countries, the main finding is that nearly all countries gain. The gains are up to 3.3 percent additional exports for the highest-performing country in the study sample. The analysis finds that switching the AfCFTA to a deep-type agreement (with stronger enforcement provision and more extensive regulatory coverage) significantly improves the simulation results, with up to 8.6 percent total export gain (Fontagné et al. 2026).

The study also offers a more ambitious trade liberalization scenario in which African countries deepen their agreements with all their preferential trade partners, thus including the prospect of deeper agreements outside of the continent. This scenario, if not fully realistic from a policy perspective, illustrates where other gains from integration may lie and how they measure relative to the AfCFTA. Under this hypothesis, export gains become considerably more important for African countries, with increases of up to 46 percent.

All the studies have another common finding: gains vary across African countries. This variation illustrates a diversity of interest that countries may have regarding integration within and outside the continent. Specific country circumstances—such as geography, size of the economy and of key trade partners, and trade sectoral specialization—dictate the results more than general ones do. It seems, however, that the largest economies in Africa may also need to seek to improve trade liberalization beyond the continent.

Policy Implications for Deepening and Enforcing Agreements

The signing of the AfCFTA agreement marks a significant milestone, offering a unique opportunity to consolidate existing agreements and elevate the ambition of current commitments. PTAs in Sub-Saharan Africa have had only a modest economic impact because of their limited depth and the small size of partner economies. Research suggests that extending preferential trade—either by deepening existing agreements or by reaching out to new partners (the two options are not mutually exclusive)—can generate positive gains for trade and welfare. This chapter has focused on the content of existing agreements and the newly signed AfCFTA, and suggests the following key areas for policy action.

Reaffirmation of existing commitments. Effective implementation of existing tariff preferences is crucial. Many African countries have not fully benefited from the preferential tariffs available under current agreements. The AfCFTA provides an opportunity to reaffirm the implementation of regional preferences and offer new trade preferences to the rest of the continent. The implementation of rules of origin arrangements is a central cog in the management of preferences. The negotiated AfCFTA protocol on rules of origin points to more flexible rules of origin and more business-friendly administration of rules of origin that could be used in lieu of existing and more restrictive subregional rules where applicable and could incite existing RECs to revisit their existing arrangements.

Enforceable commitments, governance, and monitoring. Arguably, rules of origin are only one element of effective implementation of liberalization commitments. Legally binding commitments and treaty governance rules such as dispute resolution have been shown to support the ability of governments to implement and sustain liberalization. Stronger governance measures and monitoring compliance are essential for the success of PTAs. Ensuring transparency, procedural requirements, and enforcement mechanisms will build trust and facilitate smoother implementation of trade agreements.

Deepening commitments in certain regulatory areas. To achieve deeper integration, African countries should focus on liberalizing key regulatory areas such as SPS measures, services, investment, and the digital economy. One dimension where regional agreements play an important role is in developing trade facilitation mechanisms that help businesses comply with regulatory requirements. The AfCFTA's ambition to go beyond existing regional efforts in these areas is a positive step toward comprehensive integration.

Alignment and harmonization of policies. Policies within and across different RECs need to align better, with harmonization and alignment efforts focusing on two strategic dimensions: (1) reforming domestic practices by adopting superior regional or international models; and (2) prioritizing issues that have strong externalities with trade partners, such as standards. The review for this chapter suggests that adopting best practices from successful RECs can help harmonize practices and reduce trade costs. The AfCFTA can play a pivotal role in this harmonization process, promoting a more cohesive and efficient trade environment.

Variable geometry and strategic partnerships. Given the diversity of African economies, efforts should embrace the principle of variable geometry, allowing countries to progress at different speeds. Additionally, pursuing preferential agreements with large external trading partners can provide significant benefits. These agreements can serve as gateways to global markets, enhancing the continent's economic integration and growth.

Notes

1. The World Bank Deep Trade Agreements database (<https://wits.worldbank.org>) does not have tariff schedules for all African countries, and this analysis includes only countries listed in the database.
2. Note that preferences apply to all goods in these agreements.
3. The background paper by Atsebi et al. (2026) provides details on the methodology and an extended discussion.
4. Gourdon, et al. (2023) and Gourdon et al. (2021) provide an overview of the different aspects of certification procedures.
5. Legally enforceable regulations that fall under the current mandate of WTO—referred to as WTO-plus or WTO+ in the literature—are present in more than half of the PTAs referenced in the World Bank Deep Trade Agreements database. They include areas such as customs regulations, export taxes, antidumping, countervailing measures, TBT, SPS, and so on. Provisions outside the WTO mandate (usually called WTO-extra or WTO-X) include a wide-ranging set of policy areas from investment

and environmental laws to nuclear safety. More than one-third of PTAs include legally enforceable WTO-X provisions.

6. The calculations are based on the World Bank Deep Trade Agreements database (<https://datatopics.worldbank.org/dta/table.html>). For AfCFTA, the provisions included in the World Bank DTA database are based on the text of the agreement as of 2023. Therefore it ignores elements of the agreement agreed to after 2023.
7. A list of agreements and their ranking is provided in the paper.
8. For instance, by increasing the de minimis volume and dumping margin requirements, and by shortening the duration for applying antidumping duties relative to the WTO Anti-Dumping Agreement (Prusa 2020).
9. The WTO General Agreement on Trade in Services defines four modes of services trade delivery: Mode 1 (cross-border supply, such as online services), Mode 2 (consumption abroad, such as tourism), Mode 3 (commercial presence, such as foreign subsidiaries), and Mode 4 (presence of natural persons, such as temporary movement of professionals).
10. World Bank Deep Trade Agreements database.
11. UNECA (2025, annex table 3.1) also reports the estimates from previous UNECA studies.

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Regional Public Goods: Catalysts, Institutions, and Instruments for Integration

The Regional Public Goods Lens on Africa's Integration

***Key message:** Africa's integration cannot rely on trade liberalization alone. The core challenge is collective provision of the regional public goods (RPGs) that make markets work, including reliable energy systems, secure transportation corridors, cross-border health surveillance, conflict prevention, and interoperable digital networks. These goods cross national borders but are systematically underprovided when left to individual states. Reframing integration as an RPG problem shifts the policy task from negotiating market access to coordinating the shared institutions and infrastructure that markets depend on.*

Africa's regional integration cannot rely solely on trade liberalization. The core challenge in promoting integration is not lower tariffs, simplified nontariff measures, or treaties; instead, it is ensuring collective provision of the shared institutions that make markets work, including reliable energy systems, secure transportation corridors, cross-border health surveillance, conflict prevention, and interoperable digital networks. These RPGs, whose benefits and spillovers cross national borders, are systematically underprovided when left to individual states. The economics of collective action shows that, when benefits are shared but costs are not, coordination fails and provision falls below optimal levels (Buchholz and Sandler 2021; Ostrom 2010; Sandler 1998). Effective delivery requires collective action at a regional level.

Africa has an acute gap between RPG demand and supply: power pools trade only a fraction of potential electricity; regional security mechanisms remain fragmented and reactive; cross-border health surveillance systems operate unevenly; digital and data interoperability lag global benchmarks; and major transportation corridors still suffer from inconsistent customs, regulatory, and security regimes. These gaps persist despite the continent's dense institutional landscape of the African Union (AU), eight Regional Economic Communities (RECs), and more than 30 specialized sector bodies. The problem is institutional entropy: high coordination costs, overlapping mandates, thin technical capacity, and weak enforcement. The result is a continental architecture but national delivery, mismatching the scale of problems and solutions.

This chapter develops a conceptual framework that explains the persistent underprovision of Africa's RPGs and identifies actionable levers to shift that equilibrium. It contributes to the

literature by linking the aggregation logic of RPGs, Africa's political economy of asymmetry, and the structure of its integration institutions into a single analytical and policy framework. The analysis shows how reducing coordination costs, strengthening enforcement, strategically incentivizing anchor states, and enabling plurilateral first movers can raise regional provision from a low to a high equilibrium. The sections on energy and security demonstrate how these mechanisms translate into concrete institutional and policy reforms.

Instruments and Mechanisms for Provision and Financing of RPGs

Key message: Africa's record in RPGs varies sharply across domains depending on how well the institutional approach matches each good's underlying production logic. RPGs are not uniform: some are weakest-link goods (security and health surveillance), some are threshold goods (power pools and digital platforms), some are weighted-sum goods (AfCFTA implementation), and others are best-shot goods (peace operations). Successful provision depends on matching the RPGs' aggregation technology with the appropriate governance structure, financing mechanism, and enforcement instrument.

The starting point for understanding the provision of RPGs in Africa lies in recognizing their lack of uniformity. Their delivery depends on the aggregation technology through which individual country contributions combine to produce the collective benefit (Buchholz and Sandler 2021; Sandler 2004). Table 4.1 summarizes African examples of RPGs across aggregation types and sectors. Although the concept is familiar in the literature (refer to Buchholz and Sandler 2021; Sandler 2004), its application in Africa requires a political economy lens, because aggregation is shaped by the realities of anchor country leadership, REC capacities, and plurilateral coalitions (Hoekman 2025; Kassa and Ouedraogo 2025; Mattli 1999). Aligning aggregation logic, political economy realities, and institutional architecture is critical.

Table 4.1 RPG Aggregation Technologies, Sectors, and Examples in Africa

Aggregation type	Sectors	African examples
Summation (total benefit increases with each country's contribution)	Environment	Great Green Wall; Congo Basin conservation; Lake Chad restoration
	Digital	EAC One Network Area; roaming and mobile interoperability agreements
	Standards and trade facilitation	AfCFTA SPS/TBT implementation; cross-recognition of certifications
	Transportation maintenance	Corridor upgrades (each country's infrastructure adds to efficiency)
Threshold (benefits materialize only after a critical mass of participation/ investment)	Regional statistics and data	Continental statistics harmonization (AfDB, UNECA programs)
	Energy	EAPP; SAPP; WAPP
	Transportation infrastructure	Abidjan-Lagos Corridor; North-South Corridor; LAPSSSET Corridor
	Air transportation	Single African Air Transport Market
	Customs integration	Single Window; one-stop border post systems
	Digital trade systems	AfCFTA e-commerce platform (once enough members onboard)

(continued next page)

Table 4.1 RPG Aggregation Technologies, Sectors, and Examples in Africa (*continued*)

Aggregation type	Sectors	African examples
Weakest-link (effectiveness depends on the least capable member)	Health security	Africa CDC; Ebola surveillance; pandemic preparedness networks
	Peace and security	African Union Peace and Security Architecture; early warning systems; border security cooperation
	Climate adaptation standards	Cross-border drought response (Sahel); flood early warning (Horn of Africa)
	Food safety	SPS compliance systems for trade
Best- (or better-) shot (one strong provider can deliver benefits for all)	Maritime security	Gulf of Guinea piracy monitoring and response
	Peace operations	ECOMOG (Liberia, Sierra Leone); IGAD mediation in South Sudan; SADC in Mozambique
	Disease containment	Nigeria in Ebola response; lead-country outbreak control
Weighted-sum (large contributors are decisive; benefits depend on anchor engagement)	Disaster response	Rapid deployment forces or relief resources from a single anchor
	Regional surveillance systems	Early-stage satellite monitoring hosted by one country
	Trade integration	AfCFTA implementation (Nigeria, South Africa anchors; Nigeria + South Africa = 46% of continental GDP, 52% of manufacturing; their participation determines success); customs and standards harmonization
	River basin governance	Nile Basin Initiative; Senegal River Basin (OMVS); Niger Basin Authority
	Critical minerals	Democratic Republic of Congo–Zambia cooperation; continental minerals governance frameworks
Carbon markets and green standards	Morocco and South Africa as anchor providers of low-carbon trade frameworks	
Digital payment systems	PAPSS (reliant on large financial hubs)	

Source: Adapted from Kassa and Quedraogo 2025.

Note: AfCFTA = African Continental Free Trade Area; AfDB = African Development Bank; CDC = Centres for Disease Control and Prevention; EAC = East African Community; EAPP = East African Power Pool; ECOMOG = Economic Community of West African States Monitoring Group; ECOWAS = Economic Community of West African States; IGAD = Intergovernmental Authority on Development; LAPSSSET = Lamu Port–South Sudan–Ethiopia Transport (Corridor); OMVS = Organisation pour la Mise en Valeur du fleuve Sénégal (Organization for the Development of the Senegal River); PAPSS = Pan-African Payment and Settlement System; SADC = Southern African Development Community; SAPP = Southern African Power Pool; SPS = sanitary and phytosanitary; TBT = technical barriers to trade; UNECA = United Nations Economic Commission for Africa; WAPP = West African Power Pool.

In Africa's integration context, *summation goods* (for example, the Great Green Wall) expand as each country's effort adds to the total. *Threshold goods* (for example, the Southern African Power Pool [SAPP]) deliver benefits only when a critical mass of investment and regulatory alignment is reached. *Weakest-link goods* (for example, epidemic surveillance and security) fail if the least capable member has less than minimum capacity; one strong provider can deliver *best-shot goods* (for example, Economic Community of West African States [ECOWAS] peace operations), but sustainability depends on incentives and burden sharing; and *weighted-sum goods* (for example, African Continental Free Trade Area [AfCFTA] implementation) depend disproportionately on large economies, making anchor country engagement critical. The aggregation logics underpin viable institutional and financing choices.

A Stylized Framework for RPG Delivery

Effective provision depends on aligning a good's underlying aggregation technology with delivery instruments and financing models that fit its specific characteristics. Financing strategies should go beyond asset creation to prioritize coordination capacity and interoperability, because reducing fragmentation can generate gains comparable to increasing contributions. A stylized model of RPG provision (presented in box 4.1) shows that, in Africa's polycentric governance context, lowering coordination costs can be as important as raising effort levels, making the choice of instrument central to both delivery and sustainability. This interplay between aggregation technology, institutional structure, and transaction costs can be formalized in a simple model (shown in box 4.1), which helps explain why Africa succeeds in some RPG domains and fails in others, and which levers can shift provision toward the social optimum.

Moving from theory to practice, the model yields the following insights.

Weakest-link RPGs succeed only when the floor is raised; if universal compliance is infeasible, shrink the coordination set. When the least-capable member caps the overall provision of an RPG at lower levels, that one weak node can undermine the entire chain. AU legitimacy and planning are necessary but not sufficient; the binding constraint is the laggard's capacity and incentives. In practice, cross-border sanitary surveillance, customs risk management, and regional security all behave like weakest-link goods: one porous node undermines the whole chain.

Policy follows directly: (1) targeted floor-raising—tying equipment, software, regulatory capacity, and training for the lowest performers, to verifiable standards; (2) credible enforcement—using compliance audits, conditional access to club benefits (for example, fast-track lanes and preclearance schemes) and sanctions; and (3) coalitions of the willing when universal compliance stalls—reducing implementing entities and coordination cost per entity by advancing in a smaller set under AU or REC auspices, with accession later. This pattern is how Schengen's variable geometry evolved in Europe: a subset of European Union (EU) members proceeded ahead of the full union on borderless travel, with later accession by others.

Best-shot RPGs hinge on anchor states; sustainability requires burden sharing and legitimacy. When provision depends on the strongest contributor (the maximum e_i ; refer to box 4.1), the good is essentially provided by the "best shot," an anchor state or a small coalition, while others free-ride. Economic Community of West African States Monitoring Group (ECOMOG) deployments illustrate both the upside (rapid provision) and the risk (anchor fatigue). The model implies three policy levers: (1) *legitimacy*—continental (AU) or REC endorsement lowers political costs of action for anchors; (2) *burden sharing*—side payments in kind (troops, logistics corridors, and overflight or basing rights) and in cash (cost-sharing windows) stabilize the anchor's effort; and (3) *rotating coalitions*—spread responsibility across multiple anchors over time. The disaster response mechanism of the Association of Southeast Asian Nations (ASEAN) offers a useful comparator: a light continental hub legitimizes and coordinates, and anchors such as Indonesia, Singapore, and Thailand carry the heavy lift but with visible partner contributions.

BOX 4.1**A Stylized Model Of Regional Public Goods Under Polycentric Governance**

Consider a regional public good with potential provision level G if all actors contribute optimally without frictions. In Africa's polycentric governance system, implementing entities (the African Union, Regional Economic Communities, specialized agencies, and plurilateral coalitions) must coordinate. Each incurs a per-entity coordination cost γ , reducing effective provision:

$$G_{\text{effective}} = G - M\gamma.$$

Let n member states each choose an effort level $e_i \geq 0$ at cost $c(e_i)$, with benefit $B(G_{\text{effective}})$ accruing equally to all. The aggregation technology $f(e_1, \dots, e_n)$ determines how efforts translate into G :

- Summation: $G = \sum_{i=1}^n e_i$
- Weakest-link: $G = \min \{e_1, \dots, e_n\}$
- Best-shot: $G = \max \{e_1, \dots, e_n\}$
- Threshold: $G = \sum e_i$ if $\sum e_i \geq K$, else 0

The cooperative problem is $\max_{e_1, \dots, e_n} B(f(e_1, \dots, e_n) - M\gamma) - \sum_{i=1}^n c(e_i)$.

If $c(e_i) = \frac{1}{2} ke_i^2$ and $B'(G_{\text{effective}}) = b$ is constant, the first-order condition for a summation technology is

$$b = ke_i^* \Rightarrow e_i^* = \frac{b}{k}, G^* = \frac{nb}{k}, G_{\text{effective}}^* = \frac{nb}{k} - M\gamma.$$

Comparative statics:

- Higher M or γ lowers $G_{\text{effective}}$ directly.
- Under weakest-link goods, equilibrium provision equals the lowest e_i^* , so capacity building for laggards is essential.
- Under best-shot goods, G^* depends on the largest contributor, often an anchor state.
- Under threshold goods, side payments or adjustment funds can push $\sum e_i$ above K , triggering provision.

Policy implication: Instruments must be matched to the regional public good's aggregation technology—capacity building for weakest-link goods, burden sharing for best-shot goods, anchor alignment for weighted-sum goods, and side payments for threshold goods.

Source: Adapted from Kassa and Ouedraogo 2025.

When every member's contribution adds up, fragmentation across many implementation agencies raises the coordination cost, or wedge, lowering effective provision. The AfCFTA faces this challenge on a day-to-day basis: corridor standards, border management, and digital trade facilitation are summation goods, yet multiple RECs run parallel programs with incompatible specifications. The EU's Trans-European Transport Network offers a clear lesson: designate a lead agency per corridor, impose harmonized technical standards, and fund interoperability first (common specifications for axle loads, Electronic Data Interchange messages, and customs data models). The priority is not just to increase individual effort first but to cut the coordination cost parameter (γ in box 4.1) through better interfaces, governance, and procurement so the same effort yields more provision of the public good.

Policy follows directly: (1) mandate consolidation—assign one lead agency per corridor or initiative; (2) interoperability first—prioritize finance standards and data systems before physical assets; and (3) harmonization—adopt common axle-load rules or customs formats.

Weighted-sum RPGs make anchor alignment the core political economy problem. When de facto effort F behaves like a weighted sum, tariff schedules, rules-of-origin simplification, data regimes, anchor states, or the large economies' efforts carry outsized weights. Misalignment between domestic political constraints in anchor countries—like the Arab Republic of Egypt, Nigeria, and South Africa (for example, Nigeria's tariff schedules under the AfCFTA and South Africa's digital standards)—and continental objectives becomes the binding friction. The EU's grand bargains around single market dossiers are the canonical template, with anchor states brought on board through issue linkages and compensating adjustments aligning their domestic incentives with the collective objective.

Policy follows directly: (1) reweighted payoffs—use adjustment funds to align anchors' incentives with continental benefits; (2) access concessions—anchors gain preferential access (procurement and pilot corridors) when aligned; and (3) policy linkages—pair energy market deals or digital frameworks with trade commitments.

Threshold RPGs require instruments that push participation over the threshold needed for the system to function; otherwise, high fixed costs strand the system. For these goods, benefits materialize only once enough countries participate—such as through open skies agreements, customs single windows, or transit-guarantee schemes. Because countries face very different fixed costs of adoption, many delay or opt out, leaving participation below the critical threshold required for the system to work. This pattern explains why the Single African Air Transport Market has stalled and why many single-window platforms remain nationally fragmented.

Polycentricity or Africa's multilayered governance system with numerous overlapping institutions represents a feature, rather than a bug, if paired with credible templates and accession paths. Having multiple implementing entities inevitably inflates coordination costs, but credible templates reduce them. Costs fall when countries can rely on a small, clear set of standardized legal, technical, and financial templates that coalitions can adopt with minimal

bespoke negotiation. This logic underpins the EU's *acquis* and its harmonized technical annexes, which cut negotiation and compliance costs across diverse members. Africa can achieve the same effect by reducing bespoke negotiation and anchoring regional initiatives in common templates that coalitions can readily adopt.

Policy follows directly: (1) template playbooks—develop standard playbooks for corridor governance, data exchange, regulatory interfaces, and dispute resolution; (2) certification and accreditation pipelines—translate “minimum viable compliance” into clear, auditable steps that grant access to club benefits; and (3) staged accession—specify clauses that spell out how pilots scale to continentwide norms, allowing early movers to proceed while preserving a clear path for others to join later.

Finance coordination technology: fund the interface, not just the asset. When fragmentation acts as the binding constraint, the most effective financing is the kind that reduces coordination failures by funding interoperability layers, common standards and certification bodies, governance structures, and joint procurement platforms. These interventions often improve delivery more than equivalent financing directed to physical assets. This is the quiet lesson of successful continental infrastructures: the hardest part is not the road but rather the absence of shared common standards, data exchange systems, or governance arrangements that make roads transboundary. Many corridor projects stall not because of missing hard infrastructure but because customs systems do not speak to each other. Instruments should be designed accordingly.

Policy follows directly: (1) (continental) interoperability facilities—fund only cross-system interfaces, shared data standards, certification, and joint procurement platforms; (2) lead agency compacts—have one corridor, one program management unit, and one agreed specification to reduce fragmentation at the design stage; and (3) compliance for benefits—link access to pooled insurance, guarantees, or risk-sharing instruments contingent on adopting common technical and regulatory standards.

Where security behaves like a joint product, mix clubs and side payments. Many African RPGs are neither pure weakest-link nor pure best-shot; instead, they bundle a club component, exclusive benefits enjoyed only by contributing states—such as privileged intelligence sharing, training, equipment, or command roles—with a public good spillover, namely regional stability. Having the ability to price the club part (eligibility, rotations, and kit access) while subsidizing the spillover via donor or anchor transfers leads to higher provision. Deliberately separating these two elements also increases provision, allowing contributors to internalize more of the benefit and the system as a whole to benefit from the stability externality.

Policy follows directly: (1) club design—ensure that contributors receive tangible benefits such as intelligence access, advanced equipment, kits, or priority training; (2) subsidized spillovers—use anchor state and donor transfer resources to sustain the public benefit and support the broader regional stability gains that cannot be privately appropriated; and (3) mixed incentives—link participation to career rewards, rotation opportunities, or privileged operational roles, keeping contributors engaged over time.

The implementation gap equals the mismatch between RPG type and instrument. Across African regional initiatives, failure follows a consistent pattern: the instrument deployed does not match the underlying aggregation logic of the RPG. Weakest-link problems do not respond to generic technical assistance; best-shot problems cannot be sustained without burden sharing for the anchor; summation problems stall under proliferating project management units and fragmented mandates; and threshold problems never take off without transfers or side payments that help countries cross the adoption barrier. The model provides a diagnostic: first identify the aggregation logic that governs the good, then target the specific bottleneck—whether the low-capacity laggard, the overstretched anchor, the coordination burden created by too many agencies, or the need to push participation above a critical mass.

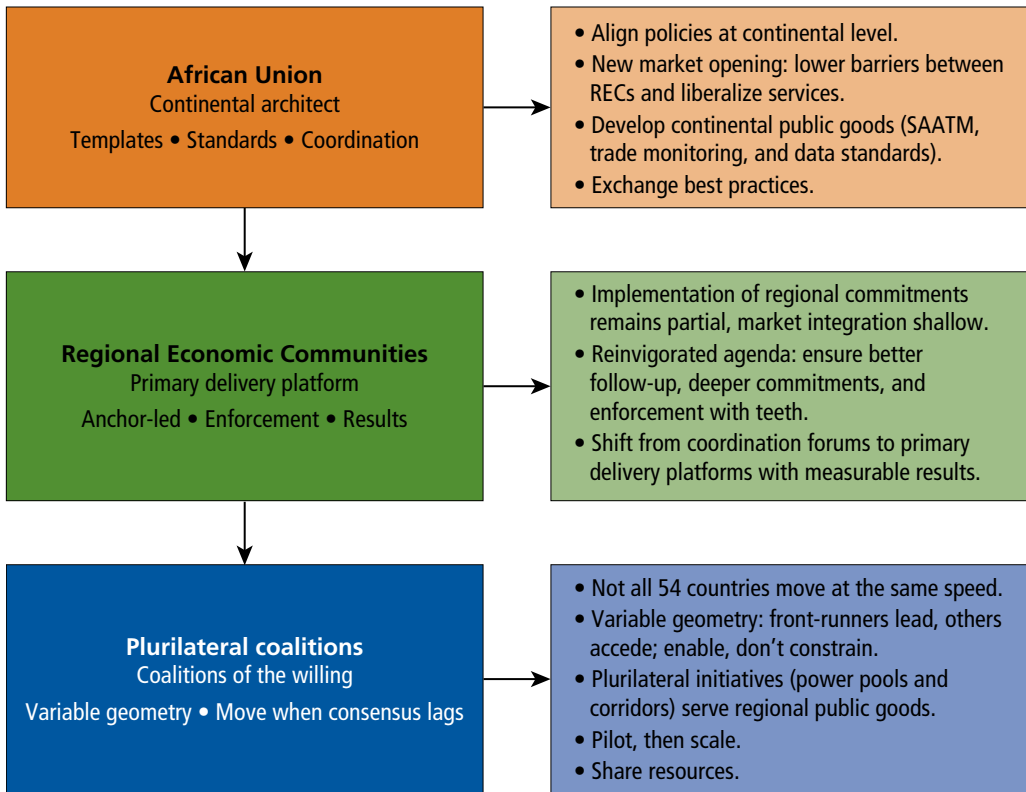
Policy follows directly: (1) diagnose the good—use aggregation logic as a guide to classify the RPG before selecting instruments; (2) pick the right lever—raise the floor for weakest-link goods, stabilize anchors for best-shot goods, reduce coordination costs for summation goods, and use transfers or design tweaks to push threshold goods past the critical level; and (3) embed diagnostics institutionally—establish regular classification of RPGs within RECs and AU organs to ensure that financing and instruments consistently align with the underlying economics of provision.

Institutional Architecture for RPG Provision in Africa

Key message: *RPG delivery in Africa occurs through a three-tiered institutional architecture: the African Union provides credible continental templates, RECs operate as scale-appropriate implementers, and plurilateral coalitions allow willing states to move first. The binding constraint is rarely vision; rather, it is the high coordination costs embedded in a multilayered system with overlapping mandates, fragmented standards, and weak interoperability. By reducing these coordination costs and enabling delivery at the lowest efficient level of governance, through the principle of subsidiarity combined with variable geometry, Africa can reconcile continental ambition with implementation realism. Integration succeeds when the AU focuses on coherence and rule-setting, RECs deliver operational coordination, and plurilateral coalitions accelerate implementation when consensus lags.*

Africa's RPG provision succeeds when the AU provides credible continental templates, RECs operate as scale-appropriate implementers, and plurilaterals allow willing states to move first (figure 4.1). High coordination costs embedded in a multilayered system with overlapping mandates and fragmented standards—rather than a lack of vision—act as the binding constraint. On the continent, the AU plays the role of reducing these costs, aligning incentives, and enabling delivery at the lowest efficient level of governance.

Figure 4.1 From Continental Templates to Delivery on the Ground: A Three-Tiered Architecture



Source: Adapted from Kassa and Ouedraogo 2025.

Note: REC = Regional Economic Community; SAATM = Single African Air Transport Market.

The AU as Continental Architect

The AU is Africa’s closest analogue to a supranational body capable of addressing the collective action failures that drive the underprovision of RPGs. As its core function, the AU provides continental coherence—legal frameworks, political legitimacy, and credible commitments—across domains where economies of scale and cross-border externalities make national provision inefficient. Peace operations, trade integration, energy markets, and disease surveillance all exhibit properties for which a continental hub can reduce duplication and internalize spillovers, much as the EU does through its Trans-European Networks.

Nevertheless, the AU’s ability to play this role is shaped by the political economy of a principal-agent structure in which 55 member states delegate authority to the AU Commission. That delegation is shallow: contributions are voluntary, enforcement is weak, and over 60 percent of the AU’s total budget (and more than 70 percent of African Peace and Security Architecture financing) comes from donors. Intended to stabilize resources, the 2016–17 reform package—including the 0.2 percent levy on eligible imports—has seen only partial implementation. As of June 2025, only 17 member states had operationalized the levy. Unlike the European Commission, which operates with binding legal instruments and independent fiscal resources

(the Cohesion Fund and Connecting Europe Facility), the AU's continental capacity is tightly constrained by financing uncertainty and limited enforcement.

These structural constraints are compounded by Africa's polycentric governance system, which disperses authority and implementation responsibilities across the AU, eight recognized RECs, specialized agencies, power pools, river basin organizations, and ad hoc coalitions. Polycentricity has upsides: it enables flexibility, experimentation, and early mover coalitions when continental consensus proves elusive. It also, however, generates high coordination costs. Mandate overlaps between the AU and RECs, divergent technical specifications across infrastructure projects, and parallel trade facilitation programs all raise the number of implementing entities and the per-entity coordination burden. In the language of the model in box 4.1, more implementers and higher coordination costs reduce the effective provision of RPGs, even when nominal commitments expand.

Reducing this coordination wedge often represents the highest-return continental investment. Interoperable standards, mandate clarity, joint procurement, common data architectures, harmonized grid codes, and shared certification systems frequently deliver more impact than equivalent investments in physical assets. When fragmentation is binding, financing the interface—the governance, standards, rules, and data systems that allow cross-border assets to function—can shift the system to a high-provision equilibrium.

The AU's comparative advantage, therefore, lies not in direct implementation but in designing credible continental templates (legal, technical, and regulatory), mobilizing financing coalitions, and establishing accession pathways that lower the political cost of compliance. Even so, continental frameworks generate outcomes only to the extent that they are operationalized at the subregional level. The RECs, with smaller memberships, geographic coherence, and existing legal instruments, function as the transmission belt between AU-level design and national delivery. Their ability to reduce coordination costs, manage experimentation, and scale plurilateral pilots ultimately determines the success of Africa's RPG agenda.

The next section examines how RECs navigate these trade-offs, how their scale matches the aggregation technologies they confront, and which instruments can enhance their role as Africa's primary implementers of regional public goods.

RECs: Operational Nodes for RPG Provision

RECs should act as the primary operational nodes for delivering RPGs in Africa. Consistent with the subsidiarity principle, RECs' smaller membership, geographic proximity, and tighter preference alignment reduce the transaction costs of collective action and increase the likelihood that countries internalize regional spillovers. Because of anchor-led provision, stronger enforcement, and more predictable financing, RECs meet the "supply" (Mattli 1999) conditions for integration more often than the AU does.

Anchor states drive provision in most RECs. In each major REC, one or two large economies act as policy anchors by internalizing a greater share of the benefits from RPG provision. Kenya in the East African Community (EAC), Nigeria in ECOWAS, and South Africa in the

Southern African Development Community (SADC) have used their political and economic weight to advance peace operations, corridor development, and energy integration (Kassa and Ouedraogo 2025; Söderbaum 2016). Kenya's leadership in the EAC Corridor, ECOMOG interventions in Liberia and Sierra Leone, and South Africa's role in SAPP illustrate how best-shot dynamics work in practice. In EAC, Kenya's investments in port expansion at Mombasa and rail upgrades directly benefit neighboring landlocked states, aligning anchor interests with regional spillovers (UNECA 2023). In ECOWAS, Nigeria alone accounts for over 70 percent of gross domestic product, giving it both the capability and incentive to push regional initiatives. Anchor-driven initiatives are often faster to implement because they internalize a larger share of the benefits, lowering the risk of collective action failure.

Enforcement mechanisms are stronger and more credible at the REC level. Many RECs possess legally binding protocols and enforcement tools that create more credible commitment mechanisms than the AU. ECOWAS's supplementary protocol on democracy and good governance enables suspension of or sanctions against member states experiencing unconstitutional changes—used in Mali (2020), Burkina Faso (2022), and Niger (2023). The East African Court of Justice has ruled on disputes ranging from customs valuation to trade bans, establishing legal precedent for compliance (EACJ 2022). These enforcement features, combined with the threat of reputational loss, have improved compliance rates in sensitive areas. In contrast, at the AU level, similar political crises often result in protracted negotiations without immediate sanctions (Kassa and Ouedraogo 2025).

Some RECs have more predictable financing arrangements than the AU. Whereas more than 60 percent of the AU budget and upward of 70 percent of African Peace and Security Architecture financing depend on external partners (African Union 2023), some RECs have established dedicated and predictable revenue streams. ECOWAS finances 70 to 80 percent of its budget through a 0.5 percent levy on imports from nonmember countries, established under Article 72 of the ECOWAS Treaty (GBN 2025). EAC currently relies on equal partner state contributions, with a 0.2 percent import levy under discussion to address mounting arrears and persistent funding shortfalls (EAC 2024). Predictable fiscal capacity enables multiyear planning for programs such as EAC's digital identification initiatives, ECOWAS's interconnectivity agenda, and SADC's shared water resource management. This predictability contrasts with AU programs—such as the African Standby Force—that experience irregular funding cycles and stalled operational readiness. Predictability enables continuity, which is critical for RPGs that require cumulative investment and sequenced reforms.

Proximity and shared context enhance design and implementation. Geographic closeness and cultural affinity allow RECs to tailor RPGs to member needs. EAC's One-Stop Border Post program incorporated gender-sensitive design after surveys showed that women represent over 60 percent of informal cross-border traders (Brenton et al. 2018). Facilities at Busia and Malaba now include childcare areas, separate sanitation facilities, and dedicated lanes for small consignments. Similarly, the design of the seed harmonization project in the Common Market for Eastern and Southern Africa (COMESA) accounted for region-specific agro-ecological zones, enabling farmers to access certified seed varieties without retesting in each country

(Hoekman 2025). Such context-sensitive adaptations—rooted in local realities—are far more difficult to design at the continental level, highlighting an intrinsic advantage of the REC scale.

Lower coordination costs translate into faster execution. RECs' smaller membership lowers coordination costs and facilitates faster adoption of technical standards, regulatory reforms, and operational protocols. ECOWAS's harmonization of sanitary and phytosanitary standards for livestock products took under three years, compared with more than five years for similar continental standards under the AfCFTA (Kassa and Ouedraogo 2025; World Bank 2020). SADC harmonized axle-load limits across key corridors in less than two years, whereas AU-designated transcontinental corridors continue to operate under divergent axle-load regimes. These speed and efficiency gains reflect the model's logic: fewer actors and lower coordination costs per entity result in higher effective provision of summation and threshold RPGs.

RECs serve as testing grounds for scalable continental policy. Subregional innovations often inform or evolve into AU-level frameworks. The Regional Electronic Cargo Tracking System—a joint initiative of revenue authorities in Kenya, Rwanda, and Uganda under EAC partner state coordination—has improved transit cargo security along the Northern Corridor, reducing transit time by approximately two days per consignment, deterring diversion, and supporting evidence-based interception of theft attempts (TradeMark Africa 2017). The system offers a working template for the AU's plans for a continental digital transit monitoring system. ECOWAS's Brown Card insurance scheme has issued approximately 8 million cards as of 2024 and processes tens of thousands of cross-border motor accident claims annually, offering a working model for continentwide motor vehicle insurance interoperability and streamlined compensation frameworks (ECOWAS Brown Card Secretariat 2025). This variable geometry approach mirrors the European Union's Eurozone and Schengen pathways, where willing coalitions advance ahead of the broader group.

Specialization in geographically concentrated RPGs offers a comparative advantage. Some RPGs yield spatially concentrated benefits, making REC-level delivery more efficient. Enabled by synchronized grids and market-based dispatch systems, SAPP has evolved into the most advanced regional electricity market in Africa, achieving interconnection of 9 out of 12 member countries and establishing sophisticated competitive trading mechanisms that have been replicated by other African power pools (Liedemann 2025). Similarly, the Niger Basin Authority's REC-level governance enables coordinated dam operations and water-sharing agreements that would be unwieldy under a purely continental framework (UNECA 2023). The REC scale often represents the minimum efficient scale for RPGs that rely on geographic coherence.

Coordination challenges persist in a polycentric system. The AU and RECs both derive their mandates directly from member states, making each relationship one of principal-principal rather than principal-agent. In practice, this type of relationship often produces parallel mandates, duplicated projects, and technical incompatibilities that erode the efficiency gains from specialization. In trade facilitation, for example, the AU's AfCFTA nontariff barrier reporting system¹ and the nontariff barrier monitoring tool of COMESA, EAC, and SADC²

are not yet interoperable, forcing traders to navigate multiple reporting channels and slowing resolution times. Infrastructure initiatives face similar misalignment: both COMESA and SADC champion the North-South Corridor, yet axle-load limits, customs documentation, and border operating procedures differ between the two frameworks. In security, overlapping standby forces at the AU and REC levels compete for funding, political attention, and deployment priority, diluting rapid-response capacity. Polycentricity can improve adaptability if each layer specializes according to its comparative advantage—as suggested in the model’s logic; however, without credible coordination mechanisms and shared technical templates, it instead generates coordination wedges that depress effective RPG provision.

Policy implications for addressing these challenges highlight the need for a clearer division of labor:

- The AU should focus on RPGs that require continental legitimacy, unified external representation, or scale economies in design such as standards, templates, legal frameworks, and continental financing platforms.
- RECs should lead on goods for which regional specificity, political homogeneity, and proximity to implementation challenges matter most. These priorities include aligning mandates and creating shared financing instruments in trade facilitation, energy pooling, interoperable digital and regulatory systems, regional security operations, and cross-border infrastructure. Embedding REC innovations into AU frameworks would maximize complementarities.
- When REC-level consensus stalls, plurilateral coalitions can bridge the gap by advancing concrete initiatives while preserving continental coherence. Even in RECs, consensus-based decision-making can still slow delivery when preferences or capacities diverge sharply among members. In such cases, plurilateral coalitions, discussed in the next section, can bridge the gap, preserving continental coherence while avoiding the lowest-common-denominator trap.

Plurilateral Initiatives and Variable Geometry in RPG Provision

Plurilateral initiatives, coalitions of willing states advancing under AU or REC frameworks, offer a pragmatic solution to the lowest-common-denominator problem in Africa’s integration. By enabling subsets of members to deepen cooperation in specific areas, plurilaterals sustain momentum, lower coordination costs, and allow RPG provision to proceed at a feasible pace while maintaining inclusivity through open accession. They narrow the coordination set to countries with aligned preferences and capacity, converting weakest-link or high-threshold RPGs into arrangements that are feasible to deliver now.

In the economics of integration, variable geometry allows progress without requiring immediate universal participation (Hoekman 2025; Mattli 1999; Wyplosz 2024). Plurilateral cooperation has emerged as a pragmatic institutional response to Africa’s political economy constraints in delivering RPGs. Many African RPGs—including cross-border security, energy pools, digital interoperability, and air transportation—stall under full membership conditions. Plurilaterals

solve this problem by redefining the aggregation set: a smaller coalition of willing and capable members acts first, reducing coordination losses and shifting the equilibrium from standstill to provision. When embedded within AU or REC legal frameworks, plurilaterals preserve continental coherence while allowing small groups to advance under common rules. Their economic logic mirrors the experience of the Eurozone and Schengen, noted previously: early movers generate demonstration effects, reduce uncertainty, and establish the templates that enable wider accession.

The effectiveness of plurilaterals stems from their ability to change the structure or aggregation technology of RPGs. A weakest-link problem becomes manageable when the coalition excludes the lowest-capacity members. A threshold problem becomes solvable when a small subset can reach the critical mass for benefits to materialize. A best-shot or anchor-driven good becomes implementable when the anchor need not wait for laggards. Rather than simply being theoretical, this effectiveness is visible across sectors:

- *Air transportation.* The Single African Air Transport Market's core group of early implementers negotiated fifth-freedom rights and standardized audits, cutting route approval times by 30–40 percent, and now serves as the template for wider accession.
- *Customs.* The acceleration phase of the ECOWAS Trade Liberalization Scheme was effectively plurilateral: five members built and tested the harmonized valuation database before REC-wide adoption.
- *Digital integration.* The EAC One Network Area began with four early adopters, cutting roaming charges by up to 60 percent (costs fell from US\$0.65/minute to US\$0.15/minute) and boosting cross-border call volumes by over 200 percent in the first year. Cross-border voice traffic in Kenya and Uganda tripled, and increased nearly fivefold in Rwanda (ITU 2016).
- *Payments and trade facilitation.* The Ghana-Nigeria mobile money interoperability pilot—enabling instant cross-border wallet payments in local currencies—demonstrates how willing coalitions can pioneer regional integration ahead of broader frameworks. While ECOWAS advances the comprehensive Payments and Settlement System toward monetary union by 2027, early bilateral corridors already show clear improvements in efficiency, offering a model for continentwide expansion (Bank of Ghana 2025; WAMA 2022).
- *Security.* The SADC Mission in Mozambique—endorsed by the AU but executed by a capable subset—deployed in July 2021 with approximately 2,000 troops from eight member states to stabilize parts of the Cabo Delgado province. A parallel bilateral Rwandan deployment of roughly 1,000 troops secured Palma and Mocímboa da Praia, where major natural gas investments are located. Together, these complementary regional and bilateral efforts demonstrate how plurilateral coalitions can rapidly mobilize when continental consensus lags, though the SADC mission's eventual withdrawal in July 2024 also reveals the limits of stabilization without sustained political settlement (Opperman and Pigou 2024).

All of these examples have an identical mechanism: visible benefits generate a demonstration effect, increasing the incentive for nonmembers to join once uncertainty falls and spillovers become tangible.

Effective plurilateralism depends on three design elements:

1. *Openness and clear accession pathways.* Plurilateral arrangements must remain open to all members, with explicit technical and legal requirements for joining. This element prevents fragmentation, preserves inclusivity, and ensures that early-mover initiatives scale rather than harden into exclusive clubs.
2. *Incentive alignment for anchor states.* Anchors typically bear disproportionate military, financial, or regulatory costs. Plurilaterals work only when anchors receive both political recognition and material support. Examples of incentives include cofinancing, shared logistics, privileged access to linked initiatives, or formalized leadership roles. In Cabo Delgado, South Africa's contribution represented roughly 45 percent of the total mission cost; cost sharing by Angola and Botswana sustained the deployment beyond the initial phase.
3. *Targeted and flexible financing.* Adjustment funds, corridor-level cost sharing, digital transformation windows, and temporary compensation for early reformers lower participation barriers for smaller or capacity-constrained states. Flexibility is essential, because the coalition evolves over time.

Plurilaterals should be deployed deliberately—not as ad hoc coalitions but as a designed complement to AU and REC integration instruments. Continental and regional bodies can enhance their value by

- Embedding plurilateral clauses into AU and REC treaties to allow rapid coalition formation while maintaining legal coherence;
- Issuing interoperability templates for corridors, digital systems, data protocols, and security arrangements so that early movers can plug into a future continental architecture without costly retrofitting; and
- Using plurilaterals to pilot complex RPGs, such as digital trade facilitation, renewable energy corridors, regional payment switches, or artificial intelligence–driven customs risk management, with clear evaluation metrics and accession pathways.

In Africa's polycentric system, well-designed plurilaterals expand the feasible frontier of RPG provision. When aligned with credible continental templates, strong anchor incentives, and financing models that lower participation costs, they allow integration to advance where political will and capacity exist. They reduce coordination costs, accelerate implementation, generate demonstration effects, and allow integration to move at the speed of political will and technical capability. They offer Africa a practical, analytically grounded strategy to overcome bottlenecks and advance integration where full consensus is unrealistic.

Energy as an RPG: Policy Directions

Key message: *Africa's industrialization problem is increasingly an electricity market integration problem. The region lacks integrated regional electricity markets that can move low-cost power across borders at scale. Closing this gap calls for institutional innovation: harmonized grid codes and market design, transparent benefit-sharing rules, credible settlement and credit backstops, and a continental interoperability facility that bundles governance, financing, and technical standards together.*

Energy access, reliability, and cost remain among Africa's most binding constraints for structural transformation. Regional electricity trade reduces firms' marginal costs, raises domestic value added in exports, and underpins forward linkages in regional value chains. Without reliable, affordable power, regional value chains in textiles, cement, agro-processing, metals, and digital services cannot scale. Firms relying on diesel backup face higher cost structures than those faced by grid-based competitors, making them systematically uncompetitive. Countries with more reliable grid power consistently record a higher domestic value added ratio in energy-intensive exports.

Real-world examples illustrate this competitiveness effect. Ethiopia's power exports have helped halve Djibouti's electricity production costs. Hydropower from the Organization for the Development of the Senegal River delivers electricity in parts of West Africa at roughly one-third the cost of thermal generation. SAPP imports from Mozambique's Cahora Bassa have allowed South Africa to manage both cost and drought shocks. Empirical studies suggest that a 10 percent drop in electricity costs raises manufacturing exports by 1–3 percent, with particularly strong effects in energy-intensive sectors. These gains are regional—not national—and derive from pooling generation and demand across borders.

Africa's power pools remain structurally underused relative to their potential. Energy is a classic RPG: pooling generation and balancing demand across borders lower average costs, reduce reserve margins, and enable scale economies in hydro, geothermal, solar, and wind. Regional energy integration offers substantial economic benefits, with coordinated power sector development potentially saving significant capital across the continent. However, inadequate grid connectivity forces many businesses and communities to rely on expensive diesel backup generation, creating cost structures that undermine competitiveness in energy-intensive sectors. Firms relying on diesel backup face energy costs 2.5–3.2 times higher than grid-connected competitors, with diesel generators costing two to three times as much as pooled grid alternatives (UNECA 2023). In West Africa, backup generators provide 40 percent of total electricity consumption with fuel costs alone averaging US\$0.30 per kilowatt-hour compared to grid electricity (IFC 2019)—making diesel-dependent manufacturers systematically uncompetitive in regional value chains.

Despite notable progress, regional energy integration in Africa remains fragmented. Africa already has the scaffolding: five power pools (the Central African Power Pool, the Maghreb Electricity Committee, the East African Power Pool, SAPP, and the West African Power Pool [WAPP]) and a continental wrapper, the African Single Electricity Market. Nevertheless, electricity trade rarely exceeds 10 percent of power consumed in most regions, and regional disparities remain stark.

SAPP operates Africa's only functional day-ahead market, with a coordination center that has gradually built operational credibility. Even so, traded volumes typically range between 5 percent and 10 percent of regional consumption, well below the levels observed in ASEAN, Central America, or Europe, reflecting remaining frictions in settlement, transmission pricing, and cross-border balancing. WAPP has made visible institutional and infrastructural progress with major interconnectors (North Core and the Côte d'Ivoire–Liberia–Sierra Leone–Guinea interconnection project) and a regional regulator; however, actual trade remains low, and payment risks and fiscally stressed utilities continue to depress cross-border trade volumes.

Several examples illustrate the importance of regional political coordination in energy integration. East Africa has advanced with the Ethiopia-Kenya line and growing geothermal capacity in Kenya, but political disputes (notably over the Nile) still constrain trust. Sovereignty concerns and mistrust prevent countries from depending on neighbors for a strategic good. For example, Algeria cut off power exports to Morocco in 2021, and Nigeria cut electricity to Niger during the ECOWAS tension.

Even regions with abundant resources or technological capacity feel the effects of fragmentation. Central Africa has the continent's largest concentration of untapped renewable resources, particularly hydropower, yet trades less than 1 percent of potential supply. Weak institutions, limited interconnection, and the absence of credible regional operational frameworks keep the Central African Power Pool stagnant despite abundant low-cost generation. North Africa—although technically sophisticated, with high-capacity grids and advanced operational practices—has minimal intra-African energy trade. Political fragmentation, regulatory divergence, and differing commercial priorities have prevented the region from translating its technical capability into continental integration.

Taken together, these regional patterns point to a common lesson: the binding constraint is not necessarily generation potential but the institutional, regulatory, and political conditions required to turn infrastructure into a functioning regional market. Weak enforcement, fragmented grid codes and pricing systems, and insufficient cross-border transmissions limit trade, even when one country has surplus supply and another has deficits. Political frictions compound these institutional gaps. Electricity remains hostage to geopolitical tensions when no supranational enforcement mechanism exists.

The solution is not simply more investment but institutional innovation that reduces coordination costs and makes participation politically rational. The Organization for the Development of the Senegal River stands out as a rare example of successful regional electricity governance precisely because it bundles the essential institutional elements: equal voting rights, an independent operator responsible for system management, and a transparent benefit-cost allocation formula that aligns incentives across members. By contrast, the Grand Inga project in the Democratic Republic of Congo demonstrates the opposite: asymmetry, ambiguous benefit sharing, and deep political mistrust have negated exceptional technical potential. That project has stalled because the governance architecture was never robust enough to solve the underlying collective action problem. The model works when governance, benefit sharing, and finance are engineered as a package. Global analogues reinforce the lesson.

Europe's Trans-European Networks for Energy advanced only once governance, financing, and harmonized technical codes were jointly engineered. ASEAN's Lao-Thailand-Malaysia-Singapore power integration project followed a similar logic: a small plurilateral pilot aligned rules, reduced transaction costs, and demonstrated feasibility before scaling to a broader regional template.

Many cross-border transmission projects remain underused because tariff systems, wheeling charges, and payment settlements are not harmonized. Delivering regional energy RPGs requires (1) prioritizing interoperability and regulatory harmonization over hardware alone; and (2) embedding compliance-finance linkages into continental and REC-level mechanisms. Without these elements, Africa risks stranded assets—built transmission lines and generation projects that fail to deliver regional trade because the connective tissue of governance, standards, and incentives is missing. A Continental Interoperability Facility dedicated to grid codes, regional regulators, market design, and settlement systems would yield higher returns than additional hardware spending alone.

Policy Agenda: Making Africa's Power Pools Seamless

Delivering energy as an RPG requires shifting from fragmented national systems to a coherent, interoperable regional market. The following agenda, summarized in table 4.2, translates the chapter's model into a set of institutional and financial reforms that directly target the coordination failures holding back Africa's power pools.

- *Consolidate mandates under a single continental template.* Adopt one African Single Electricity Market rulebook transposed by RECs and power pools. When power pools have clear roles (such as SAPP and WAPP), trade rises; when they have diffuse roles (Central African Power Pool), trade stagnates. Threshold-type energy goods require coherent institutions that align anchor incentives and reduce coordination frictions.
- *Harmonize grid codes and operational standards—with enforcement.* Issue AU-endorsed network codes on frequency control, reserves, data telemetry, and renewable integration, with mandatory transposition by RECs and pools. The Organization for the Development of the Senegal River shows how shared operating rules reduce costs; the EU's code convergence provides the benchmark for scaling.
- *Establish regional clearinghouses with short settlement cycles and credit cover.* Most cross-border trade still depends on bilateral government-to-government contracts because of settlement risk. A power pool clearinghouse plus standardized power purchase agreements—supported by partial risk guarantees—can unlock liquidity and private investment. WAPP, overseen by the ECOWAS Regional Electricity Regulatory Authority, already has the rulebook to start.
- *Codify anchor state incentives.* Anchors such as Ethiopia, Nigeria, and South Africa bear outsized costs. Incentivize sustained effort through leadership roles, weighted cost sharing, priority access to concessional finance, and issue linkages (energy–industrial policy, energy–trade facilitation). Anchor alignment is essential in weighted-sum RPGs.

- *Launch plurilateral pilots under AfCFTA's variable geometry.* Start two to four country coalitions for renewable corridors, reserve sharing, or standardized regional power purchase agreements—open to later accession. The Ethiopia-Kenya line and the East African Power Pool's trading platform are ready for an East African balancing pilot.
- *Link financing to outcomes, not inputs.* Disburse against traded gigawatt-hours, inertia use, settlement timeliness, power purchase agreements cleared, and renewable penetration. SAPP's approximately 17,000 gigawatt-hours traded in 2020 show what measurable key performance indicators look like. Link results to the African Single Electricity Market's monitoring dashboard.
- *Hardwire industrial policy into grid expansion.* Strategic coordination between power pool development and industrial planning can unlock manufacturing competitiveness across regions. Place special economic zones and industrial corridors at major grid interties with firm capacity and predictable tariffs, then track energy cost reductions and production outcomes.
- *Embed climate finance and resilience into pool operations.* Finance cross-border hydro-solar corridors with regional green bonds, pooled carbon credit markets, and blended financing instruments. Codify drought sharing, redispatch, and reserve sharing in power pool protocols. East Africa's high renewable share and Desert to Power initiative offer immediate pilots.

Security as an RPG: Policy Directions

Key message: *Conflict spillovers, forced displacement, illicit trade, and armed networks routinely cross borders faster than national institutions can respond; however, Africa's security architecture remains fragmented, reactive, and dependent on ad hoc financing and anchor states. Transforming security from episodic intervention into a functional RPG calls for institutional innovation: a delegated powers protocol that triggers binding mandates when early-warning thresholds are crossed, predictable rules-based financing across continental and REC levels, a reimbursement platform that converts pledges into bankable cash flows, and codified plurilateral compacts with anchor incentive structures.*

Fragility is rarely confined within borders, and conflict spillovers make peace and security archetypal RPGs in Africa. Conflict shocks propagate across borders, reducing neighboring countries' trade and growth (Diallo et al. 2024). Violent conflict reduces annual gross domestic product growth by 2–3 percentage points and depresses regional trade flows by up to 50 percent (Collier et al. 2008; World Bank 2011). Insecurity in the Sahel, the Horn of Africa, and the Great Lakes demonstrates how violence spills over into neighboring states through refugees, illicit trade, and armed groups. The Boko Haram insurgency spread from Nigeria into Niger. Sudan's war is now the world's largest displacement crisis, with over 4 million refugees in neighboring countries and far higher internal displacement—straining Chad, Egypt, and South Sudan, and jeopardizing regional stability. In the central Sahel, violence has diffused into littoral states and borderlands, confirming the transnational nature of the threat. No single country can contain these risks alone; collective action is indispensable. Regional security pooling reduces duplication, internalizes spillovers, and creates economies of deterrence.

Table 4.2 Policy Agenda: Making Africa’s Power Pools Seamless

Policy area	African Union	RECs/Power pools	National governments	Plurilaterals (CoW)	Development partners
Institutional consolidation	Anchor AfSEM as the continental electricity market framework; issue legal templates; coordinate REC mandates.	Align REC and pool mandates with AfSEM; designate a single REC lead per pool.	Harmonize national laws with AfSEM protocols; ratify REC-level agreements.	Pilot AfSEM-compatible arrangements in willing pools.	Provide technical support for AfSEM legal harmonization.
Harmonized grid codes	Issue AU-endorsed continental grid code templates.	Adopt and enforce harmonized grid codes (ERERA, RAERESA).	Integrate continental codes into national legislation and utility practices.	Early adopters agree to harmonized code implementation.	Support code drafting, benchmarking, and capacity building.
Regional clearing houses	Establish continental design standards for clearinghouses.	Set up pool-level clearinghouses with next-day settlement and credit guarantees.	Participate by channeling PPAs through pool systems.	Pilot clearinghouse operations in smaller coalitions.	Provide credit enhancement and risk guarantees.
Anchor incentives	Create AU-level recognition and burden-sharing packages for anchors.	Assign governance leadership roles to anchors; design weighted cost-sharing rules.	Provide disproportionate contributions when domestic benefits are high.	Form anchor-led coalitions with preferential access.	Fund side payments, adjustment facilities, and concessional infrastructure finance.
Plurilateral pilots	Endorse plurilaterals under AfCFTA’s variable geometry; provide accession templates.	Facilitate pilot renewable corridors or balancing markets within REC frameworks.	Join pilot arrangements to demonstrate feasibility.	Launch first-mover renewable corridors (for example, Ethiopia-Kenya-Tanzania).	Finance and evaluate pilots; provide scaling pathways for replication.

(continued next page)

Table 4.2 Policy Agenda: Making Africa’s Power Pools Seamless (*continued*)

Policy area	African Union	RECs/Power pools	National governments	Plurilaterals (CoW)	Development partners
Outcome-linked financing	Develop a continental monitoring dashboard (AfSEM) to track traded GWh, PPAs, and renewable penetration.	Report pool-level outcomes; integrate output metrics into REC planning.	Collect and report national data on energy trade and costs.	Demonstrate outcomes from pilot markets to attract financing.	Tie disbursement to integration outcomes (output-based aid).
Industrial linkages	Integrate energy into AfCFTA services negotiations; mainstream into continental industrial policy.	Map corridors, SEZs, and value chains to pool interconnections.	Locate SEZs and industrial parks on interconnected grids.	Demonstrate competitiveness gains from power-linked SEZs.	Finance industrial corridors tied explicitly to electricity trade.
Climate finance and resilience	Mobilize continental green bond and carbon credit facilities.	Integrate renewable benchmarks, feed-in tariffs, and drought-sharing protocols.	Implement resilience measures nationally (reserve sharing, redispatch rules).	Pioneer regional renewable corridors with climate finance.	Provide concessional climate finance, blended instruments, and insurance facilities.

Source: Adapted from Kassa and Ouedraogo 2025.

Note: AfCFTA = African Continental Free Trade Area; AfSEM = African Single Electricity Market; AU = African Union; CoW = coalition of the willing; GWh = gigawatt-hour; ERERA = ECOWAS Regional Electricity Regulatory Authority; PPA = power purchase agreement; ; RAERESA = Regional Association of Energy Regulators for Eastern and Southern Africa; REC = Regional Economic Community; SEZ = special economic zone.

Africa's current model of soft coordination is insufficient; delivering regional security as a public good will require credible enforcement and financing mechanisms. African Peace and Security Architecture has struggled to prevent or resolve conflicts decisively. REC-level mechanisms, such as ECOWAS's security interventions in The Gambia, Liberia, and Sierra Leone, demonstrate that regional action can halt state collapse and restore trade corridors. By contrast, the AU's limited enforcement capacity during crises in the Democratic Republic of Congo and Sudan illustrates the cost of institutional fragmentation. The AU's Peace and Security Council (PSC) has limited coercive authority, and African Standby Forces remain largely on paper. By contrast, Europe's post-Balkan interventions illustrate how supranational authority, backed by anchor states, can deter conflict. The Group of Five for the Sahel (G5 Sahel) collapsed under unclear mandates and donor volatility; overlapping AU and REC forces compete for resources; and missions wait months for reimbursements. The binding constraints are enforcement, finance, and mandate clarity.

Regional mechanisms work when mandates are clear and anchors lead; they falter when coordination and finance are fragmented. The ECOWAS Mission in The Gambia stabilized a constitutional transition at modest scale and cost, and the Multinational Joint Task Force degraded the capacity of Boko Haram and Islamic State West Africa Province. By contrast, the G5 Sahel Joint Force illustrates how underresourced voluntarism fragments and stalls. Across regions, successful provision of security as an RPG hinges on four elements: (1) delegated authority that bypasses unanimity; (2) anchor incentives that compensate states bearing disproportionate costs; (3) predictable, rules-based financing; and (4) plurilateral coalitions that allow capable members to act without waiting for full membership. ASEAN's security frameworks and the EU's Common Security and Defence Policy show how regional institutions can pool sovereignty for faster response. PSC lacks similar binding authority; instead, its decisions often depend on member state consensus, which slows action during crises (for example, in the Democratic Republic of Congo and in Sudan).

Policy Agenda: Turning Security from Ad Hoc Cooperation into a Rules-Based RPG

Delivering security as an RPG demands coordinated action across Africa's institutional layers. The following policy agenda, summarized in table 4.3, defines the specific mandates, financing tools, and operational mechanisms required to shift the system from fragmented, reactive responses to a rules-based regional security architecture.

- *Delegate authority for crisis response from consultative to operational.* PSC decisions should trigger time-bound, binding obligations on members. Operationalize a delegated powers protocol: when the AU's Continental Early Warning System (CEWS) crosses preagreed thresholds (for example, displacement, battlefield fatalities, or electoral violence metrics), PSC can mandate an AU/REC mission with defined timelines, force packages, and status-of-mission agreements, moving beyond unanimity logjams. Binding triggers close the often long alert-to-action gap documented in multiple crises (Kassa and Ouedraogo 2025). This approach requires formalizing coalitions of the willing into AU-backed mandates, not ad hoc arrangements.

Table 4.3 Policy Agenda: Provision of Security as an RPG

Actor	Decision-making and mandates	Financing and burden sharing	Deployment and operations	Prevention and early warning	Legitimacy and accountability
AU	Empower PSC with binding mandates; codify CEWS-to-mission triggers.	Operationalize AU Peace Fund (target: US\$400 million/yr); coordinate AU import levy.	Maintain African Standby Force brigades; coordinate logistics and training standards.	Strengthen CEWS analytics; link alerts to automatic deployments.	Ensure PSC transparency; establish AU PSO Dashboard (deployments, re imbursements, outcomes).
RECs	Translate AU mandates into REC missions with legitimacy (EAC, ECOWAS, SADC).	Establish REC-level levies (ECOWAS 0.5 percent levy precedent); integrate into pooled funds.	Stand up REC standby forces; run command centers.	Operate REC early warning systems; align with CEWS.	Engage civil society and local communities in REC security decisions.
Anchor states	Commit political will; provide troops and resources to back PSC decisions.	Provide disproportionate contributions with offsets (side payments, leadership roles).	Lead force generation, logistics hubs, and high capacity units.	Provide intelligence and border security capacity; integrate with monitoring.	Demonstrate inclusivity to avoid hegemonic perceptions.
Plurilaterals and coalitions	Form codified coalitions under AU/REC endorsement (for example, ECOMIG, MNJTF).	Share costs flexibly; seek rapid reimbursement.	Deploy rapidly under plurilateral compacts; open for accession.	Pilot corridor-focused security units in hot spots.	Adopt clear exit strategies; maintain open accession clauses.
External partners (EU, UN, donors)	Endorse AU/REC mandates at UNSC; provide legitimacy through resolutions.	Unlock UNSC Resolution 2719 (UN-assessed contributions); fund via EU Peace Facility.	Provide enablers (airlift, ISR, logistics), training, and equipment.	Support data integration (satellite, migration, displacement); finance preventive missions.	Condition financing on compliance with human rights; co-monitor with AU/RECs.

Source: Adapted from Kassa and Ouedraogo 2025.

Note: AU = African Union; CEWS = Continental Early Warning System; EAC = East African Community; ECOMIG = ECOWAS Mission in The Gambia; ECOWAS = Economic Community of West African States; EU = European Union; ISR = intelligence, surveillance, and reconnaissance; MNJTF = Multinational Joint Task Force; PSC = AU Peace and Security Council; PSO = Peace Support Operation; REC = Regional Economic Community; SADC = Southern African Development Community; UN = United Nations; UNSC = United Nations Security Council.

- *Lock in predictable financing by combining the AU Peace Fund levy with external assessed support and regional levies.* First, complete rollout of the 0.2 percent AU import levy, and raise the Peace Fund to its US\$400 million per year target (as of 2022, it had mobilized US\$200 million). Second, implement United Nations Security Council Resolution 2719 (2023) to access United Nations–assessed contributions for AU-led Peace Support Operations (PSOs) under clear compliance standards. Third, mirror the ECOWAS 0.5 percent community levy model that generates substantial annual revenue to stabilize REC-level security budgets. Finally, braid in the EU’s European Peace Facility (which has mobilized approximately €1.2 billion for African military and defense since 2021, including €75 million for the African Union Support and Stabilization Mission in Somalia in 2025) as cofinancing, progressively substituting African sources (European External Action Service 2025).
- *Create a PSO Financing Platform (that is, a security clearinghouse) that securitizes receivables and enables rapid reimbursement.* Stand up an AU-REC reimbursement and credit-enhancement platform that (1) validates troop or police days, (2) provides reimbursements within seven days via Peace Fund liquidity, (3) uses partial risk guarantees to backstop arrears, and (4) bundles receivables for short-term financing by African development finance institutions. This platform converts today’s arrears-prone pledges into bankable cash flows, directly addressing the chronic slow money problem highlighted in AU missions.
- *Institutionalize anchor incentive packages to sustain provision in weighted-sum goods.* Assign formal leadership roles (force generation, logistics hubs, and command) and side payments (cost-shares, concessional lines, and debt swaps) for Ethiopia and Kenya (East African Power Pool and Intergovernmental Authority on Development), Nigeria (ECOWAS), and South Africa (SADC) to keep anchors engaged, and obliging smaller states to cofinance proportionally. Experience in EAC, ECOWAS, and SADC confirms that anchor alignment determines mission sustainability (Söderbaum 2016). This report’s framework on weighted spillovers underpins that design.
- *Use plurilateral security compacts with open accession to bypass paralysis—that is, make compacts codified rather than ad hoc.* Legalize coalitions of the willing under AU/REC templates with clear mandates, exit criteria, and accession pathways. The ECOWAS Mission in The Gambia and the Multinational Joint Task Force show feasibility, and the G5 Sahel shows the cost of fragmentation. Codification would preserve speed while ensuring accountability and interoperability. Regional interventions risk being perceived as hegemonic projects of anchor states. In Burkina Faso and Mali, regional sanctions were resisted as externally imposed. Legitimacy requires transparent governance of interventions, representation of smaller states, and institutionalized civil society input. Comparative evidence from Latin America’s Organization of American States shows that legitimacy, not just coercion, sustains long-term regional security cooperation.
- *Tie early warning to automatic financing and force packages—that is, CEWS-to-mission playbooks.* Preapprove modular force packages (light stabilization, border security, and election security) and preallocate contingent budget lines that unlock when CEWS flags are tripped so that alerts reliably become deployments. Prevention is fiscally efficient

(every dollar spent saves many in avoided losses); locking finance to thresholds operationalizes that logic. Conflict prevention requires moving from slow diplomacy to rapid deterrence. CEWS has developed predictive analytics but lacks operational linkage to rapid response forces. Embedding data from mobile technology, trade disruptions, and displacement flows can improve precision. ECOWAS's Mechanism for Conflict Prevention, Management, Resolution, Peacekeeping and Security shows how linking early warning to standby brigades can reduce escalation.

- *Link security operations to trade and corridor dividends to make peace self-financing.* Embed border security and antiextortion reforms from the Great Lakes Trade Facilitation Program into PSO mandates; couple Horn of Africa Initiative corridor investments (for example, Addis Ababa–Djibouti) with mission footprints to visibly raise cross-border incomes in hot spots within 12–24 months. This approach aligns stabilization with tangible, near-term economic payoffs. Conflict disrupts corridors, raises transportation costs, and destroys cross-border trust. Security policy should therefore be mainstreamed into AfCFTA implementation. Trade recovery is fastest when security is restored in core corridors.
- *Align continental and global financing reforms to reduce donor volatility.* Operationalize United Nations Security Council Resolution 2719 through AU–United Nations compacts that standardize human rights compliance, reporting, and auditing; program European Peace Facility support on multiyear envelopes; and publish an AU PSO Dashboard tracking deployments, reimbursements, and mission outcomes (conflict events and displacement trends). This alignment increases credibility, reduces funding shocks, and attracts cofinancing (European External Action Service 2025).

Notes

1. AfCFTA, “Non-Tariff Barriers: Reporting, Monitoring and Eliminating Mechanism,” <https://tradebarriers.africa>.
2. COMESA, EAC, and SADC, “Non-Tariff Barriers: Reporting, Monitoring and Eliminating Mechanism,” <https://tradebarriers.org>.

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Africa trades as much as East Asia relative to GDP but without the structural transformation. The problem lies not just in the volume of trade, but in its composition and direction: exports remain concentrated in raw commodities destined for external markets, while intra-African trade—more diversified and more manufacturing-intensive—accounts for only 15 to 20 percent of the total. Regional integration is a structural requirement for transformation. Yet progress has stalled, not for lack of agreements, but due to shallow commitments, weak implementation, and fragmented production and trade systems.

Integrating Africa: From Threads to Hubs offers a new analytical and operational framework organized around four interdependent pillars.

- First, integrate production regionally. The report shows that the frontier of feasible industrialization expands significantly at the regional level, opening paths inaccessible to individual countries.
- Second, fix the frictions. New trade cost decompositions show that the majority of frictions originate behind the border, in customs inefficiencies, regulatory divergence, and weak logistics while bilateral barriers at the border, including divergent standards, nonmutual recognition, and fragmented transit regimes, compound the problem. The report argues that interoperability—the capacity of goods, data, finance, and regulatory systems to operate seamlessly across borders—rather than liberalization alone is the central condition for integration.
- Third, deepen and enforce agreements and implement AfCFTA. Deeper agreements with binding and specific provisions generate substantially larger trade and welfare effects than shallow arrangements. The report benchmarks African agreements against global counterparts, identifies where gaps lie, and shows how the AfCFTA can support more effective integration through new and renewed liberalization commitments, including on services, nontariff measures and investment, credible dispute settlement, and variable geometry.
- Fourth, strengthen the provision of regional public goods. Infrastructure, energy, digital platforms, and security are preconditions for integration. The report develops an operational framework showing that effective provision depends on the alignment of coordination costs, anchor-country incentives, enforcement capacity, and predictable financing and demonstrates how institutional consolidation and plurilateral coalitions can shift provision from low to high equilibrium.

Trade fragmentation, the erosion of preferential access, and growth and reorganization of global value chains are reshaping the development landscape. This report provides the analytical foundation and policy architecture to move from commitments to functioning regional integration.

ISBN 978-1-4648-2320-6



SKU 212320

