



WORLD TRADE
ORGANIZATION

LDC TRADE PRIORITIES— *Looking forward*

Acknowledgements

The Doha Programme of Action for LDCs for the decade 2022-2031 recognizes the role of trade for realizing the socio-economic development ambitions of least developed countries (LDCs). This policy note covers the topics of services, green transition and regional integration.

This note was prepared by Christian Lippitsch, Richard Newfarmer and Andrew Womer (International Growth Centre), David Luke (London School of Economics) and Kulani McCartan-Demie (Organisation for Economic Transformation), and Colette van der Ven (TULIP Consulting). It was edited by Helen Castell and designed by Jason Quirk.

Disclaimer

This policy note has been prepared under the WTO Secretariat's own responsibility. It does not necessarily reflect the positions or opinions of WTO members and is without prejudice to their rights and obligations under the WTO agreements. The opinions expressed and arguments employed herein are not intended to provide any authoritative or legal interpretation of the provisions of the WTO agreements and shall in no way be read or understood to have any legal implications whatsoever.

Designed by JT Quirk

**LDC TRADE
PRIORITIES—**
Looking forward

Table of contents

- 1 Promoting services-led transformation and exports in Africa 4**
Richard Newfarmer, Christian Lippitsch and Andrew Womer,
International Growth Centre
- 2 Emerging trade opportunities for LDCs from the green transition 21**
Colette van der Ven, TULIP Consulting
- 3 The evolving priorities of African countries and LDCs in the global trade regime 27**
David Luke, London School of Economics, and Kulani McCartan-Demie,
Organisation for Economic Transformation

1

Promoting services-led transformation and exports in Africa

Richard Newfarmer, Christian Lippitsch and Andrew Womer,
International Growth Centre¹

As Africa strives to accelerate its growth rate and raise its living standards, export growth has a central role to play. Since transportation and communication costs plummeted in the 1990s, East Asia in particular has used exports, mainly of manufactured goods, to power its phenomenal growth over three decades. However, changes in the world economy mean that if Africa is to replicate the East Asian miracle, it will need to adopt a different strategy.² This paper explores ways services and services exports can be central to a new development strategy for Africa.

Several reasons underpin the need for a new strategy based on more than manufacturing. The wave of globalization in which companies based in rich countries successively offshored selected labour-intensive manufacturing processes to labour-abundant developing countries – creating what became global value chains – appears to have attenuated. Thus, the exceptionally buoyant trade environment of the 1990s has given way to a slower growth environment for world trade in the new century. These forces, taken together, have caused the ratio of growth in world trade to output – which in the 1990s and 2000s was 1.5 to 2.0 – to fall to roughly 1:1 since 2010. Moreover, the Republic of Korea, then China and other East Asia countries, have used their high productivity prowess to establish dominant positions in virtually all major markets for manufactures around the world, either through direct export or lynchpin positions in global value chains. These circumstances have diminished African countries' opportunities for manufacturing-led growth.

Second, services have come to play a more important role in national economies everywhere. With increased income and diversification of production has come the “servicification” of business organization itself; leading manufacturing companies have outsourced business processes to specialty services firms (Hoekman, 2017). Even more importantly, new technologies – mainly based directly or indirectly on the post-1990s development of the internet – have given rise to new economic activities that feature a high income elasticity of demand. These range from online shopping for products or travel services to the use of streaming services to access entertainment, sports or online education. Due to these factors, manufacturing's share of GDP has on average declined each decade for countries of all income levels (Newfarmer et al., 2018).

Third, these same technological developments have progressively led to the introduction of skill-intensive, capital-intensive and labour-saving production processes that appear to be shifting the economics of manufacturing production back toward major consuming markets or to a few select developing countries whose geography, human resources and political alignment qualify them for “friend-shoring”. One result is that flows of foreign direct investment (FDI) to developing countries have slowed. Moreover,

many of the new technologies are skill-intensive, so the natural attraction of large pools of unskilled labour in developing countries has progressively dissipated. Other recent trends have augmented this long-term impulse. Efforts to curb greenhouse gas emissions have channelled energy-related technological development towards R&D activities and industrial locations more prevalent in the global north (Rodrik and Stiglitz, 2024). More recently, the pandemic and then conflict in Ukraine and new strains in US-China relations have prompted a wave of political efforts aimed at “re-shoring” far-flung production lines. The most important technological wave may be yet to come, with the rapid deployment of generative artificial intelligence (AI) potentially affecting services even more than other sectors.

This raises the following questions for Africa's development strategy. Can services create opportunities for growth, alongside manufacturing and other sectors? If so, can the export of services play a role similar to the role manufactures played for East Asia? And if this is the case, what policies will figure prominently to promote services exports from African countries?

To answer these questions, this paper first summarizes recent literature on the role of services in structural transformation. Here, we demonstrate that services have contributed to productivity growth and employment in Africa in a major way. A second section focuses on Africa's services export performance and potential. It finds that while Africa's services exports have not kept pace with growth in the global services market, they have actually fared somewhat better than the continent's manufacturing exports. Africa's services export successes – and shortcomings – are disaggregated in the next section. This highlights how Africa has performed best in relatively low-skilled sectors, such as travel and transport, but with important new inroads to some higher-skilled sectors such as e-commerce. A penultimate section reviews the role liberalization of services could play in Africa's regional economic communities and emphasizes that the African Continental Free Trade Area (AfCFTA) Agreement offers an opportunity to capitalize on the region's unique advantages to accelerate growth. The paper concludes with a review of the policy agenda if Africa is to seize the opportunity of services exports.

Services in Africa – can they drive productivity growth and job creation?

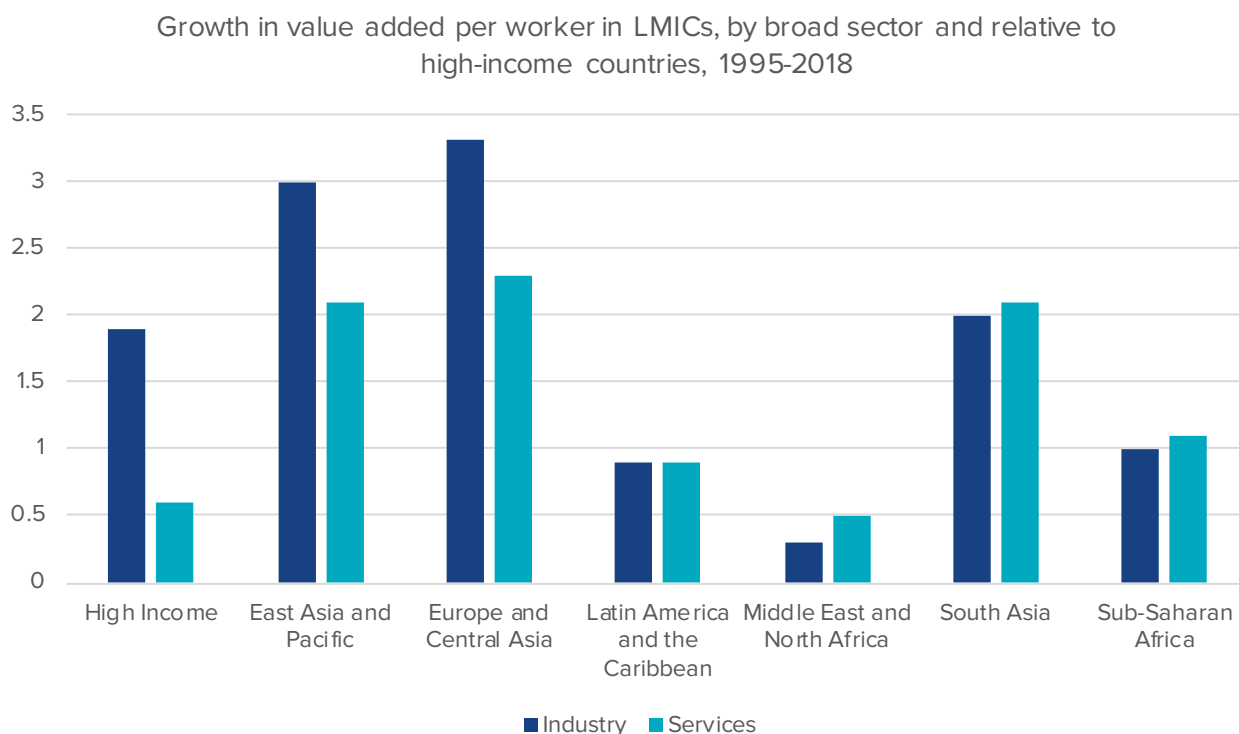
Early literature analyzed Africa’s rather low productivity growth through the lens of structural transformation – that is, the movement of labour from low-productivity to high-productivity activities. In examining Africa’s growth pattern, Rodrik (2016) and others found that, in contrast to East Asia’s experience and indeed that of other developing countries or regions, labour that shifted away from subsistence agriculture moved mainly into services, rather than manufacturing. Compared with services, however, manufacturing benefited from rapid technological change, plus better economies of scale and export potential, allowing it to generate faster growth in labour productivity, irrespective of other conventional conditions affecting growth.³

A growing body of literature, however, has started to flag the productivity potential of services – and their potential to drive growth.⁴ Baccini et al. (2022) study the evolution of the services industry for 13 African countries and find a strong positive relation between emerging

high-skilled services and economic development, but with substantial heterogeneity at the industry level. The authors also find a strong complementary role between services-led development and market conditions and technology – an aspect to which we turn below. In one of the most comprehensive recent studies, Nayyar et al. (2021) examine the productivity gains of major regions during 1995–2018 and categorize them according to whether they were generated by services or industry. They find that services contributed substantially to productivity growth over the period. Moreover, in all regions except East Asia and Central Europe, productivity growth in services outpaced that of industry (Figure 1). Financial and business services (Nayyar et al.’s “global innovator” services) are drivers of productivity gains; they provide higher-value inputs and are often digitally delivered.

Moreover, these services typically supply inputs upstream to other activities in the economy and therefore generate economy-wide spillovers, with the potential to drive productivity in virtually all sectors (Ariu and Ogliari, 2023; WTO, 2019). Hoekman and Shepherd (2017) describe the important complementary of services; for instance, financial services improve the

Figure 1. Productivity growth in services has been important everywhere and has outpaced that of manufacturing in Africa, South Asia and Latin America



Source: Nayyar et al., 2021.

Note: Value-added data are in constant prices. “Low- and middle-income countries” (LMICs), by World Bank income group classifications had 1994 gross national income (GNI) of less than US\$ 8,965. “High-income countries” (HICs) had GNI exceeding US\$ 8,965 in 1994. Data for the “industry” sector include not only manufacturing but also mining, utilities and construction. CAGR = compound annual growth rate.

productive allocation of capital, telecommunication services provide key digital transport services for information, and conventional transport services provide equivalent services for physical goods. Fiorini et al. (2023) support this by pointing to the important role that policies aimed at liberalizing services can play in boosting industrial growth, given restrictions on FDI in services and international payments. Also, while economies of scale still play a role in services, they are less important here than for manufacturing, and are easier to achieve, for instance through digital market access – an effect Nayyar et al. (2021) refer to as “scaling up without sizing up”. The reduction in productivity disparities offers a promising sign that growth in the services sector can aid lower-income countries in their economic advancement.

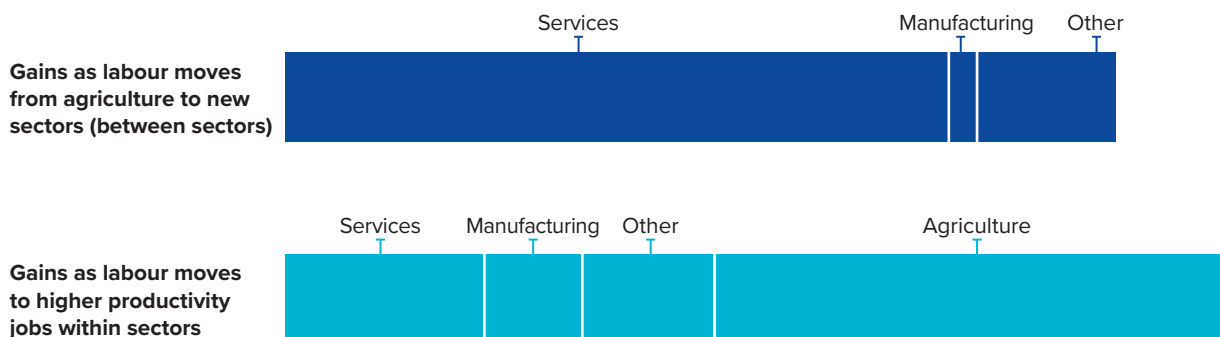
In Africa, the largest contributor to labour productivity growth has been the reallocation of workers from low-productivity agriculture, often subsistence, to services (Figure 2). Heitzig and Newfarmer (2023) divide productivity growth associated with employment shifts into two categories: *within-sector* growth (e.g. from workers moving into high-productivity areas in the same sector); and *between-sector* growth (e.g. from workers leaving agriculture and moving into new sectors). Services have played a huge role in this structural shift.⁵ Moreover, productivity growth *within* African services has exceeded that of African manufacturing. Productivity growth in Sub-Saharan Africa has followed a unique pattern. It has been generated as much by the within-sector movement of labour to higher productivity jobs as it has by the

movement of labour away from agriculture into other sectors. Increasing agricultural productivity has been a key driver of this, but so too have manufacturing and services. Even so, if Africa is to accelerate its growth and attain the rates recorded in East and South Asia, it will have to raise productivity in services as well as in other sectors.

In their study of all developing countries, Nayyar et al. (2021) describe the *changing nature of services* and explore their impact on employment and productivity. They divide services into the following categories – low-skill sectors that employ large numbers of workers, such as retail trade; skill-intensive services, such as health and education; and higher-technology services such as finance and insurance (which they call global innovator services) – to drill into employment trends and associated productivity gains for each. For developing countries overall, it is the first category that drives overall increases in service sector employment (Figure 3). Evidence suggests that certain services, such as wholesale and transportation services, have similar poverty-reducing effects as the agriculture and manufacturing sectors, and that they further enable the inclusion of informal-economy workers and women (Dorosh and Thurlow, 2018).

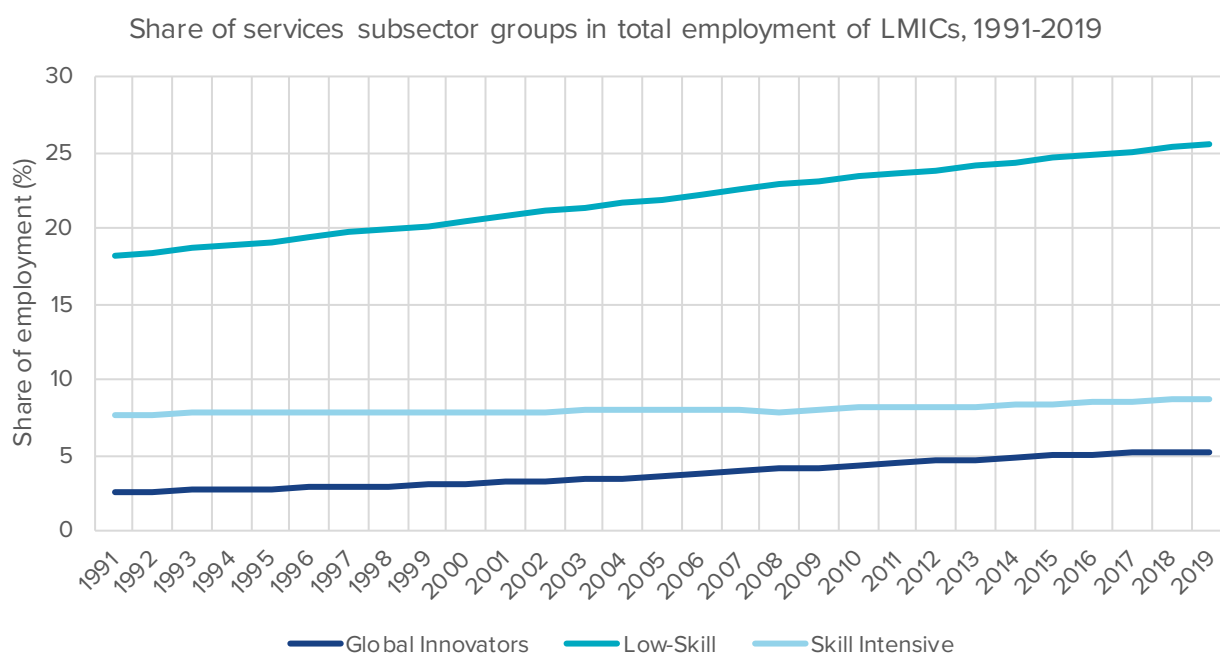
Companies producing services in Africa figure prominently among the fastest-growing businesses on the continent. According to data compiled for the Financial Times, 70 of the 100 fastest-growing companies in Africa were primarily companies producing services.⁶ These spanned a wide range of

Figure 2. Services have been central to Africa’s structural transformation and gains in labour productivity



Source: Heitzig et al., 2024.

Figure 3. Low-skill services offer the greatest employment opportunities in developing countries while high skill services drive productivity growth



Source: Nayyar et al., 2018.

activities, including e-commerce, employment services, fintech and financial services, and health care services. Omniretail – a Nigerian software company specializing in B2B e-commerce platforms that helps small retailers and market traders digitize their businesses – led the list with US\$139 million in revenues in 2022 and a growth rate of 772 per cent.

Can services propel exports? Performance as prologue

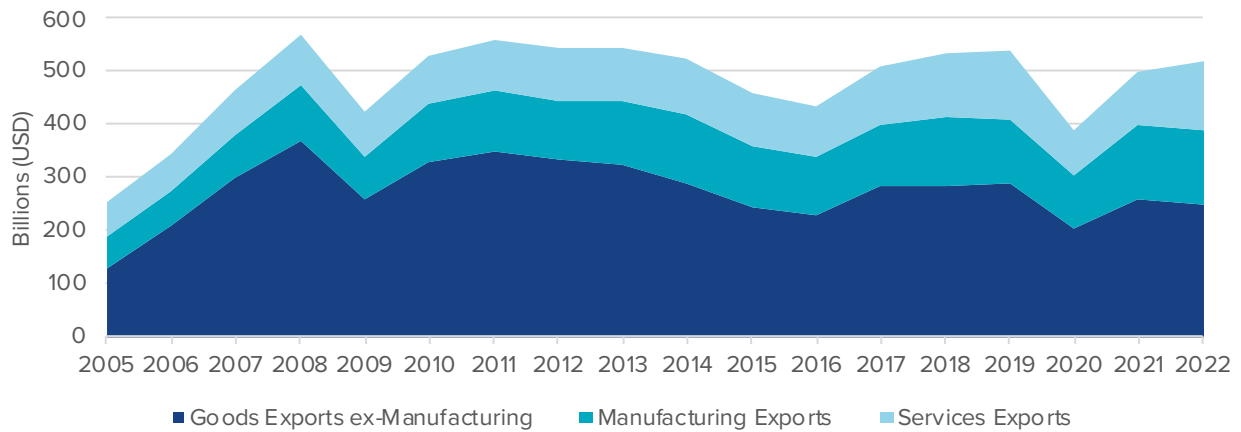
Much as East Asia did during its period of growth acceleration, Africa must increase its exports if it wants to achieve its growth aspirations. The region needs foreign exchange to purchase an increasing array of inputs and capital goods to power its investment growth. At the same time, private capital flows – via foreign direct investment and portfolio flows – have plateaued. And development assistance, with new demands from Eastern Europe and eventually the Middle East, is likely to be ever more constrained. Services exports, while complementing goods exports, offer several advantages. Services are the most dynamic segment of world trade (Ariu and Ogliari, 2023). Moreover, digitally delivered services circumvent disadvantages related to distance and small

scale – a significant attribute given the distance of most African nations from major markets (Hellmanzik and Schmitz, 2016; Kandilow and Grennes, 2012). Finally, services have a substantial impact on exports in the form of indirect exports. Hoekman and Sanfillipo (2023), for example, find that exposure to FDI in services is associated with downstream improvements (vertical linkages) on participation in global value chains (GVCs) through provision of key intermediary inputs such as business services. It underscores the point made by Ariu and Ogliari (2023) that policies that reduce barriers to FDI have a positive impact on business services exports.

African services exports have already grown to take a major share of Africa’s foreign exchange earnings. In 2022, Africa earned as much from services – US\$129 billion, mainly through tourism and transportation – as it did from manufactured exports (Figure 4). Moreover, over the period 2005–22, services earnings from the region grew faster than earnings from goods exports – a trend that might have been even stronger had it not been for the pandemic, which severely depressed earnings from tourism (Figure 5).

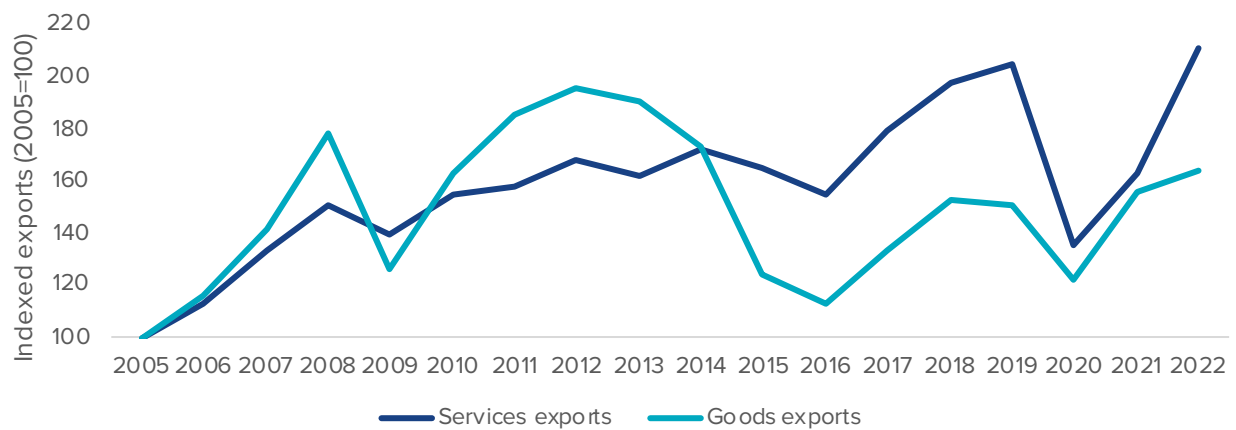
Africa has a larger share of global services exports (nearly 2 per cent) than it does of global merchandise exports (under 1 per cent). However, its share has fallen for both (Figure 7). In fact, in all of the main

Figure 4. Services exports have become a major part of Africa's exports (exports of services and goods, 2000-22)



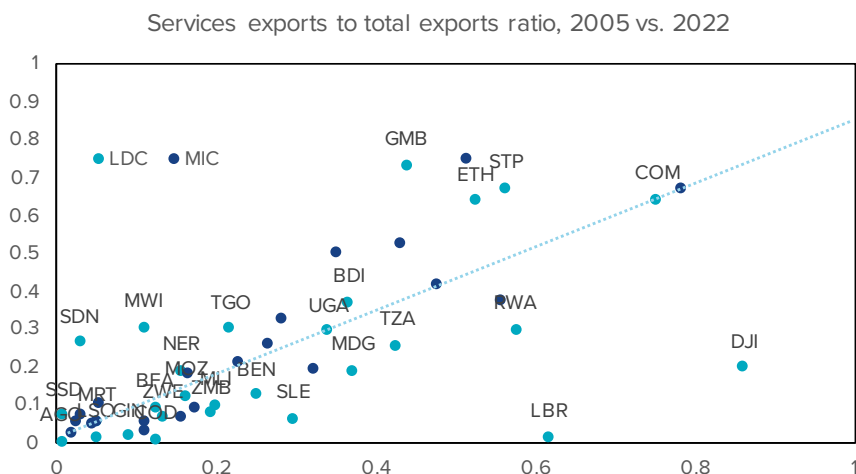
Source: Author, using WTO data.

Figure 5. ... and Africa's services exports have outpaced its goods exports since 2005



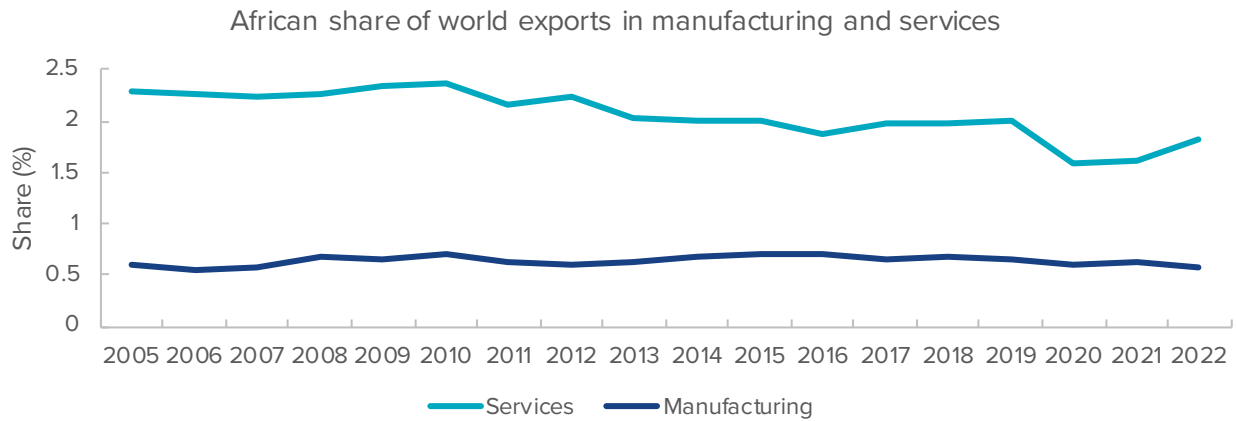
Source: Author, using WTO data.

Figure 6. Many countries, including some LDCs, have experienced rapid services export growth...



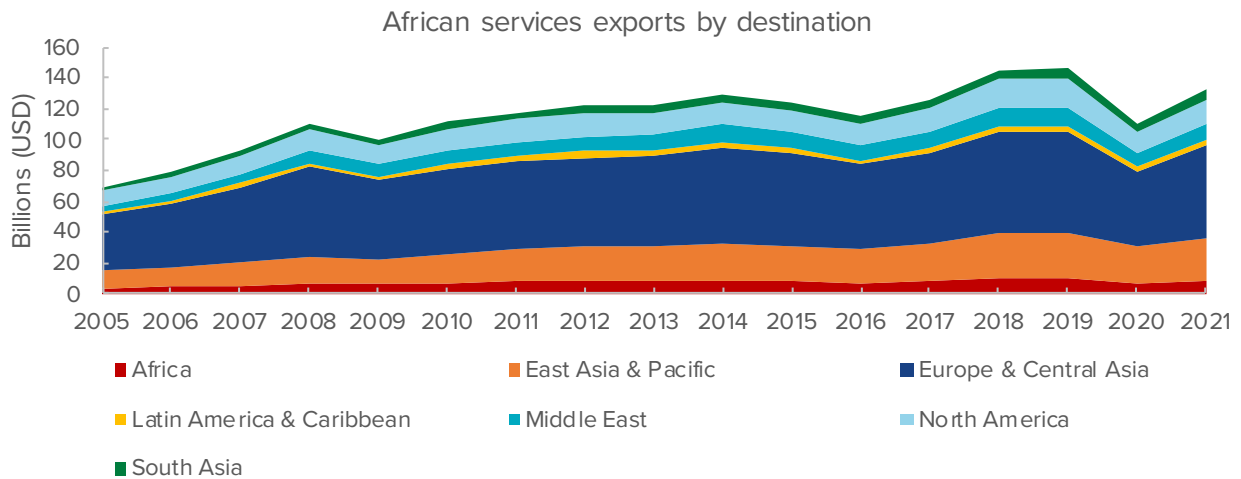
Source: Author, using WTO data.

Figure 7. ... but Africa's overall share of the world market has barely changed



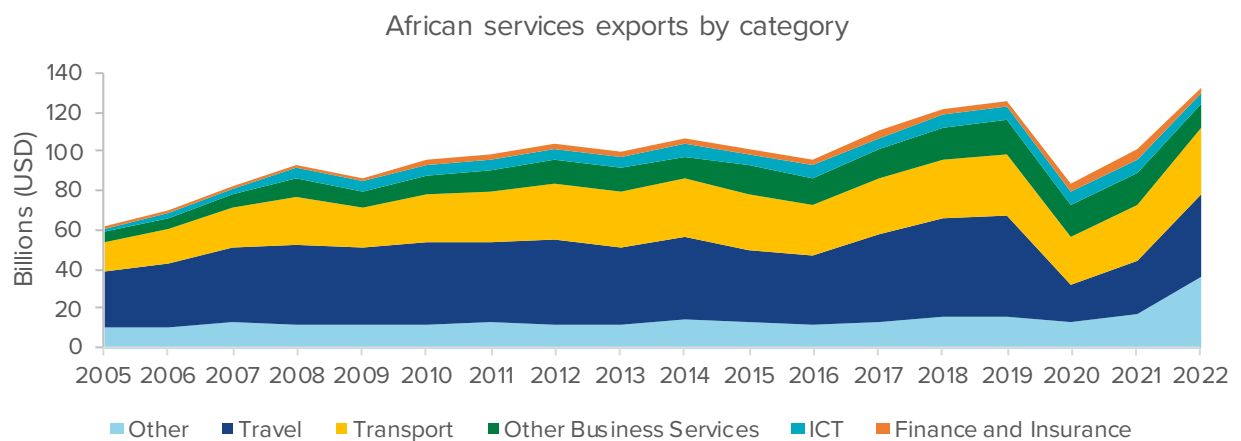
Source: Author, using WTO data.

Figure 8. Europe takes most of Africa's services exports and Asia's share is growing, but Africa's remains small...



Source: Author, using WTO data.

Figure 9. ... in part because Africa's strengths are in travel, tourism and business services



Source: Author, using WTO data.

services sectors, Africa's export growth has not kept pace with that of its worldwide competitors. Much of this performance differential can be explained by countries' varying levels of skills and productive capacity, infrastructure, and connectivity via the internet and telecommunications (World Bank, 2021; de Melo and Solleder, 2022) – a point to which we return below. A silver lining to Africa's poor performance here is the fact that other developing countries have been able to increase their share of global services exports in the past – and so African countries may also be able to do so if they can develop and exploit their natural advantages.

Much of Africa's services exports are destined for European markets (Figure 8). Their next largest destination is Asia, which has been one of the fastest growing markets for Africa. This reflects the dominance of tourism in the continent's export basket (Figure 9). It is worthy of remark that while exports of services to Africa are growing, they remain relatively small and are hardly greater than exports to Latin America.

Beneath these aggregates, however, lies considerable country diversity. Some countries have seen their exports from services grow very rapidly over the nearly two decades since 2005, while others have lagged (Figure 6). Those countries that have done well share common characteristics: an absence of political conflict, stable regulatory environments, and rapid trade growth more generally. Commodity-dependent nations that rely on minerals and petroleum exports have generally done less well. On the other hand, as Sauv e and Shingal (2023) find for all least developed countries (LDCs), several very poor African economies have actually experienced strong growth. Moreover, countries have developed specializations beyond tourism and transport. For example, Mauritius earns 40 per cent of its considerable services exports from financial services; South Africa likewise earns roughly 25 per cent from finance; Ghana earns some 80 per cent of its services exports from business services; and Liberia earns some 70 per cent of its services from insurance (Majune et al., 2023).

To shed light on the determinants of services trade, we run several regressions for African services exporters (see Annex). We use bilateral services trade data from the WTO and OECD Balanced Trade in Services (BaTIS) dataset for gravity regressions from 2005–21 (A.1) and the World Bank services export data for regressions on total exports (A.2). Some findings worthy of note:

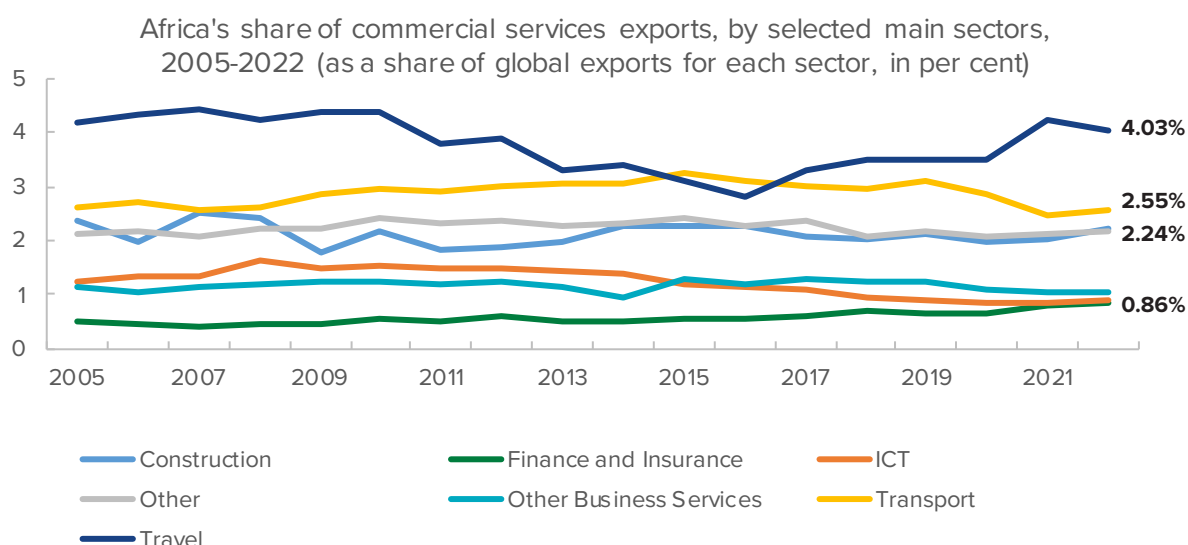
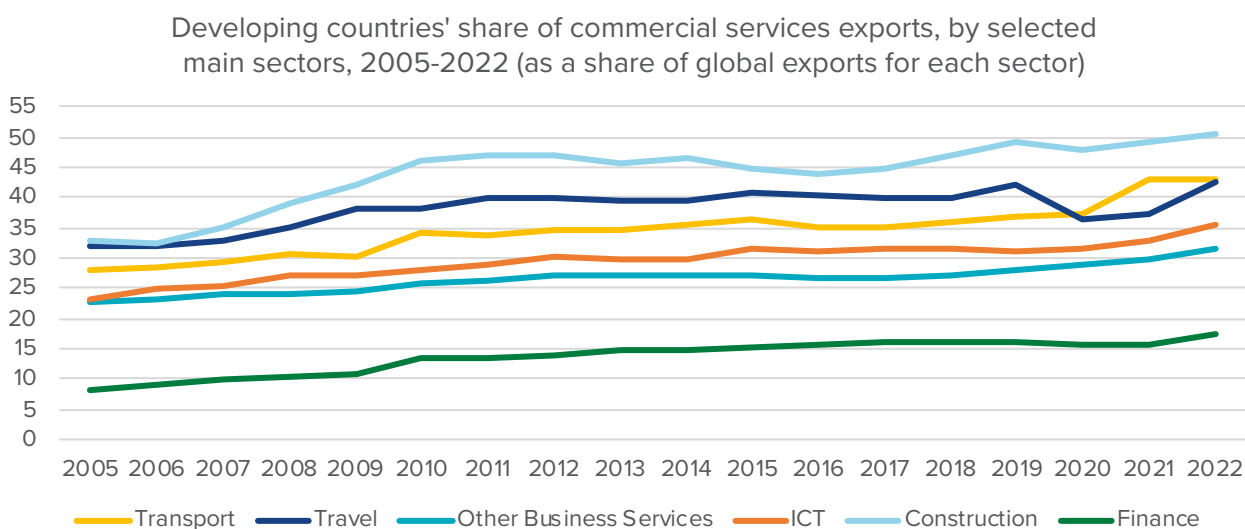
- The gravity regressions confirm conventional trade determinants established in literature: the distance between two countries (a proxy for trade costs) is negatively associated with services exports; and large exporters and importers (as measured by GDP), reflective of their respective supply and demand side capacity, have positive effects on total services exports.
- Bilateral and total export regressions, however, present somewhat conflicting evidence on the complementary role of goods exports: whereas the gravity equations show bilateral goods trade has a clear positive impact on services exports, as found by Ariu et al. (2023), this is not shown when using total services exports, perhaps because of the preponderance of tourism in Africa's services exports.
- FDI is found to be positively associated with services exports, in all probability because of its association with tourism, finance and business services generally.
- Digital infrastructure, proxied by the proportion of a population that has internet access, has positive effects on services exports.
- Landlocked countries are, as with goods trade, at an apparent disadvantage in services export markets. Other things equal, being landlocked is negatively associated with services exports. This is in part undoubtedly because transport services are an important component of total services exports – and they are bound up with goods exports.
- Similarly, countries that are rich in oil and other resources (using the IMF's classifications) were generally poor performers in both sets of estimations. This is perhaps because their relative wages are high and because they have a strategic focus on minerals.
- Finally, policy matters. The Services Trade Restrictiveness Index (STRI) captures a set of barriers to services trade, such as restrictions on the movement of people, lack of regulatory transparency and market entry barriers. While the results using bilateral data do not show such barriers having any significant impact on services trade, the regression on total services exports shows the existence of a more restrictive environment having a strong and significant negative impact on services trade. This is most important for mostly digitally delivered and data-intensive e-commerce services. Similarly, the regulatory environment is also important, and a positive score on regulatory quality tends to lead to greater services exports.

Patterns of success – types of services exports

Africa's services exports have been mostly concentrated in traditional activities – chiefly travel and transport (Figure 9). A closer comparison of Africa with all developing countries reveals that the region is more reliant on tourism exports than developing countries generally (Figure 10). On the one hand, developing countries constitute more than 50 per cent of the world market in construction services exports (mainly through Mode 3, commercial presence) but Africa's share is comparatively small at less than 1 per cent. The sector is dominated by large Asian suppliers based in China, India and Vietnam. Some large suppliers of construction services within the

continent are emerging from South Africa and Nigeria, and this may represent an eventual opportunity for African firms. A second divergence from the developing country pattern is that African countries have only recently begun to expand their service offerings into high-skilled, digital services, such as business and financial services. This represents a key development in the continent's economic landscape (Ariu and Ogliari, 2023; WTO, 2019) as these sectors, as noted above, are the fastest-growing components of trade. In particular, high-skilled services sectors contribute positively to development, if with considerable variance across countries (Bacchini et al., 2021). While Africa has held its own in business services and increased its share of finance and insurance services, the region's share of ICT services declined marginally over the period. This is troubling insofar as it reflects a digital divide.

Figure 10. Africa has different comparative advantages than developing countries overall



Source: Roy and Sauv  (2023) and authors' calculations based on WTO data.

Transport and distribution services

The efficiency and success of global value chains and international trade more broadly hinge on the availability of efficient logistics services that are both cost effective and high quality. This is particularly true for products of higher value, where the calibre of transportation and logistics services is key (Hoekman, 2017; World Bank, 2014). The sector not only encompasses road, rail, air and maritime transport but relies on additional activities, such as warehousing, customs and cargo handling services, which provide a link between industrial sectors.

Majune et al. (2023) emphasize that growth in Africa's services exports is highly correlated with growth in its merchandise exports. In part, this reflects the fact that transport services make up a substantial portion of the region's services.

Increased investments in physical infrastructure, plus the reduction of non-tariff barriers (NTBs) through improvements in regulatory frameworks, trade facilitation, regional integration and technological innovation have been key for the growth of transport services. Governments and regional bodies have implemented policies to improve transport infrastructure and efficiency. For example, trade corridors linking major economic hubs and ports, such as the Trans-African Highway network, have been developed. The reduction of NTBs, such as through modern border facilities and investments in road networks and the adoption of paperless trade, has helped to facilitate transport and reduce trade costs and time.

The effectiveness of these policies is supported by our estimates, which point to a strong positive relationship between transport exports and total goods exports – although this is not apparent when considering total exports. Being in the same regional trade agreement as a trade partner is also beneficial. Similarly, alleviating services restrictions has a strong potential to increase exports further.

Travel and tourism

Travel and tourism services exports encompass a broad spectrum of services – including travel (mostly air transport), accommodation, hospitality, and leisure – which together form one of the most extensive value chains in the service industry. The sector is a major attraction for small and medium-sized enterprises (SMEs) and is marked by the presence of many integrated firms, both public and private. It is a significant contributor to

employment, particularly of female and young workers, and to GDP. In 2022, Africa drew over 84 million overnight international tourists and earned upwards of US\$168 billion from tourism – which was below the pre-pandemic level reached in 2019 but still accounted for no less than 5.9 per cent of the continent's GDP and supported around 22 million jobs (Jus et al., 2023). In Sub-Saharan Africa alone, the number of annual tourists almost tripled between 2000 and 2018. In particular, nature-based tourism (NBT), MICE (Meetings, Incentives, Conferences, and Exhibitions), and new forms of tourism – such as sports, religious and health tourism – will help diversify Africa's export baskets.

In comparison, our regression outcomes – and in particular the bilateral estimates – indicate a positive relationship between a country's level of development and its travel exports. This suggests that developing countries can indeed use tourism to increase and likely to diversify exports. Interestingly, our bilateral regression results show the impact of distance to be low relative to total services exports and, at the same time, the impact of a common regional trade agreement to be pronounced. This could suggest that reductions in international travel costs and the diversification of tourist offers have helped Africa succeed in attracting more demand from the international market. At the same time, the result simultaneously highlights the important role of regional integration, such as through visa arrangements, and its impact on services exports.

That said, the tourism industry is unusually vulnerable to shocks. The sector was devastated during the pandemic – and was one of the major transmission channels of global recession to Africa. Tourism revenues were slashed by more than half between 2019 and 2020. Moreover, the sector has been sporadically affected by more regionally specific health outbreaks – such as Ebola in Western Africa or Marburg in East Africa. Tourism is also vulnerable to political turmoil, as seen in Egypt, or even civil war, as seen in Sudan. Additionally, while the sector has been a major driver for the employment of low-skilled workers, efforts to diversify tourism offerings towards higher-quality activities such as eco-tourism and new consumer segments will necessitate improving the supply of skilled workers. For instance, Rwanda's tourism sector is estimated to lose about US\$40 million each year due to poor customer service (IPAR, 2012). Finally, Africa's tourism sector faces significant challenges from climate change. The increasing frequency and severity of climate-related events present substantial risks to the sustainability and appeal of tourism destinations.

Business services and e-commerce

A new set of modern services, referred to earlier as *global innovator services* (Nayyar et al., 2021), holds enormous potential to increase productivity directly and through important spillovers to the wider economy. For example, a recent study (OECD, 2022) showed that ICT adoption was responsible for between 30 per cent (over the period 2000–19) and 45 per cent (over the period 2012–19) of the total decline in trade costs for business services, while air traffic growth accounted for an additional 10 per cent of trade cost reductions.

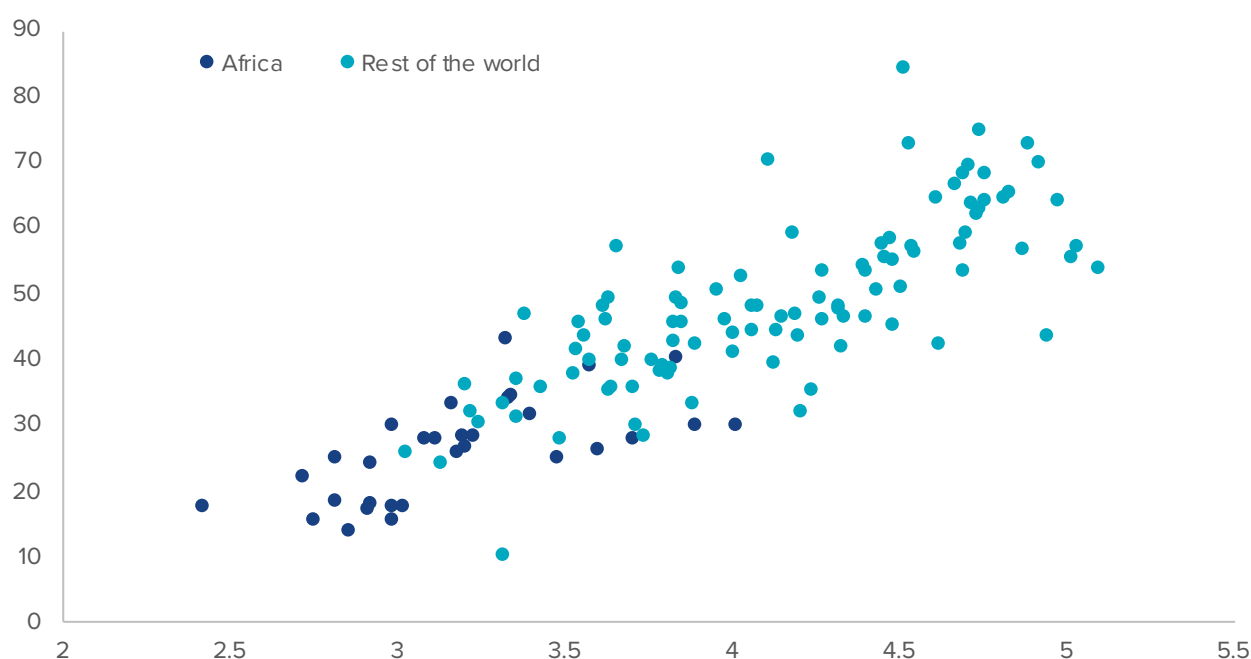
Africa's exports of more skill-intensive services, such as professional and business services, have not yet kept pace with those of the rest of the world. The continent's challenges include a dearth of necessary human capital, strict nationality regulations, heterogeneity in requirements and procedures for licensing and qualifications, and the high cost of travel and visas (Dihel and Goswami, 2016). This paper's gravity regression results confirm the importance of such determinants, including shortcomings in digital infrastructure. Figure 11 focuses on the necessary human component of a country's digital environment and shows that the process of economic development is strongly linked with a more enabling digital environment. Reducing barriers, therefore, will be crucial for tapping into a global surge in high-skilled services – a trend that has propelled growth in other developing regions, notably Asia (Ariu and Oglariu, 2023).

These new modern services exports have in common a high degree of digitalization and hence reliance on digital infrastructure. De Melo and Solleder (2022), however, point to significant disparities in the development of national data infrastructure across Africa. This indicates that numerous countries are not adequately prepared to engage in cross-border e-commerce – a critical component of digital transformation. Moreover, the absence of digital skills may cause them to miss opportunities to provide some services in larger global value chains.

As mentioned, while Africa has a larger share of the global market for services than of the global market for merchandise, its share has fallen for both (Figure 7). That developing countries have been able to increase their share of global services exports in general augurs well for the potential of services from Africa. Much of this performance differential can be explained by differing levels of skills, productive capacity, infrastructure, and connectivity via internet and telecommunications (World Bank, 2021; de Melo and Solleder, 2022) – a point to which we return below.

Foreign investment plays an important role in these high-technology sectors. Ariu (2023) finds that African countries with good institutions, such as Ghana, have been able to attract multinational firms, and that this has been a key driver for the growth of business services. This is confirmed by our estimates, which point to FDI

Figure 11. Africa has a lower skill base than other regions



Source: Authors, using Network Readiness Index.

having a significant positive impact across the services sector. At the same time, however, persistent regulatory barriers have reduced the potential for attracting FDI, which has been a key driver for services exports (Nayyar et al., 2021).⁷ Attracting more FDI will therefore be key for the growth of direct services as well as for indirect exports, as described above (Fiorini et al., 2023).

These findings from literature are reflected in our regression estimates. Our bilateral regressions point to digital infrastructure and FDI having a particularly strong link with e-commerce services exports – and in our regression represented by other business services, with financial as well as insurance exports. Finally, our estimates show a more restrictive services environment to have the strongest negative impact on e-commerce while a good regulatory environment has a strong positive impact. Services like finance are also strongly reliant on data access and flows, which are often strongly regulated, and on additional imported service inputs, such as accounting services.

drive growth. In part, this is because African efforts at integration have focused mainly on trade in goods rather than services (Hoekman, 2017). Intra-African goods trade accounted for around 15 per cent of total trade between 2015 and 2017 compared to merely 7 per cent between 2009 and 2019 for services exports (UNCTAD, 2019). However, while services were previously relegated to the last stage of African trade negotiations (Simo, 2020), they have now moved to centre stage across the continent (Uwase et al., 2024). Integration into the global services market is much lower in Africa than in other regions. Figure 12 shows the unweighted average ratio of African countries' service sales to the world to their exports within the continent and compares it with the ratios seen in other major regions. Africa's ratio is more than twice as high relative to other regions.⁸ In addition, trade within Africa remains mostly focused on travel and transport services. The composition of services is different in other regions – with construction and business services, for example, featuring more heavily – and their integration in goods markets is deeper.

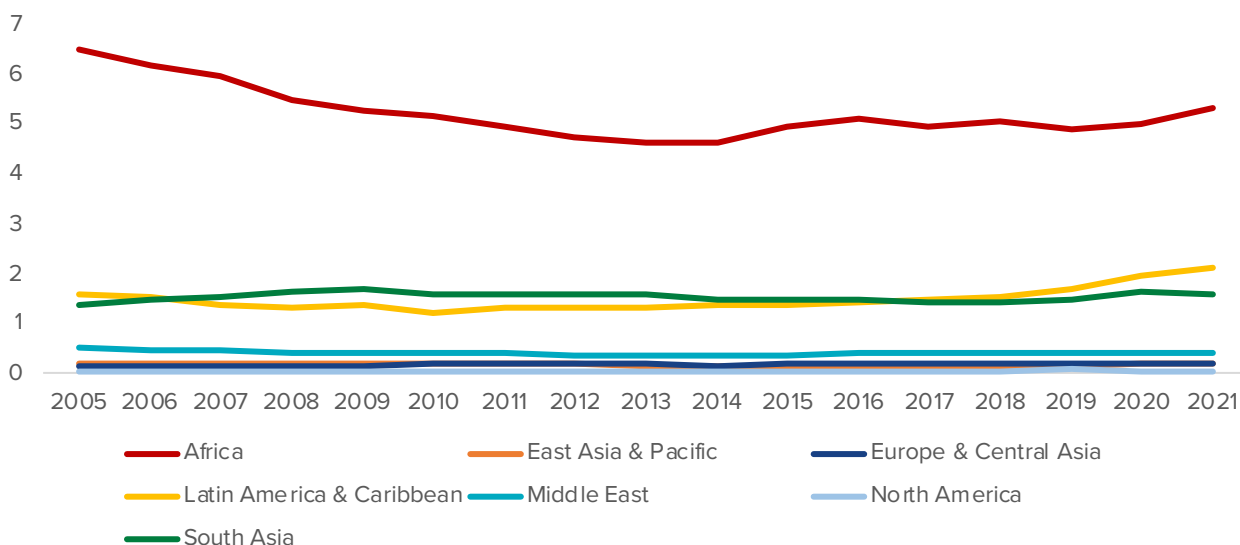
Using regional integration to boost services trade

Regional integration in Africa, as de Melo and Tsikata (2014) note, has fallen short of its full potential to

Subregional integration – performance and possibilities

There is significant potential for further liberalization and the promotion of trade and investment to facilitate regulatory convergence by deepening regional

Figure 12. African countries export more services to the rest of the world than within the continent (ratio of exports to the world to within the region, by major exporting region, unweighted)



Source: WTO's Trade in Services Annual Dataset.

integration in Africa. In this context, Roy and Sauvé (2023) state that deepened regional integration within the East African Community (EAC) alone can boost GDP by up to US\$2.6 billion and create up to 4.5 million new jobs. In addition, the authors further describe services as the essential “glue” that facilitates cross-border production networks, playing a pivotal role in the development of regional (as well as global) value chains in manufacturing as well as services exports themselves.

African trade in services has been as limited within the subregional trade areas as within the continent as a whole. This, however, masks the underlying evolution of services exports within regional trade agreements (RTAs). There is some degree of divergence between countries within the EAC and the Economic Community of West African States (ECOWAS) on one hand and members of the Southern African Development Community (SADC) and the Economic and Monetary Community of Central Africa (CEMAC) on the other. While the former have expanded their services trade among member countries up to fourfold relative to 2005, countries within SADC and CEMAC, after a temporary peak, have approximately doubled their within-RTA services exports. This points to the fact that within Africa there could be differences in how trade agreements boost services exports among members.

The gravity equation for bilateral services exports shows that membership in the same RTA indeed exerts a positive impact on services exports (see A.1 in Annex). We find that RTAs vary in their effects and in some case do not appear to be of statistical significance.

All of the subregional trade areas have fallen short of many of their own stated liberalization objectives. The EAC Common Market Protocol, for example, aims for the progressive liberalization of trade in services across all four modes of supply. It further applies a standstill clause that prevents the introduction of new restrictions on intra-regional trade in services. Also, the liberalization process is guided by a positive list approach, specifying which services sectors and modes of supplying services are to be liberalized (Hoekman, 2017). In addition, while commitments across EAC members to liberalize services trade are frequent, compliance remains low according to the Common Market Scorecard (Were and Odongo, 2019).

The promise of the AfCFTA

The most promising opportunity to liberalize and facilitate services exports will come from the AfCFTA. The World Bank estimates that the implementation of commitments under AfCFTA that aim to reduce NTBs and promote the convergence of trade rules would increase output in the services sector by US\$147 billion, with 90 per cent of African countries expanding production, alongside an increase in services trade of around 4 per cent overall and 14 per cent within Africa by 2035. To achieve this, countries have identified five priority sectors – financial, transport, telecoms and ICT, professional services and tourism – with a complementary second phase of negotiations foreseen on matters of investment, competition and intellectual property (World Bank, 2020).

Were and Odongo (2019) recall that the General Agreement on Trade in Services (GATS) obligates members of the WTO to periodically engage in the progressive liberalization of services trade, with this process expected to advance through successive negotiation rounds. Yet efforts to enhance trade conditions for services and to expand market access have been protracted and complex at the multilateral level, particularly as regards the establishment of special provisions aimed at fostering service trade growth for developing and least developed nations.

According to empirical estimates, across various services subsectors regulations tend to be more stringent for Mode 3 (commercial presence) and Mode 4 (movement of natural persons) than for Mode 1 (cross-border supply). These restrictions are exacerbated by the diverse regulatory frameworks among trading partners (Nordås and Rouzet, 2017). Therefore, focusing on sector-specific strategies, as discussed in the next section, and fostering positive integration through convergence in national regulations, as proposed in the AfCFTA, could significantly enhance intra-African services trade (Majune et al., 2023). The AfCFTA, in this regard, will complement existing RTAs by offering a common framework that can reduce regulatory fragmentation and tackle issues not addressed by existing agreements (World Bank, 2020).

Not surprisingly, empirical evidence – such as from the World Bank, referred to above – suggests significant gains from reducing barriers, especially for subsectors such as financial, travel and other business service exports within the context of the AfCFTA.⁹ To realize

these gains, the AfCFTA and other regional trade agreements linking African economies need to find ways to strengthen legal and regulatory environments to create a level playing field that is liable to boost FDI inflows (Roy and Sauv , 2023).

One example of efforts to facilitate trade through the AfCFTA is the recently agreed Protocol on e-commerce. It aims to establish common positions, harmonize digital economy regulations, and establish regional platforms. This comes as a response to persistently high trade commissions and taxes, in addition to issues around the free flow of data and the lack of reliable cross-border payment systems reducing the competitiveness of cross-regional trade. The Protocol further establishes guiding frameworks on data protection and stronger enforcement, and develops sector-specific policies on data and business taxation (Banga et al., 2021).

The agenda ahead for Africa – accelerating services exports

A new development strategy that moves services to centre stage along with other sources of growth seems both practical and promising. Global and regional services markets are buoyant and more easily entered than slower-growing goods markets, and services tend to be in greater demand worldwide as incomes rise. In addition, services tend to have synergies with both goods trade and each other.

But the challenges in doing so should not be underestimated. Constraints include a low base of capital accumulation, a low rate of overall labour productivity growth (see Figure 1), and a low base of skill development (see Figure 11). Moreover, the growth process in Africa is inherently skill-biased and a reliance on services and services exports may exacerbate these dynamics. As Fan et al. (2023) found for India, and Borat et al. (2024) emphasize for Africa, services developments tend to be skill-intensive, so the risk that a services-led strategy can aggravate income inequality requires serious attention. At the same time, as de Melo and Solleder (2022) emphasize, the advent of widespread use of AI may reduce low-income African countries' ability to compete on the basis of their traditional advantage of low labour costs. These risks suggest a need for a policy agenda that is as urgent as it is challenging.

Foundational policies

Policies to promote services exports begin with those that support economy-wide national development. Among these, three elements of public investment are particularly important: infrastructure, education and skills, and innovation policies.¹⁰ Adequate roads, power, internet and telecommunications are essential determinants of success in tourism development, transport, business service exports and e-commerce exports. Telecommunications and internet services are required for virtually all services exports. Similarly, because of the high human capital intensity of services, it is crucial to maintain high-quality educational systems at the primary, secondary and, when applicable, tertiary levels, as well as vocational training to ensure that the workforce is equipped with the necessary skills (Hoekman, 2017; Saez et al., 2015; Dihel et al., 2012). Finally, policies that encourage the adoption of technology and drive innovation are as essential to all business growth as they are to services exports. The protection of intellectual property rights (IPR) helps to create incentives for innovation. For example, the adoption of IPR protections in Nigeria has led to a flourishing of its music and film industry (Rutschman, 2015). Beyond this, most countries in Africa offer generous tax incentives to encourage investment in high-technology sectors as a central trait of industrial policy, although these can prove costly and merit systematic review for their effectiveness.

Promoting services exports

Beyond these foundational policies, literature points to several policies that are directed more specifically at expanding services exports:

- Mapping barriers to services exports through surveys: Impediments, whether via domestic policies, foreign NTBs, or those requiring direct investment, differ from country to country and require specific analysis and remedies. Banga et al. (2021), with their small survey, have shown the benefit to this effort, as has the Habinshuti et al. (2022) review of Rwanda's education and health exports.
- Domestic regulatory measures, captured in part by the STRI and other measures of policy barriers to entry, can have a dampening effect on services trade. In conjunction with efforts at the national level and in regional trade agreements, countries need to streamline regulations that improve competitiveness while not posing barriers to trade and investment.

- Because of the synergies between expanding merchandise and services exports, general efforts to promote exports will have a natural tendency to drive services exports as well. Domestic efforts to maintain a competitive exchange rate, adopt programmes of trade facilitation, and generally reduce trade costs can be coupled with active participation in international negotiations to improve market access by challenging tariffs and NTBs that impede merchandise exports. Doing so can pay a dual dividend, not only in goods but also in services (Majune et al., 2023). Vigorously implementing the WTO's Trade Facilitation Agreement is important to this objective.

Within each major category of services exports, countries can identify constraints or proactive initiatives that could stimulate services exports.

Sector-specific policies – tourism, transport and e-commerce

Tourism has untapped promise. Africa is endowed with world-class treasures: spectacular mountain and lake scenery, an unparalleled abundance of wildlife, pristine beaches, and historical and cultural diversity (including cuisine), to name a few. As incomes rise in countries around the world, the demand to travel and explore is a growth opportunity, and tourism, managed well, can drive job creation and growth along well-integrated value chains that especially benefit smaller enterprises and local economies (Hoekman, 2017; Bhorat et al., 2024). Moreover, it represents an opportunity to employ a large contingent of relatively unskilled labour and make the growth process more inclusive.

Even so, maximizing the potential of tourism hinges on having both solid infrastructure geared towards tourists and a skilled workforce capable of delivering both direct interactions with tourists and the various supporting services essential for top-tier tourism offerings. Training programmes to enhance skill sets, and fostering stronger connections between international travel companies and local businesses are among the strategic measures needed in numerous African countries (Hoekman, 2017).

Reducing the cost of access to African tourism can help expand the industry. The *liberalization of air travel* can reduce costs through competition and improve air connectivity through initiatives like the Single African Air

Transport Market (SAATM). Few countries in Africa have fully open skies arrangements that allow for maximum competition and lowest prices. At the same time, the industry is characterized by high costs, for instance through national flag carriers that monopolize selected routes. Looking for ways to expand competition is of paramount importance. *Visa regulations* can also be a burden and discourage access, and are arguably unnecessarily restrictive (see Africa Visa Openness Index, 2023). The average African citizen is still required to secure a visa in advance of travel for about 55 per cent of the destinations they may wish to visit. Moreover, adopting vigorous *health standards*, perhaps supplemented with information campaigns in major markets where post-pandemic concerns dampen traveller enthusiasm, can provide a welcoming environment (OECD, 2022). Finally, *preserving wildlife*, one of the great attractions in African tourism, from deforestation, habitat destruction, climate change and poaching is a high priority. Rwanda has shown that engaging local communities and sharing with them tourist revenue can create a sustainable political economy. Similarly, augmenting local tourist attractions by preserving *cultural heritage sites* and *developing eco-tourism* can expand the market.

According to the United Nations Economic Commission for Africa (UNECA), the AfCFTA will expand **transport services** by 50 per cent by 2030. However, more needs to be done to improve Africa's transport landscape. In 2014, during which at least 80 per cent of goods were transported by road, only 53 per cent of those roads were paved and only half of Africa's rural population had access to all-season roads (AfDB, 2014). Given depreciation and damage to transport infrastructure, such as through climate change-related events, necessary investments will have to occur repeatedly. African nations will need to find creative ways to raise necessary funds, such as through public-private partnerships, so as not to jeopardize the sustainability of public finances. This requires continued investment in the expansion, quality improvement and integration of roads, ports and airports – which already represent a substantial portion of all public investment.¹¹

The agenda to promote transport services is therefore threefold. Mobilizing finance through taxation and creative channels of private capital is essential for accelerating transport services exports. Liberalizing trade in goods in regional trade agreements can drive bilateral increases in transport services. Moreover, reducing policy barriers to entry and regulations

can increase competition, which can be a source of productivity gains that expand trade. In trucking, for example, Kunaka et al. (2018) describe restrictions on cabotage policies that mute competition and force trucks making cross-border deliveries to return empty. Furthermore, efforts to improve trade facilitation can pay large dividends, so streamlining customs procedures and ensuring consistent and compatible border trade regulation can increase trade. This is particularly true for landlocked developing countries that face higher transport and trade costs due to their geographical location. Finally, using cross-border discussions to ensure consistent investments in border facilities can move trade faster and reduce delays. More complex but equally valuable is to look at key value chains to identify constraints, such as informal roadblocks, along main trade corridors.

E-commerce and ICT are potential high-growth areas for Africa, if from a low base. More than other services export activity, the myriad of services exports that can be provided through digital means – financial services, insurance, professional services, and recreational streaming services, among others – require adequate infrastructure and human capital. The advent of fibre optic cables in the 2008–12 period, the rapid spread of internet-enabled smartphones, and the provision of high-speed connective services have opened huge opportunities. Africa as a region scores lower on the Network Readiness Index – which reflects access to ICT infrastructure, skills, governance, business usage and innovation capacity – than other major developing regions (Dutta and Lanvin, 2023). Internet access and usage rates are typically among the lowest in the developing world. By 2022, only 36 per cent of Africa’s population enjoyed access to broadband internet. Despite a surge in mobile internet use across the continent, the reach of broadband infrastructure and the quality of service available remain behind those of other regions (World Bank, 2023). Similarly, creating and providing new services requires a relatively sophisticated workforce. Therefore, as with other services, education assumes disproportional importance for the growth agenda. Key issues are digital literacy and the need for micro, small and medium enterprises (MSMEs) to make productive use of available digital tools.

Three other areas merit consideration: *electronic trade facilitation*, *taxation* and *data governance*. Improvements in payment systems and parcel delivery services and reductions in transport costs

provide win-win opportunities for both importing and exporting countries. Taxation has been the subject of more controversy – as recent discussions around a moratorium on customs duties at the 13th WTO Ministerial Conference (MC13) illustrate. With regard to the issue of data localization, Banga et al. (2021), in reviewing the policies of large middle-income countries, argue for efforts to adopt policies that would create local data centres built around some restrictions. Ferracane and van der Marrel (2023) counter that such policies slow services development. De Melo and Solleder (2022) take a more cautious view revolving around specific capabilities and opportunities.¹²

Taking advantage of regional trade arrangements – Regional Economic Communities and the AfCFTA

African regional trade agreements have yet to fulfil the promise of trade expansion and productivity growth that RTAs in East Asia have shown are possible. A priority to drive services liberalization, as noted in this essay, is continuing to make progress in liberalizing intra-regional merchandise trade (a point emphasized by Majune et al. 2023 among others). Reducing border restrictions to promote merchandise trade competitiveness can spur services trade; the case is most obvious in the link between goods trade and transport services, but it also extends to most other categories of business services exports. This suggests that efforts to liberalize trade in goods through the AfCFTA will have a positive knock-on effect on services exports.

The subregional communities and the AfCFTA would benefit from deeper integration that can drive productivity gains and provide a platform for the coordination of regulations on services trade (Majune et al., 2023). However, much remains to be done. Evidence captured by the STRI shows that restrictions on professional services remain high across Africa, as elsewhere. While restrictions are born out of a motivation to protect jobs and domestic skill upgrading for national citizens, they can have the opposite effect by eliminating cross-country learning that occurs when domestic citizens and foreigners (especially neighbours) interact in the provision of professional services, such as law, economics,

engineering and accounting. Already the EAC has gone far toward supporting the granting of work permits across professional categories through the adoption of Mutual Recognition Agreements (MRAs) facilitated through National Trade in Services Committees (NTSC). Leveraging this, Regional Implementation Committees aim to facilitate the implementation of commitments at the AfCFTA level (WTO, 2023). Even in the EAC, however, Uwase et al. (2024) found that many of the commitments made under the AfCFTA Protocol on Trade in Services fall short of requirements stipulated under GATS Article 5. African nations need to find ways to ensure the effectiveness of commitments made under the AfCFTA, in particular to liberalize trade, but they also need to pursue swift implementation, such as through the above-described coordinating efforts between regional and AfCFTA-wide regulatory environments.

How the international community can help

Both the complexity and enormity of this agenda point to several ways that the international community can help. Augmenting transfers through development assistance is paramount to assist in the financing of much-needed public investments – and aid for trade can play a direct role in enhancing exports. Aid for trade involves the provision of economic analysis to identify binding constraints to service exports in specific countries, proposing investment and policy remedies, financing technical assistance where capacity is lagging and increasing support for public investment programmes. For services, the aid-for-trade agenda is arguably easier than trade negotiations for market access, because interest groups can more readily see “win-win” outcomes. As Sauvé and Shingal (2023) point out, using the WTO and Bretton Woods architecture to facilitate analysis, help define needs, and respond to developing country requests for technical assistance can promote services exports. These same resources can help African countries play a greater role in the Trade Facilitation Agreement and in the Joint Statement Initiatives on Investment Facilitation for Development, E-Commerce, and Services Domestic Regulation. At the end of the day, each country has to pursue its own policy

framework, but the international community can play a positive supportive role through these mechanisms.

Conclusion

This note highlights the importance of services in the development strategies of African countries. To spur growth, industrial and trade strategies need to accord as much weight to developing services as they do to manufacturing, agriculture and other leading economic activities. African companies in a wide variety of service activities – fintech, software development and e-commerce, to name a few – are already among the fastest growing on the continent. Not only does the sector in general create opportunities for productive employment that drives structural transformation, but exports of services are growing more rapidly than merchandise exports and they now rival manufacturing in importance and dynamism.

That said, the region has not kept up with competition in the global marketplace and its share of the world market has declined marginally, not unlike its share of manufactured exports. Moreover, among commercial services, the region is over-reliant on tourism and transport. These sectors are likely to grow and, if anything, deserve continued policy emphasis for their potential growth and employment effects. However, the region has ample scope to develop higher-productivity sectors, including finance and insurance, business services, and e-commerce generally, and therefore needs to invest in education and skill upgrading and the expansion of its digital infrastructure, and to work with trading partners to reduce restrictions that limit trade. To that end, the AfCFTA offers an opportunity. On the one hand, the prospect of increasing goods trade carries with it the prospect of increasing associated services trade. On the other, commitment to the AfCFTA creates an opportunity to discuss restrictions that limit services exports. The challenge ahead for the region is for countries to adopt policies that will lead to the realization of this potential.

2

Emerging trade opportunities for LDCs from the green transition

Colette van der Ven, TULIP Consulting¹³

As the effects of climate change become increasingly palpable, policy makers around the world face the unprecedented challenge of transitioning towards a net-zero world. Yet this is not their only challenge. Policy makers must also ensure that net-zero transition does not create a “green divide” – between countries that have the necessary resources to invest in and develop green value chains and products, and countries which are at risk of being excluded from the green transition due to lack of resources.¹⁴ Least developed countries (LDCs) are especially at risk of falling behind, given that they are the most vulnerable to the effects of climate change – and have

constricted ability to green their economies and find new markets. LDCs' challenges are compounded by the emergence of uncoordinated, unilateral green trade measures, whose high compliance costs place LDCs at risk of exclusion from global value chains.

It is possible to avoid a green divide. However, this will require proactive, orchestrated efforts by both LDCs and developed countries to address barriers head-on. Trade policy and the existing WTO framework can play important roles in facilitating a green transition in LDCs: by enabling LDCs to access goods, services and technologies necessary for green transition; by enabling LDCs to develop new export markets for environmental goods and services in which they have a comparative advantage; and by mitigating adverse impacts on value chains created by fragmented and uncoordinated green trade approaches.

To get there, a narrative shift is required at the WTO. Developed countries must openly acknowledge the negative implications that green trade measures can have, especially with regards to LDCs, and prioritize adopting an approach that is aligned with both environmental and development objectives. LDCs must go beyond approaching green trade discussions through a purely defensive lens and identify how trade rules can be leveraged to help them achieve green development objectives. New institutional arrangements that simultaneously address all three pillars of the trade-environment-development nexus will also be required. After sketching the contours of the narrative shift that must take place at the WTO, this paper illustrates how the WTO can be instrumental in creating trade opportunities for LDCs related to the green transition.

The importance of a narrative shift

Momentum is growing for environment and climate measures to feature more prominently on the WTO agenda. Over the last ten years, there has been a 25 per cent increase in environment-related notifications and a 70 per cent increase in environment-related Trade Policy Review (TPR) entries.¹⁵ Between 2015 and 2022, there was also a ninefold increase in trade concerns raised in the WTO Council for Trade in Goods related to the environment. However, progress on trade and

environmental issues within the WTO framework has been hindered by geopolitical tension, as well as different, and often misaligned, green trade narratives, reflecting members' levels of economic development.

Developed countries generally emphasize the positive role trade can play to advance environmental and climate objectives. In particular, they highlight that trade policies can accelerate investment and innovation and can result in the dissemination of green goods and technologies. This is reflected in their leadership role in driving key environmental initiatives at the WTO, including the Trade and Environmental Sustainability Structured Discussions (TESSD), the Fossil Fuel Subsidy Reform Initiative, the Dialogue on Plastics Pollution, and the Agreement on Fisheries Subsidies. In addition, the now-dormant negotiations on the Environmental Goods Agreement (EGA), which sought to lower tariffs and non-tariff barriers on environmental goods, were spearheaded predominantly by developed countries. Although the negative implications that greening trade can have for development are mentioned, they tend to be mostly an afterthought.

By contrast, LDCs – and a subset of developing countries – predominantly focus on these negative implications. This is reflected in recent submissions on trade and the environment by the African Group (which includes 32 African LDCs) and other developing countries, which repeatedly call on members to refrain from imposing unilateral trade-related environmental measures, as they risk creating market access barriers and fail to reflect the principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC).¹⁶ LDCs' focus on the negative development implications of greening trade has contributed to their under-participation in key environmental initiatives at the WTO, including TESSD, whose 76 members include only three LDCs, the Fossil Fuel Subsidy Reform Initiative, and the Dialogue on Plastics Pollution.

To avoid a green divide at the WTO, a narrative shift is required. On the one hand, developed countries must acknowledge and address more prominently anticipated negative development implications of green trade measures, while integrating the concept of CBDR-RC more centrally and consistently into green trade discussions. Indeed, in a July 2023 submission, the African Group highlights “the need to shift the narrative regarding the trade-environment nexus, with more emphasis on how to address the harmful impacts

of trade or trade agreements on the environment, while recognizing the need of developing countries.”¹⁷ Likewise, while responding to comments in the EU TPR, EU Ambassador Joao Machado acknowledged that “achieving our sustainability objectives requires that we find the optimal triangle between trade, environment and development.”¹⁸

On the other hand, LDCs must go beyond adopting a predominantly reactive and defensive approach to trade and climate, and proactively identify areas where the international trade regime can advance the green transition in LDCs while achieving development outcomes. Hints of this approach were apparent in the February 2024 MC13 proposal, in which various developing countries and the African Group committed to “work together to foster a dialogue on how to promote trade that supports sustainable development and just transitions, including by considering how positive trade incentives... could facilitate trade of sustainably produced products and provide developing countries with necessary means of implementation in this regard.”¹⁹ Adopting this narrative shift is imperative for the WTO to play a positive role in advancing the trade-environment-development nexus and ensuring LDCs are not left behind.

At an institutional level, this requires establishing a forum or committee where trade, the environment and development can be simultaneously addressed. Currently, green trade measures fall within the mandate of the Committee on Trade and Environment (CTE), whereas trade and development issues are discussed in the Committee on Trade and Development (CTD). Issues related to technology transfer and intellectual property are discussed in the Council for Trade-Related Aspects of Intellectual Property Rights (TRIPS Council). As has been advocated before by the Europe Jacques Delors think tank, it is imperative to break institutional siloes and create a forum where issues of trade and the environment and of trade and development can be discussed all together. This can be achieved by establishing either joint CTE/CTD committee meetings or a new forum within the WTO.²⁰ This will be conducive to assessing the development implications – both positive and negative – of green trade initiatives or trends that are being discussed, thereby re-prioritizing the development dimension of green trade measures. It would also facilitate LDC participation.

The next section highlights more concretely what a narrative shift could look like *vis-à-vis* different green trade initiatives and WTO rules.

Leveraging trade to facilitate a green transition for LDCs

Liberalizing trade in environmental goods and services

A key way for green trade to actively drive LDCs’ green development objectives is through the dissemination of the goods, services, and technologies that are necessary to facilitate the green transition in LDCs. While LDCs contribute only negligible amounts of greenhouse gas (GHG) emissions, it is imperative they invest in climate mitigation strategies in order to remain internationally competitive in the long run. At the same time, given their high levels of exposure to climate change, investing in adaptation is also key.

In the renewable energy industry specifically, trade can facilitate access to affordable technology related to solar panels, wind turbines, wind or hydro energy, green hydrogen, and water electrolyzers.²¹ This in turn can support the development of a country’s renewable energy sectors, encouraging investment and rendering businesses more competitive. Indeed, the more than doubling of net installed capacity that has occurred in LDCs over the past 15 or so years has gone hand in hand with a fourfold increase in imports of power generating machinery and equipment – with half of this coming from other developing countries.²² It would be important to lower tariff and non-tariff barriers on these environmental goods – something that is the focus of ongoing TESSD discussions. LDC participation in these discussions would be crucial to obtain the benefits: while tariffs on environmental goods are generally lower than tariffs for other goods, they remain relatively high for low-income countries.²³ Moreover, given the importance of climate adaptation in LDCs, participating in discussions on lowering tariffs and non-tariff barriers for environmental goods would enable LDCs to ensure that key goods and technologies relevant to adaptation are included in the list of environmental goods.

Most LDCs do not have a comparative advantage in the products set out in earlier EGA negotiations – reflecting in part the fact that that list was put together by developed countries. To create opportunities for value add, LDCs must identify environmental goods and services in which they do have a comparative advantage. This will mostly be the case with regards to environmentally preferable products.²⁴ Indeed, many

LDCs have a comparative advantage in eco-friendly agricultural products, as well as in natural fibres of jute and sisal, which can be used as inputs for non-plastic end-use products.²⁵ LDCs also have abundant renewable energy resources, including sunlight, wind and biomass, which they can further develop as export industries. Indeed, some developing countries have started investing in developing green hydrogen.²⁶ LDCs also tend to have extensive forest cover and can produce sustainably harvested timber, or non-timber products like bamboo, rattan and medicinal plants. By participating in TESSD discussions that seek to lower tariffs on environmental goods, LDCs can ensure environmental goods in which they have a comparative advantage, including in sustainable and organic agriculture, forestry and fisheries, are included in the negotiations.²⁷

Developed countries, on their end, must demonstrate sufficient flexibility to expand the scope of EGA negotiations to include products in which they do not necessarily have a comparative advantage and for which they still have high trade barriers.

Similarly with services negotiations, LDCs should identify the kind of services it would be necessary to access to facilitate the green transition. Typically, LDCs have made only limited commitments in their GATS services schedules. Participating in discussions on reducing barriers to environmental services could lead to more commitments, which could bring in investment (through Mode 3, commercial presence) as well as professional service providers (through Mode 4, movement of people), which can help advance knowledge transfer to the local community. Moreover, LDCs must identify services in which they have a comparative advantage, such as eco-tourism²⁸, and seek to include them in environmental services negotiations, such as the exploratory discussions on environmental services in the Special Session of the Council on Trade in Services.

Advancing technology transfer

The role of technology transfer in green trade discussions must be elevated, given its importance for LDCs. For instance, one of the principles highlighted in the African Group's July 2023 submission is access to and transfer of environmentally sound technologies (ESTs).²⁹ ESTs are technologies with innovative processes and methods that minimize environmental

degradation, such as energy storage, recycling and waste management, and GHG reduction methods.³⁰ Given that most EST patents are concentrated in OECD countries, LDCs would require access to EST patents to facilitate the green transition.³¹ This could be done by invoking the compulsory licensing provisions set out in the TRIPS Agreement. Following up on Ecuador's 2013 proposal on intellectual property and the transfer of EST³², LDCs might want to seek a review of relevant compulsory licensing provisions and the extent to which they facilitate compulsory licenses relevant to EST patents. Such a submission could be made to the TRIPS Council, or under TESSD, which has highlighted the importance of "promoting and facilitating access to environmental goods and services, including encouraging the global uptake of new and emerging low-emissions and other climate-friendly technologies."³³

Moreover, LDCs should also consider adopting a more proactive approach to technology transfer provisions set out in TRIPS Article 66.2. TRIPS Article 66.2 falls short of requiring WTO members to transfer technology; it merely requires that members provide incentives for enterprises to do so. Generally, the enforcement of technology transfer under TRIPs has been highly ineffective. While not all limitations can be addressed, LDCs should identify needs and priorities relevant to transfer for ESTs, to encourage members to provide incentives with regards to the transfer of ESTs relevant to LDCs. A starting point could be 17 frontier technologies featured in a 2023 report by UNCTAD.³⁴ LDCs could also focus on improving monitoring of Article 66.2, and request for clarity on how to establish that developed countries have met the technology transfer obligations set out in Article 66.2 in the context of ESTs.³⁵

It would be worth exploring potential actions that could be undertaken to advance access to ESTs with other international organizations. This includes exploring initiatives to build a Green Tech Bank, which would buy patents on the market for technologies considered indispensable for the green transition in developing countries, and open them for free or with reduced royalties.³⁶ It would be important to take account of existing initiatives, including the World Intellectual Property Organization's WIPO GREEN, a multistakeholder platform for innovation in and diffusion of ESTs by connecting technology and service providers with those seeking innovative solutions,³⁷ and the UN Technology Bank (UNTB) for LDCs.

Reducing non-tariff barriers associated with green trade measures

The WTO can also play an important role in reducing non-tariff barriers on green trade measures. To achieve their net-zero strategies within the framework of the Paris Agreement and countries' Nationally Determined Contributions (NDCs), governments are adopting a variety of different instruments with trade implications, including carbon pricing policies, the regulation of production and products, and subsidies.³⁸ These policies could have significant negative implications, especially for LDCs, as they increase the cost and complexity of trade. The heterogeneity of these measures reflects the absence of a global framework that could evaluate equivalence between these measures, highlight their discriminatory nature, and enhance interoperability.³⁹

The WTO could address these issues by setting up thematic task forces, which could create guidance with regards to different trade and environment areas. For example, the WTO has launched a Global Carbon Price Task Force to create a methodology to determine global carbon prices.⁴⁰ This would reduce the risk that different approaches to carbon emissions accounting would unfairly penalize developing countries.⁴¹ In parallel, the WTO could serve as a forum for discussions about the coherence and interoperability of different climate measures, to better identify how different climate measures vary and interact, and, at the sectoral level, to identify the data and methodological needs for both and how these compare.⁴² This should be done as part of a Joint CTE/CTD effort, as advocated for earlier, and could take the form of non-binding instruments, best practice principles, and codes of conduct to guide and coordinate national approaches in various green trade areas.⁴³ In addition, to give more weight to these efforts, members could also consider developing a new plurilateral initiative focused on trade, environment and development, which would focus on decarbonization, subsidies, and how to support developing countries.⁴⁴

It would be important for LDCs to participate in these discussions, as they could raise specific areas where they would have difficulties in complying and identify areas where they would need technical assistance and capacity building. Moreover, enhancing the interoperability of green trade measures would reduce the risk that green trade measures continue to operate as non-tariff barriers.

Capacity building, technical and financial assistance

LDCs face significant challenges in securing adequate financing to address climate change, despite their critical needs and circumstances. Developing countries need an estimated US\$1.7 trillion of investment in renewable energy each year, but they only attracted about US\$544 billion in 2022.⁴⁵ Aid for Trade and financial assistance programmes will be critical to bridge these gaps.

Aid for Trade, which has disbursed more than US\$556 billion since 2006⁴⁶, and programmes such as the Enhanced Integrated Framework (EIF), are positioned to support climate finance efforts along with trade performance efforts for LDCs. 51 per cent of Aid for Trade commitments in 2020 included climate objectives and 40 per cent of the climate-related funding was allocated to LDCs.⁴⁷ This increased emphasis on environmental sustainability is also reflected in donor strategies and beneficiary country trade strategies.⁴⁸ However, further integration between Aid for Trade and finance commitments made in the context of the Paris Agreement is required, both to bridge the gap between the amount of climate finance that is needed and the amount that is provisioned, and to strengthen Aid for Trade's ability to contribute to this.

Domestically, integrating Aid for Trade with environmental sustainability necessitates strengthened inter-ministerial cooperation to identify sustainable trade priorities that support climate adaptation and mitigation efforts. Internationally, this integration calls for enhanced inter-organizational cooperation among key entities such as the UN Framework Convention on Climate Change (UNFCCC) and the WTO. By fostering collaboration across these organizations, Aid for Trade can better complement climate finance efforts and contribute significantly to addressing climate challenges while advancing sustainable trade objectives.

Conclusion

This policy brief highlights that the WTO can play an important role in preventing the emergence of a green divide. However, this will require all hands on deck. Developed countries must be open to addressing real concerns LDCs have flagged with regards to the impact

of some green trade measures on development, and to engaging with LDCs on points they have raised, including the importance of technology transfer and of expanding the scope of environmental goods and services to include those in which LDCs have a comparative advantage.

LDCs must also be willing to adopt a proactive approach to green trade at the WTO and pursue their offensive interests – in addition to their defensive interests. Doing

so would require increased participation in green trade discussions of interest to LDCs, including the TESSD. A proactive approach for LDCs is premised on countries' ability to identify their trade interests relevant to the green transition – either through integrated trade and climate strategies or through trade and industrial policy plans. To the extent that LDCs do not have the capacity to undertake this work, assistance should be made available under the EIF programme or Aid for Trade more generally.

The evolving priorities of African countries and LDCs in the global trade regime

David Luke, London School of Economics⁴⁹ and Kulani McCartan-Demie, Organisation for Economic Transformation⁵⁰

There have been strong synergies between the priorities of the LDC Group and the African Group at the WTO over the years. 2024, a Ministerial Conference year, was no different. Close examination of the issues set out by the two groups reveals an almost identical agenda. This is expected: 27 of the WTO's 35 least-developed country (LDC) members are African,⁵¹ with five more African LDCs negotiating to join the WTO. Both groups have articulated shared policy priorities for sustainable industrialization, economic diversification and overcoming global inequalities.

In this current phase of multipolar globalization, new policy approaches are needed to respond to the climate emergency and rapid technological change, and to engage with the multiple complexities of economic transformation. This is an objective that is shared by two other groups that are closely aligned: those of the Africa, Pacific and Caribbean (ACP) and the small, vulnerable economies (SVE).⁵² The purpose of this note is to make the point that fresh thinking is required at the WTO on: (a) what special and differential flexibilities are required for industrial development in a changing global economy and in view of the climate transition; and (b) how to apply special treatment in a way that targets the countries that need them, whether in relation to (i) temporal flexibilities for implementation of agreements and commitments, (ii) derogations from specific aspects of the WTO's accumulated rules and practices, and (iii) provision of technological and other knowledge cooperation support along with financial and technical assistance support.

We follow Bacchus and Manak⁵³ in arguing that a case-by-case, data-driven approach is probably the best way forward for deciding who gets special treatment at the WTO. As a means of filtration, we argue for the application of thresholds related to, for example: (1) a country's overall share of world trade; (2) its share in a specific trade sector; (3) its income per capita; (4) its LDC status; and (5) its significant vulnerability to climate change.

The note is divided into three sections. First, we outline the trade profile of African countries. This is very similar to that of the LDCs and SVEs. Second, we illustrate similarities between African countries and LDCs in their

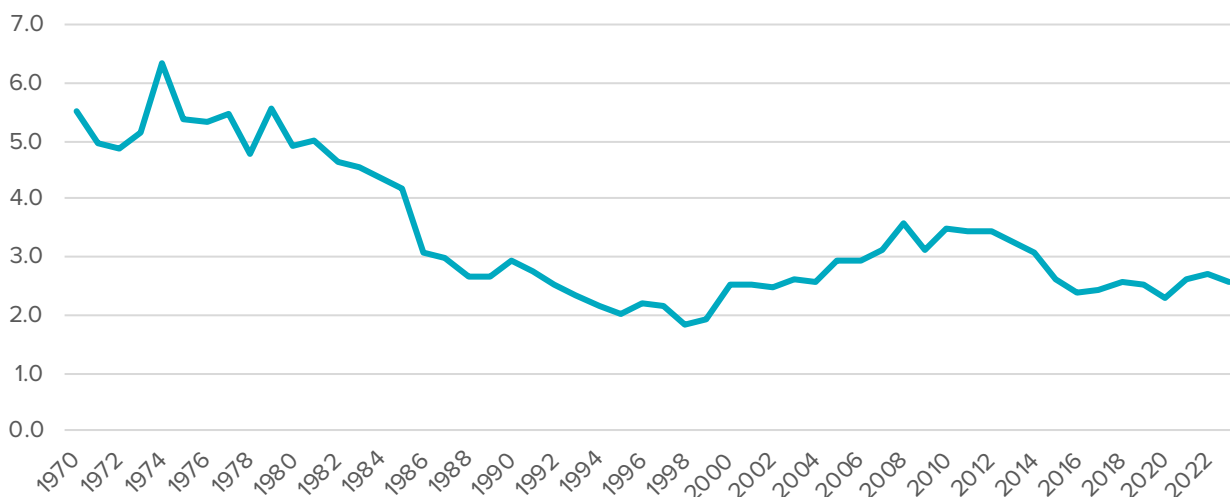
prioritization of issues at the WTO. Third, we relate the African Group proposals to the rationale of the African Continental Free Trade Area (AfCFTA) as the continent's strategy for economic transformation. We conclude by summarizing the case for fresh thinking on special treatment at the WTO.

Trade profile of African countries

In 2023, the LDC share of world exports was 1.15 per cent; Africa's share was 2.6 per cent. In 1970, that share was 5.5 per cent⁵⁴ (Figure 13). For both African countries and LDCs, these exports remain highly concentrated in a few sectors, such as fuels, metals and ores, and agricultural commodities. In both cases, it is a trade profile that can be characterized as commodity dependent⁵⁵ and volatile in the face of price shocks.⁵⁶

This picture is not new. Africa's trade flows with the rest of the world have long underperformed, both in volume and value, translating into the continent having an undersized share of world trade. However, this picture is different when Africa trades with itself. Intra-African trade flows are more diversified and manufactured goods take a larger share.⁵⁷ This is indeed the main rationale behind the AfCFTA's vision of boosting intra-African trade as a step towards achieving its aspiration for economic transformation and better integration into higher levels of regional and global value chains.

Figure 13. Africa's exports as a share of world trade: 1970 to 2022

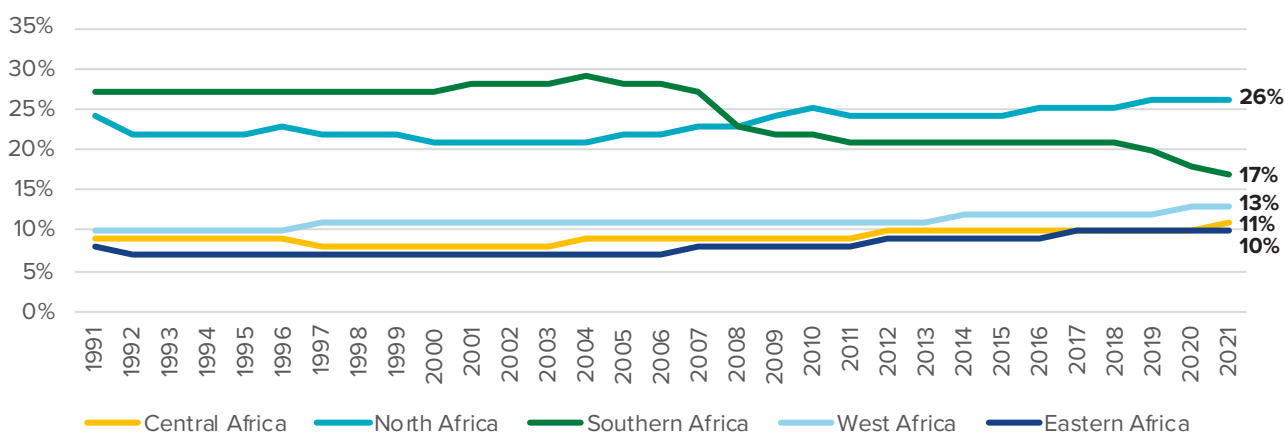


Source: Authors' calculations based on IMF Direction of Trade Statistics (2024).

The AfCFTA cannot be timelier for generating impetus to manufacturing and comes at a time when African countries still have comparative advantage on labour cost notwithstanding rapid technological changes. Recent research at the London School of Economics' Africa Trade Policy Programme shows that in West, Central and East Africa, manufacturing's share of total employment has grown, albeit from a low base ⁵⁸ (Figure 14). Countries like Ethiopia and Mauritius have had successes in apparel and textiles. Kenya has performed well in agro-processing and Nigeria in electronics. In North Africa, manufacturing employment has grown from a high base and reached levels typically associated with industrial take-off. But in Southern Africa, historically the most industrialized part of the continent, manufacturing's share of total employment has collapsed. This is related to domestic challenges in South Africa, with energy supply becoming a major constraint on production in the manufacturing sector.

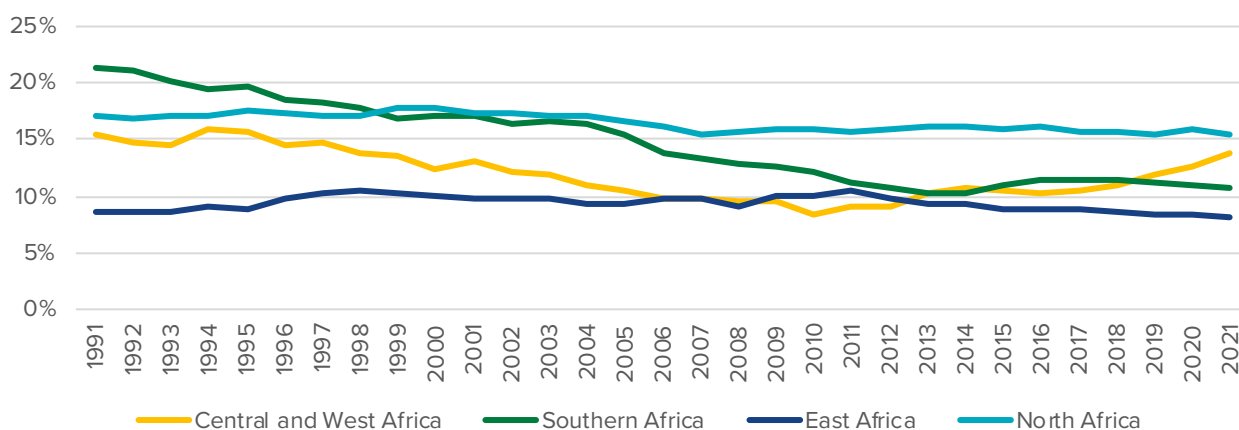
Figure 15 shows changes in the share of GDP taken by manufacturing value added (MVA). This is another measure used to assess industrialization, and one for which a longer comparable time series is often available. MVA's share of GDP fell in most African regions from the mid-1980s. That was a period of deregulation, privatization, and trade and financial market liberalization in African countries, driven by market-led development strategies known as Structural Adjustment Programmes, which were promoted at the time by the Washington Consensus. The MVA of Central and West Africa has since experienced a U-turn, increasing rapidly from a nadir in 2010. MVA's share of GDP has fallen most dramatically in Southern Africa, from rates above the world average to lower than those of Central and West Africa by 2020. This change of fortune drags down the overall African picture.

Figure 14. Three stories – manufacturing's share of employment declines in Southern Africa, grows from a high base in North Africa, and grows from a low base elsewhere



Source: London School of Economics' Africa Trade Policy Programme calculations based on ILO Modelled Estimates and Projections, Nov. 2022 Revision.

Figure 15. Changing shares of economic value added



Source: London School of Economics' Africa Trade Programme calculations based on World Development Indicators (2023)⁵⁹.

UN Trade and Development (UNCTAD), the International Monetary Fund (IMF), the World Bank and the United Nations Economic Commission for Africa (UNECA) all forecast that Africa’s manufacturing sector will be a major beneficiary of the AfCFTA initiative. In IMF modelling, “60 percent of the increase in overall income comes from higher manufacturing output”. UNECA finds that “approximately two-thirds of the intra-African trade gains would be realised in the manufacturing sector”, while in UNCTAD scenarios “the largest employment growth rates are found in manufacturing industry.”⁶⁰

However, these forecasts also underscore the importance of behind-the-border reforms as essential for the realization of gains from the AfCFTA. As a deep trade agreement extending beyond the tariff reductions of a traditional trade agreement, the AfCFTA includes provisions for trade facilitation, non-tariff barriers, trade in

services, and other behind-the-border regulatory issues, such as competition policy, investment facilitation, intellectual property rights, digital trade, gender and youth. In this light, there is synergy between the WTO’s global framework for rules of trade and the AfCFTA, which provides a platform for a rule-based arrangement for trade governance across the continent.⁶¹

Evolving policy priorities of the African Group and LDC Group

Similarities in the trade profiles of African countries and LDCs are mirrored by similarities in their evolving priorities at the WTO. This is apparent from close examination of the MC13 statements of the African Group and the LDC Group (Table 1).

Table 1. Priorities of the LDC Group and African Group

PRIORITY	LDC GROUP	AFRICAN GROUP
Agriculture and food security	Reform the Agreement on Agriculture based on food security concerns	Tackle food insecurity in net food importing developing countries (NFIDCs) and reduce trade-distorting domestic support
Fisheries subsidies	Prohibit harmful fisheries subsidies and prioritize LDCs’ text proposals in negotiations	Support for the elimination of harmful fish subsidies that contribute to overfishing and overcapacity
Decisions on LDC graduation	Support measures from development partners need to target LDCs after graduation to ensure smooth and sustainable transition	Ensure policy cohesion on LDC graduation with AfCFTA timelines
WTO reform	The development dimension is integral to WTO reform along with improving procedures for greater LDC participation in WTO bodies	An integral feature of the WTO reform process is greater policy space for industrialization. WTO “reform by doing” should not be limited to incremental, procedural reforms focused on the efficiency of WTO bodies and standardizing practices but should also be outcome based
Extension of trade-related responses to COVID-19 (Agreement on Trade-Related Aspects of Intellectual Property Rights – TRIPS Agreement)	Remove export restrictions on essential medical and basic food products destined for LDCs and facilitate the flow and transit of products to address COVID-19. MC12 decision on TRIPS waiver should be extended to cover therapeutics and diagnostics	Support TRIPS waiver and extension to cover therapeutics and diagnostics
Special and differential treatment (S&DT)	S&DT is a critical component of policy space for structural economic transformation	Support for S&DT is critical for policy space in the context of the WTO reform process and beyond existing S&DT provisions in the various WTO agreements
Policy space for industrialization and technology transfer (TRIPS Agreement, Article 66.2)	Provide incentives for technology transfer from institutions and enterprises in developed countries to create a sound and viable technological base	Promote industrialization that addresses climate change and digitalization through: the Agreement on Trade-Related Investment Measures (TRIMs Agreement), for local content; TRIPS, for tech transfer; and the Agreement on Subsidies and Countervailing Measures (ASCM), for flexibilities for climate change, etc

PRIORITY	LDC GROUP	AFRICAN GROUP
E-commerce	Highlight the deep digital and technological divide and infrastructural challenges in the utilization of digital technologies by LDCs	Extension of the e-commerce moratorium is not the only priority for consideration
Trade and environment	Mitigation and adaptation measures and unilateral environmental trade agreements should not block market access of LDCs	Financial support and technology cooperation to mitigate and adapt to climate change, e.g. transfer of environmentally sound technology (EST) and a Trade and Environment Fund for investments
Accessions	Streamline and simplify LDCs' accession procedures and provide support for implementing obligations	Support the five African LDC countries with pending accession in fulfilling membership requirements

Source: Authors' compilation based on African Group⁶² and LDC Group⁶³ submissions to the WTO.

The priorities of the two groups are concerned with the expansion of productive capacities, reduced commodity dependence and diversification of trade growth. The overarching themes of these proposals are to derive greater value from global supply chains and to better integrate regionally and into a changing global economy. At the level of the WTO, the proposals speak to urgency to free up policy space for industrial development at the intersections of climate change, production, digitalization, technology transfer and agricultural reform, among other issues. Within Africa itself, as previously discussed, the regional integration agenda through the AfCFTA is the continent's strategic initiative to realize this objective.

African Group proposals and the AfCFTA

The African Group's aspirations at the WTO share a common thread: to enable its members, through appropriate flexibilities, to pursue their legitimate aspirations for economic development and convergence with the rest of the world. These priorities have evolved in line with the vision and strategy behind the AfCFTA.

Table 2. Submissions for special treatment to support industrialization by the African Group

PRIORITY	AIM
'Policy space for industrial development – A case for rebalancing trade rules to promote industrialisation and to address emerging challenges such as climate change, concentration of production and digital industrialisation' (March 2023) ⁶⁴	Initiate discussions on greater policy space to promote industrialization through TRIMs (local content), TRIPS (tech transfer) and ASCM (updating and flexibilities for climate change). Address growing concentration of market power in key product and service markets in relation to climate change and digital industrialization on domestic, regional and global production and supply networks
'A case for rebalancing the agreement on subsidies and countervailing measures (ASCM) – Policy space for industrialisation in developing countries' (May 2023) ⁶⁵	Update special and differential provisions that have expired to enable members to respond to the global polycrisis. Extend flexibilities to grant subsidies where needed, including localization initiatives to drive industrialization. Reinstate Article 8 of ASCM to address technological, poverty and environmental challenges
'The role of transfer of technology in resilience building: Climate change mitigation and adaptation' (July 2023) ⁶⁶	Outlines technology transfer and climate change issues that the Committee on Trade and Environment (CTE) can address. These include S&DT for LDCs, assessment of TRIPS for green technology diffusion, compulsory licensing, and transfer of environmentally sound technology. Proposes collaboration with United Nations Framework Convention on Climate Change (UNFCCC) instruments to support adaptation and mitigation in agriculture, energy and industry
'The role of transfer of technology in resilience building: the TRIPS Agreement' (July 2023) ⁶⁷	Harness the potential of WTO instruments to make technologies accessible and affordable. Discussions are centred on nine key issues, including how far flexibilities in the TRIPS Agreement have contributed to technology transfer and how has compulsory licensing been incorporated in national legislations of developed countries

PRIORITY	AIM
'The role of transfer of technology in resilience building: Agriculture' (July 2023) ⁶⁸	Enhance transparency around experience, know-how and technology in agriculture. Take stock on the role of international research centres in contributing to agricultural technology transfer
'The role of transfer of technology in resilience building: Reinvigorating the discussions in the WTO on trade and transfer of technology' (July 2023) ⁶⁹	Set out the design and parameters for discussions on Agreement-specific issues linked to industrial development and the role of transfer of technology and trade. Issues include TRIPS, trade facilitation, agricultural resilience, climate change and electronic commerce (source code)
'The role of transfer of technology in building resilience: Trade facilitation' (July 2023) ⁷⁰	Review WTO rules on technology transfer and trade facilitation, including the effects of digital technologies on the composition of trade and the ability of members to implement their trade facilitation commitments

Source: Authors' compilation based on African Group submissions.

African Group submissions during 2023 point to the need for special treatment that is precise and operational. As highlighted earlier, the proposals aim to pin down which flexibilities countries in need of special treatment require for industrial development. Some of the proposals are aimed at time-bound provisions. Others concern exemptions from provisions in the WTO's rules and others are concerned with assistance and technological cooperation.

The submissions specifically identified key policy interventions to promote industrialization while also addressing the climate emergency. TRIMs (local content), TRIPS (technology transfer) and ASCM (updating and flexibilities for climate change) are among the multilateral trade instruments that are addressed, as shown in Table 2. The submissions follow both an enabling principle and an exemption principle. The African Group's calls for greater policy space should not be equated with current S&DT provisions in various WTO agreements. They are also intended to be an integral part of more comprehensive conversations on the WTO reform process, beyond the procedural level, and therefore directed at systemic challenges in the multilateral trading system that African countries, LDCs and SVEs typically face. For African countries, the submissions are further consistent with ambitions that AfCFTA's implementation will boost intra-African trade and, through doing so, diversify African economies and enable them to capture greater value from interconnected global supply chains.

Conclusion

The WTO reform process should take a fresh look at the support needed to meet the aspirations of its members in the groups that are most marginalized in world trade, particularly Africa – the region with the smallest and a declining share of world trade. As we have shown, the African and LDC groups share several policy priorities. These priorities have a central focus: flexibilities for members to advance long-overdue industrialization while responding to the climate transition and opportunities created by recent technologies.

The fresh look must begin with rethinking the criteria that qualify members for S&DT. As a means of filtration, we argued for thresholds such as overall share of world trade, share in specific trade sectors, income per capita, and designation as an LDC or SVE. To be sure, S&DT is not a magic bullet. It must be complemented by deliberate efforts to boost investment and improve the type of investment made, diversifying away from a disproportionate concentration on resource extraction to encourage agriculture and industry. More support is also needed to overcome supply side constraints in infrastructure, energy, transport, education, health, and behind-the border reforms, etc. For the African countries, implementing the AfCFTA is also critical.

In 2015, a WTO Ministerial Conference, MC10, was held for the first time in Africa, in Kenya. This was

perceived as a standout moment in African-led WTO engagement, culminating in the adoption of the “Nairobi Package”, a series of six Ministerial Decisions on agriculture, cotton, and issues related to LDCs. The benefits that flowed from the Nairobi Package to LDCs and African countries have been mixed. The next Ministerial Conference, MC14, will again be held in Africa, in Cameroon. An ideal “Cameroon

Package” will encompass not only new criteria for special treatment as part of a comprehensive approach to WTO reform but also the priorities of the African and LDC groups that were summarized in Tables 1 and 2 above. If this note contributes to a “Cameroon Package” that includes a new deal for African countries, LDCs and SVEs at the WTO, it will have served its purpose.

References

- African Development Bank (2014). Tracking Africa's Progress in Numbers. African Development Bank.
- Ayoki, M. (2018). Recent Trends in Africa's Services Trade; IPRA Working Paper 61, Institute of Policy Research and Analysis, Kampala.
- Ariu, A. and Ogliari, L. (2023). Services' Trade in Africa: Structure and Growth. *The World Economy*, Vol. 00, pp. 1–22, special issue on Global Value Chains in Africa.
- Ariu, A. (2024). Trade in Services' Booms: The Case of Ghana. Mimeo.
- Baccini, L., Fiorini, M., Hoekman, B. and Sanfilippo, M. (2023). Services, jobs, and economic development in Africa. *The World Bank Research Observer*, 38(1), pp. 147–178.
- Banga, K., Gharib, M., Mendez-Parra, M. and Macleod, J. (2021). E-commerce in preferential trade agreements – Implications for African firms and the AfCFTA. ODI Research report.
- Bhorat, H., Coulibaly, B., Newfarmer, R. and Page, J. (eds.) (2024). *New Pathways for Job Creation and Development in Africa: The Promise of Industries without Smokestacks*. Brookings Institution, Washington DC.
- Buys, P., Deichmann, U., and Wheeler, D. (2006). Road Network Upgrading and Overland Trade Expansion in Sub-Saharan Africa. Development Research Working Paper. World Bank, Washington DC.
- Christie, I., Fernandes, E., Messerli, H. and Twinning-Ward, L. (2013). *Tourism in Africa: Harnessing Tourism for Growth and Improved Livelihoods*. World Bank, Washington DC.
- de Melo, J. and Tsikata, Y. (2014). Regional integration in Africa: Challenges and prospects. *The Oxford Handbook of Africa and Economics: Volume 2: Policies and Practices*, pp. 222–246.
- de Melo, J. and Solleder, J.-M. (2022). *Structural Transformation in MENA and SSA: The Role of Digitalization*. ERF Working Paper Series, Working Paper No. 1547.
- Dihel, N., Fernandes, A., Gicho, R., Kashangaki, J. and Strychcz, N. (2012). Becoming a Global Exporter of Business Services? The Case of Kenya. In A. Giswami, A. Mattoo, and S. Sáez. *Exporting Services: A Developing Country Perspective*. World Bank, Washington DC. pp. 237–69.
- Dihel, N., Goswami, A. (2016). The Unexplored Potential of Trade in Services in Africa: From Hair Stylists and Teachers to Accountants and Doctors. World Bank, Washington DC.
- Dorosh, P. and Thurlow, J. (2018). Beyond Agriculture versus Non-Agriculture: Decomposing Sectoral Growth–Poverty Linkages in Five African Countries. *World Development* 109: pp. 440–51.
- Fan, T., Peters, M. and Zilibotti, F. Growing Like India – The unequal effects of services-led growth. *Econometrica*, Vol. 91, No. 4 (July, 2023), 1457–1494.
- Ferracane, M. and van der Marrel, E. (2023). *Digital trade regulatory environment: opportunities for regulatory harmonization in Africa*. United Nations Economic Commission for Africa, African Trade Policy Centre (ATPC) report.
- Fiorini, M., Hoekman, B. and Quinn, D. (2023). Services trade policy and industry performance in African economies. *The World Economy*, 46(2), pp. 382–395.
- Giswami, A., Mattoo, A. and Sáez, S. (2011). *Exporting Services: A Developing Country Perspective*. World Bank, Washington DC. pp. 237–69.
- Habinshuti, V., Tharcisee Nigizimana, and Twum, A. (2022). Exporting degrees and prescriptions: a survey of Rwanda's exports of educations and health services. IGC Policy Brief. IGC, London.
- Heitzig, C. and Newfarmer, R. (2023). Africa: Growth beyond deindustrialisation? International Growth Centre, blogpost under <https://www.theigc.org/blogs/africa-growth-beyond-deindustrialisation>, retrieved on April 29, 2024.
- Heitzig, C., Newfarmer, R. and Page, J. (2024). From Deindustrialization to Growth. Chapter 1 in Bhorat et al. (eds) *New Pathways for Job Creation and Development in Africa: The Promise of Industries without Smokestacks*. Brookings Institution, Washington DC.

- Hellmanzik, C. and Schmitz, M. (2016). Gravity and international services trade: The impact of virtual proximity. *European Economic Review*, 77.
- Heuser, C. and Mattoo, A. (2017). Services Trade and Global Value Chains: It is not what you make but what you do. In Mashayekhi, M. and Antunes, B. (eds.) *Services and Structural Transformation for Development*. UNCTAD, Geneva.
- Hoekman, B. and Shepherd, B. (2017). Services productivity, trade policy and manufacturing exports. *The World Economy*, 40(3), pp. 499–516.
- Hoekman, B. (2017). Trade in services: Opening markets to create opportunities. WIDER Working Paper Series wp-2017-31, World Institute for Development Economic Research (UNU-WIDER).
- Hoekman, B. (2018). Trade in Services: Opening Markets to Create Opportunities. In Newfarmer et al. (eds) (2018) *Industries without Smokestacks: Industrialization in Africa reconsidered*. Oxford University Press, Oxford.
- Hoekman, B. and Sanfilippo, M. (2023). Trade and value chain participation: Domestic firms and FDI spillovers in Africa. *The World Economy*, 46(11), 3367–3391.
- Jus, N., Royds, L.-T., Mitcham, J., Tsering, C. and Gillespie, C. (2023). Unlocking Opportunities for Travel and Tourism Growth in Africa. *World Travel and Tourism Council*.
- Kandilov, I. and Grennes, T. (2012). The determinants of service offshoring: Does distance matter? In *Japan and the World Economy*, 24(1).
- Kunaka, C., Raballand, G. and Fitzmaurice, M. (2018). How trucking services have improved and may contribute to economic development: the case of East Africa. In Newfarmer et al. (2018) *Industries without Smokestacks: Industrialization in Africa reconsidered*. Oxford University Press, Oxford.
- Majune, S. K., Karria, J. K. and Kihui, E. N. (2023). Intra-Africa Trade in Services and the AfCFTA. *Journal of African Trade*, Vol. 10, Issue 1 1–2 Article 5.
- Nayyar, G., Hallward-Driemeier, M. and Davies, E. (2021). *At your Service? The Promise of Service-Led Development*. World Bank, Washington DC.
- Newfarmer, R., Page, J. and Tarp, F. (eds) (2018). *Industries without Smokestacks: African Industrialization Reconsidered*. Oxford University Press, Oxford.
- Nordås, H. and Rouzet, D. (2017). The impact of services trade restrictiveness on trade flows. *The World Economy*, 40(6).
- OECD (2022). *Shedding Light on the Drivers of Services Tradability over Two Decades*. OECD Trade Policy Papers.
- Pilling, D. (2024). *Special Report: Africa's Fastest Growing Companies, 2024*. Financial Times, May 14, 2024.
- Roy, M. and Sauvé, P. (2023). *Trade in services for development - Fostering sustainable growth and economic diversification*. A World Bank and WTO co-publication, Report No. 185136.
- Rutschman, A. (2015). *Weapons of Mass Construction: The Role of Intellectual Property in Nigeria's Film and Music Industries*. *Emory International Law Review*, Volume 29, Issue 4.
- Saez, S., Taglioni, D., van der Marel, E., Hollweg, C. and Zavacka, V. (2015). *Valuing Services in Trade: A Toolkit for Competitiveness Diagnostics*. World Bank, Washington DC.
- UNCTAD (2022). *Economic Development in Africa Report 2022*. UNCTAD.
- Sauvé, P. and Shingal, A. (2023). LDC services trade: A story in differentiated and supply side constraints. In *WTO and EIF: LDCs and the Multilateral Trading System: A Collection of Essays, Volume 2*. WTO and EIF, Geneva, pp.13–26. Available at https://www.wto.org/library/events/event_resources/devel_0311202310/ldc_and_multilateral_trade_digital.pdf
- Simo, R. Y. (2020). Trade in services in the African continental free trade area: Prospects, challenges and WTO compatibility. *Journal of International Economic Law*, 23(1).
- UNCTAD (2019). *Economic development in Africa report 2019: Made in Africa e rules of origin for enhanced intra-African trade*. United Nations Publications, New York.

Uwase, D., Pholosi, L., Zawadi Antony, E., Gonsaro, R., Yeshitla, E., Abuka, M. M., Mlotha, H., Muzumara, S. and Ngwira, T. J. (2024). Evaluating the Level of Liberalisation of the EAC's Services under the AfCFTA: An Analysis of the Schedule of Commitments under AfCFTA. Draft under WTO Chairs Research through The TradeLab Legal Clinic Requirements.

Viviers, W., Parry, L. and Jansen von Rensburg, S. (eds) (2021). *Africa's Digital Future: From Theory to Action*. OASIS, Cape Town.

Were, M. and Odongo, M. (2019). *Competitiveness and Diversification of Service Exports in Sub-Saharan Africa: The Case of the East African Community*. WIDER Working Paper, No. 2019/89.

World Bank (2014). *Connecting to Compete, 2014: Trade Logistics in the Global Economy*. World Bank, Washington DC.

WTO (2019). *World Trade Report 2019: The Future of Services Trade*.

Dutta, S. and Lanvin, B. (2023). *Network Readiness Index 2023*. Portulans Institute, University of Oxford and Saïd Business School.

World Bank (2020). *The African Continental Free Trade Area: Economic and Distributional Effects*. World Bank, Washington DC.

Annex

Regressions of services exports

As described above, we run two types of regressions. Similarly to Ariu (2023), we run linear gravity regressions restricted to African exporters (but not trading partners). Additionally, we run simple panel regressions also restricted to African exporters. We use bilateral services trade data from the WTO and OECD Balanced Trade in Services (BaTIS) data set for the bilateral gravity regressions and services trade data from the World Bank Development Indicators for total services and different subsectors for the years 2005 to 2022. We make further use of the World Bank's Development Indicators, from which we obtain GDP (PPP) in current USD, GDP PPP per capita in current USD, the share of people with internet access, and data on FDI, regulatory quality and goods trade. The data for the 2023 Services Trade Restrictiveness Index (STRI) comes from the OECD. Information about landlocked status stems from ITU. The common regional trade agreement status is derived from information given by the WTO.

A.1 Bilateral gravity regressions

Accounting for year fixed-effects, our baseline specification is:

$$\log(XS_{ijt}) = \alpha_t + \beta X_{ijt} + \delta Y_{ijt} + \varepsilon_{ijt}.$$

i denotes the origin country, j represents the destination and t is time. We run different specifications such that XS either denotes total or sectoral bilateral services exports. There are two sets of explanatory variables. X_{ijt} is a vector of standard gravity regressors, namely distance (between two capitals) and GDP of the origin and destination country as a measure of size. β denotes the related coefficient vector. Y_{ijt} is a vector of additional variables. These include total goods exports, which are the sum of exports of goods of the exporter and the importer to capture the complementarity effect with services exports. GDP per capita in PPP current USD of exporter and importer captures levels of economic development of exporter and importer and therefore potential supply and demand effects. We include the share of FDI in GDP to capture potential complementarities, as found in Ariu (2023). The share of people with internet access is a proxy for the quality of digital infrastructure and is chosen for its wide country-year coverage. We include a dummy for whether a country is landlocked to capture additional trade costs to distance. We include an indicator that is one if the origin and destination country are in the same regional trade agreement (such as the EAC).

We further include total and sectoral values of the STRI. We cluster standard errors at the origin-destination level.

We test different specifications and exclude several variables which reduce the sample size substantially, given low coverage. These include a human capital index, information on tertiary enrolment and the Network Readiness Index. We further exclude dummies for membership in a regional trade agreement, given very low significance.

Figure A.1. Gravity regression using 2005–21 data

VARIABLE	LOG OF SERVICES EXPORTS			
	TOTAL XS	TRANSPORT	TRAVEL	E-COMMERCE
Log Distance	-0.261	-0.306	0.0113	-0.287
	-2.75	-2.04	0.07	-1.26
Log Total Goods Trade	0.276	0.352	0.273	0.37
	8.11	6.57	6.39	5.81
Log Exporter GDP pc PPP USD	-0.14	-0.412	0.0813	0.0575
	-0.79	-1.58	0.36	0.15
Log Exporter GDP PPP bill. USD	0.444	0.681	0.303	0.437
	4.59	3.89	2.26	2.75
Log Importer GDP pc PPP USD	0.211	0.144	0.209	0.626
	2.42	0.71	1.58	2.58
Log Importer GDP PPP bill. USD	0.39	0.263	0.599	0.222
	7.12	2.85	6.91	1.78
Exporter FDI rel. to GDP in %	0.0365	0.0436	0.0327	0.0425
	3.42	2.68	2.64	3.38
Log of Exporter Share of people w. internet access	0.195	-0.133	0.337	0.17
	1.74	-0.84	2.11	0.66
Common RTA	-0.00772	-0.533	0.639	-0.601
	-0.05	-1.82	3.21	-1.71
Exporter is landlocked	-0.51	-1.53	0.227	-1.782
	-2.5	-3.21	0.78	-3.95
Log STRI Exporter (total or sectoral)	-0.0114	-0.488	0.588	-0.586
	-0.03	-0.69	1.16	-0.5
Log STRI Importer (total or sectoral)	0.701	0.972	0.386	1.521
	2.15	1.66	1.09	1.49
Resource rich	-0.461	-1.041	-0.34	-0.213
	-2.74	-3.03	-1.51	-0.55
Constant	-18.97	-20.21	-23.52	-20.16
	-7.28	-4.59	-6.96	-3.37
Observations	44,942	44,942	44,942	44,942
Year FE	✓	✓	✓	✓

Gravity regression estimated using ordinary least squares (OLS). Standard errors are clustered at the bilateral trading partner level. Regional trade agreements (RTAs) refer to trade agreements within Africa, such as the EAC or ECOWAS. The STRI is for 2023. Total trade of goods is the sum of goods trade of both trading countries.

A.2 Total services exports regressions

As a comparator regression, we estimate linear regression of total services exports for a country in a given year. Accounting for year fixed-effects, our baseline specification is:

$$\log(XS_{it}) = \alpha_i + \beta X_{it} + \varepsilon_{it}$$

i denotes the origin country and t is time. We run different specifications such that XS either denotes

total or sectoral services exports. X_{ijt} is a vector of explanatory variables. β denotes the related coefficient vector. Included variables are a sub-set of variables included in the bilateral regression dropping those that do account for exporter-importer linkages such as distance. We further include a measure of regulatory quality that captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

Figure A.2. Panel regression of total services exports using 2005–21 data

VARIABLE	LOG OF SERVICES EXPORTS			
	TOTAL XS	TRANSPORT	TRAVEL	E-COMMERCE
Log Goods Exports	-0.173	-0.0626	-0.475	-0.126
	-3.96	-0.73	-8.15	-1.95
Log Exporter GDP pc PPP USD	0.126	0.0847	0.159	-0.0683
	1.86	0.65	1.72	-0.69
Log Exporter GDP PPP bill. USD	0.992	1.29	1.077	1.018
	22.18	14.96	17.87	15.29
Exporter FDI rel. to GDP in %	0.0131	0.0557	0.00881	-0.00691
	3.41	5.2	1.12	-0.8
Log of Exporter Share of people w. internet access	0.191	0.0976	0.282	0.106
	3.49	0.94	3.83	1.35
Exporter is landlocked	-0.272	-0.57	-0.153	-0.406
	-3.35	-3.39	-1.44	-3.51
Log STRI (total or sectoral)	-0.294	-0.964	0.951	-3.062
	-1.97	-3.71	6.25	-4.23
Resource rich	-0.415	-0.806	-0.0688	-0.295
	-5.57	-5.71	-0.69	-2.84
Regulatory Quality	0.765	0.699	1.313	0.69
	11.05	5.3	14.41	6.76
Constant	-24.11	-30.23	-32.16	-22.41
	-18.25	-11.18	-18.35	-11.22
Observations	730	730	730	730
Year FE	✓	✓	✓	✓

Panel regression estimated using OLS. The STRI is for 2023.

Abbreviations

AfCFTA	African Continental Free Trade Area
CBDR-RC	Common but Differentiated Responsibilities and Respective Capabilities
CEMAC	Economic and Monetary Community of Central Africa
CTD	Committee on Trade and Development
CTE	Committee on Trade and Environment
EAC	East African Community
ECOWAS	Economic Community of West African States
EGA	Environmental Goods Agreement
EIF	Enhanced Integrated Framework
EST	Environmentally sound technologies
EU	European Union
FDI	Foreign Direct Investment
GATS	General Agreement on Trade in Services
GHG	Greenhouse gas
ICT	Information and Communications Technology
IMF	International Monetary Fund
LDC	Least developed country
MC14	14 th WTO Ministerial Conference
MRA	Mutual Recognition Agreements
NBT	Nature-based tourism
NDC	Nationally Determined Contributions
NFIDC	Net food importing developing countries
NTSC	National Trade in Services Committees
OECD	Organisation for Economic Co-operation and Development
R&D	Research and development
RTA	Regional Trade Agreement
S&DT	Special and differential treatment
SAATM	Single African Air Transport Market
SADC	Southern African Development Community
SCM	Subsidies and Countervailing Measures
STRI	Services Trade Restrictiveness Index
SVE	Small, vulnerable economies
TESSD	Trade and Environmental Sustainability Structured Discussions
TPR	Trade Policy Review
TRIMs	Trade-Related Investment Measures
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UNCTAD	UN Trade and Development
UNECA	United Nations Economic Commission for Africa
UNFCCC	UN Framework Convention on Climate Change
UNTB	UN Technology Bank
WIPO	World Intellectual Property Organization

Endnotes

- 1 Richard Newfarmer was most recently the World Bank's Special Representative to the United Nations and World Trade Organization, based in Geneva, Switzerland, where he worked with country delegations and Geneva-based international organizations on issues of trade (WTO, UNCTAD and ITC), labour (the ILO), climate change (the WMO and WFP), and health (WHO, Global Fund, UNAIDs). Most recently, he has focused on aid for trade. He has also lectured at the World Trade Institute, University of St. Gallen, and the Graduate Institute, among others. Previously, he was Economic Advisor in the International Trade Department and in the Prospects Group of the World Bank, and worked extensively on trade, investment and globalization issues. He co-edited "Breaking into New Markets: Emerging Lessons for Export Diversification", in May 2009. Earlier, he edited "Trade, Doha and Development: A Window into the Issues". He led the teams that produced "Global Economic Prospects 2007: Managing the Next Wave of Globalization" and was the lead author of four previous "Global Economic Prospects" reports – on regional trade, the WTO negotiations, and investment and competition policy. Besides authoring numerous country studies at the World Bank on macroeconomic and public finance issues, Mr. Newfarmer has written on foreign direct investment, with publications in the *Journal of World Trade*, *Cambridge Journal of Economics*, *Journal of Development Economics and Foreign Policy*, among others. Mr. Newfarmer holds a PhD and two MAs from the University of Wisconsin, and a BA from the University of California at Santa Cruz.

Christian Lippitsch is a country economist for the International Growth Centre (IGC) in Rwanda. His work focusses on firm productivity, domestic value chains and international trade alongside questions around the impacts of climate change. Christian holds a BSc in economics from the University of Cologne as well as a MSc and PhD in economics from the University of Edinburgh. Before his PhD, Christian worked for several economic research institutes in Europe and Asia.

Andrew Womer is a country economist for the International Growth Centre (IGC) in Uganda. Andrew holds a bachelor's degree from the University of Edinburgh and a master's from Universitat Pompeu Fabra. Prior to joining the IGC, he worked at the IMF and OECD.
- 2 Rodrik and Stiglitz (2024), for example, write: "Strategies that worked well in the past are unlikely to do so in the decades ahead. In particular, the manufacturing- and export-based growth strategies that drove East Asia's development miracles are no longer suited for today's low-income countries."
- 3 This tendency for selected activities to produce more rapid productivity gains relative to international leaders, irrespective of level of development, labour force education and governance measures, was called "unconditional convergence". Heitzig and Newfarmer (2023), using more recent data than earlier efforts, analyzed 11 subsectors and found that more than half displayed unconditional convergence rates comparable to or higher than those seen with manufacturing.
- 4 See, for example: Heuser and Mattoo (2018); Hoekman (2018); and Roy and Sauvé (2023).
- 5 Heitzig et al. (2024) follow the methodology developed by Fabricant (1942) and subsequently popularized by de Vries et al. (2015), Diao et al. (2019), Nayyar et al. (2021), and others. The analysis uses the Economic Transformation Database, a newly released dataset that contains data for employment and value added for 12 sectors for 1990–2018, jointly produced by the Groningen Growth and Development Centre and UNU-WIDER. The database covers the eight case-study countries presented in this book as well as Botswana, Burkina Faso, Cameroon, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Nigeria and Tanzania.
- 6 David Pilling, *Financial Times* "Special Report: Africa's Fastest Growing Companies, 2024" May 14, 2024.
- 7 Majune et al. (2023).
- 8 If one uses a GDP-weighted average, the picture is the same if somewhat less pronounced, in part because of the inclusion of South Africa.
- 9 Majune et al. (2023), using a gravity equations framework, estimate that the liberalization of services through a reduction of the STRI could increase financial exports by 71 per cent, travel exports by 12 per cent and other business service exports by 40 per cent.
- 10 See, among others: Nayyar et al. (2021); Roy and Sauvé (2023); de Melo and Solleder (2022); and Viviers et al. (2021).
- 11 Buys et al. (2006) use a continental gravity model to show that building an intra-African road network not unlike the US interstate road network would generate some US\$250 billion worth of trade – at a cost of only US\$20 billion.
- 12 The authors argue that policy makers in developing nations are contending with a pivotal choice: either to integrate into global value chains through export-led industrialization that endorses free data flows across borders or pursue a domestic-centric industrialization model. The latter prioritizes local consumer preferences, using data localization to prevent 'data colonialism' and keep valuable consumer data within national borders. See also Viviers et al. (2021) for an essay that discusses the complex issues of regulation.
- 13 Colette van der Ven is an international trade lawyer and policy expert specialized in sustainable development. As founder and director of TULIP Consulting, a boutique Geneva-based consultancy, Colette advises the public sector on legal and policy issues at the trade, environment, and development nexus. She is also a visiting lecturer in international law at the Graduate Institute, where she teaches the TradeLab International Economic Law Clinic. Previously, Colette worked as an international trade lawyer at Sidley Austin's international dispute settlement practice, representing governments in their disputes at the World Trade Organization. Colette holds a Juris Doctor from Harvard Law School, a Master in Public Policy from the Harvard Kennedy School of Government, and is a member of the New York Bar.
- 14 WTO. DDG Paugam: Fight against climate change can also bring trade opportunities for LDCs. 3 December 2023. https://www.wto.org/english/news_e/news23_e/ddgjp_03dec23_e.htm.
- 15 Paugam, Jean-Marie. Trade, Sustainability and Climate: What is at stake 30 years after WTO's creation? 5 March 2024. WTO. https://www.wto.org/english/blogs_e/ddg_jean_marie_paugam_e/blog_jp_28feb24_e.htm.
- 16 See e.g. Ministerial Declaration on the Contribution of the Multilateral Trading System to Tackle Environmental Challenges. 29 February 2024. WT/MIN(24)/28. Principles Guiding the Development and Implementation of Trade-Related Environmental Measures. WT/GC/W/894, WT/CTE/W/255; G/C/W/830, IP/C/W/703; G/AG/W/239. 13 July 2023.
- 17 Principles Guiding the Development and Implementation of Trade-Related Environmental Measures. WT/GC/W/894, WT/CTE/W/255; G/C/W/830, IP/C/W/703; G/AG/W/239. 13 July 2023.

- 18 Lamy, Pascal et al. The Case for a Global Triangle Forum at the WTO. 12 September 2023. TESS. <https://tessforum.org/latest/the-case-for-a-global-triangle-forum-at-the-wto>.
- 19 WTO. Ministerial Declaration on the Contribution of the Multilateral Trading System to Tackle Environmental Challenges. 29 February 2024. WT/MIN(24)/28.
- 20 Lamy, Pascal et al. The Case for a Global Triangle Forum at the WTO. 12 September 2023. TESS. <https://tessforum.org/latest/the-case-for-a-global-triangle-forum-at-the-wto>.
- 21 WTO. TESSD Statement by Co-convenors. WT/MIN(24)/11/Add.3. 19 February 2024.
- 22 UNCTAD. *The Least Developed Countries Report 2017: Transformational Energy Access*. 2017. <https://unctad.org/publication/least-developed-countries-report-2017>.
- 23 WTO. World Trade Report. 2022. https://www.wto.org/english/res_e/booksp_e/wtr22_e/wtr22_ch6_e.pdf.
- 24 Olarreaga, Marcelo. Rethinking LDC trade priorities. 2021. https://www.wto.org/english/tratop_e/devel_e/ldc_s4_olarreaga_1.pdf. Environmentally preferable products have a reduced effect on the environment when compared with competing products that serve the same purpose.
- 25 Sugathan, Mahesh. Plastic Pollution: Can Aid for Trade Help Least Developed Countries Tackle This Crisis? 7 June 2022. <https://tessforum.org/latest/plastic-pollution-can-aid-for-trade-help-least-developed-countries-tackle-this-crisis>.
- 26 Augier, César et al. Green Energy in Africa Presents Significant Investment Opportunities. 17 October 2023. <https://www.mckinsey.com/capabilities/sustainability/our-insights/green-energy-in-africa-presents-significant-investment-opportunities>.
- 27 Olarreaga, Marcelo. Rethinking LDC trade priorities. 2021. https://www.wto.org/english/tratop_e/devel_e/ldc_s4_olarreaga_1.pdf.
- 28 WTO. World Trade Report. 2022. https://www.wto.org/english/res_e/booksp_e/wtr22_e/wtr22_ch6_e.pdf.
- 29 WTO. Principles Guiding the Development and Implementation of Trade-Related Environmental Measures. WT/GC/W/894, WT/CTE/W/255; G/C/W/830, IP/C/W/703; G/AG/W/239. 13 July 2023.
- 30 Lewis, Leslyn. The applicability of TRIPS flexibilities to the developing world for climate change mitigation as a public good in green energy projects. 2015. *Asper Review of International Business and Trade Law*, Vol. 15.
- 31 AFC and LSE Firoz Lalji Institute for Africa. Implications for African Countries of a Carbon Border Adjustment Mechanism in the EU. 2023. <https://www.lse.ac.uk/africa/assets/Documents/AFC-and-LSE-Report-Implications-for-Africa-of-a-CBAM-in-the-EU.pdf>.
- 32 WTO (2023). Contribution of Intellectual Property to Facilitating the Transfer of Environmentally Rational Technology. IP/C/W/585.
- 33 WTO. TESSD Ministerial Statement on Trade and Environmental Sustainability. WT/MIN (21)/6. 15 November 2021.
- 34 UNCTAD. Technology and Innovation Report. 2023. <https://unctad.org/tir2023>.
- 35 AFC and LSE Firoz Lalji Institute for Africa. Implications for African Countries of a Carbon Border Adjustment Mechanism in the EU. 2023. <https://www.lse.ac.uk/africa/assets/Documents/AFC-and-LSE-Report-Implications-for-Africa-of-a-CBAM-in-the-EU.pdf>.
- 36 Lamy, Pascal et al. EU trade and the environment: Development as the missing side of the triangle. June 2023. Europe Jacques Delors. https://europejacquesdelors.cdn.prismic.io/europejacquesdelors/e94330f1-d6f1-4ce8-8928-3a9af27a0383_20230602_EUtradeandtheenvironment_EN.pdf.
- 37 WIPO. Climate Change and Intellectual Property. https://www.wipo.int/policy/en/climate_change/.
- 38 Paugam, Jean-Marie. Trade, sustainability and climate: What is at stake 30 years after WTO's creation? 5 March 2024. WTO. https://www.wto.org/english/blogs_e/ddg_jean_marie_paugam_e/blog_jp_28feb24_e.htm.
- 39 Paugam, Jean-Marie. Trade, sustainability and climate: What is at stake 30 years after WTO's creation? 5 March 2024. WTO. https://www.wto.org/english/blogs_e/ddg_jean_marie_paugam_e/blog_jp_28feb24_e.htm.
- 40 Reuters. WTO Launching Global Carbon Price Task Force – Okonjo-Iweala. 17 October 2023. <https://www.reuters.com/sustainability/wto-launching-global-carbon-price-task-force-okonjo-iweala-2023-10-17/>.
- 41 Reuters. WTO Launching Global Carbon Price Task Force – Okonjo-Iweala. 17 October 2023 <https://www.reuters.com/sustainability/wto-launching-global-carbon-price-task-force-okonjo-iweala-2023-10-17/>.
- 42 WTO. Understanding the Opportunities and Challenges of the Green Transition: Coherence and Interoperability of Trade-Related Climate Measures. WT/CTE/W260; G/C/W/843. 4 April 2024.
- 43 Kleimann, David et al. Climate and Trade Cooperation After the Thirteenth WTO Ministerial Conference: Quo Vadis? 7 March 2024. TESS. <https://tessforum.org/latest/climate-and-trade-cooperation-after-the-thirteenth-wto-ministerial-conference-quo-vadis>.
- 44 PIIE. How Can Trade Become Greener? 9 April 2024. <https://www.piee.com/events/2024/how-can-trade-become-greener>.
- 45 UNCTAD. World Investment Report. 2023. <https://unctad.org/publication/world-investment-report-2023>
- 46 WTO. DDG Zhang: Aid for Trade Global Review 2022 – Session 28 – Plenary: Sustainable Aid for Trade. 28 July 2022. https://www.wto.org/english/news_e/news22_e/ddgxz_28jul22_e.htm
- 47 WTO. DDG Zhang: Aid for Trade Global Review 2022 – Session 28 – Plenary: Sustainable Aid for Trade. 28 July 2022. https://www.wto.org/english/news_e/news22_e/ddgxz_28jul22_e.htm.
- 48 WTO. Aid for Trade Global Review 2022: Empowering connected, sustainable trade. 2022. https://www.wto.org/english/tratop_e/devel_e/a4t_e/a4tpublicationgr22_e.htm.
- 49 David Luke is professor in practice and strategic director at the London School of Economics Firoz Lalji Institute for Africa, where he oversees a programme on African trade policy. He is a former director of the African Trade Policy Centre at the UN Economic Commission for Africa (ECA) where he led the technical work on the protocols that make up the African Continental Free Trade Area (AfCFTA) agreement. His research interests include boosting intra-African trade; the AfCFTA initiative; Africa's multilateral and bilateral trade relationships; and how trade policy intersects with industrialisation, structural transformation, inclusion, gender, public health, and climate change. He is a member of the Board of TradeMark Africa and of the Council of the Africa Trade Foundation.

- 50 Kulani McCartan-Demie is an international consultant with a background in technical assistance and cross-cutting research in economic transformation, trade facilitation, industrial policy and gender mainstreaming. She is the founder and director of the Organisation for Economic Transformation (OET), a think tank specialising in advisory and consultancy services and particularly interested in the following policy conundrum: How to collectively square the contradictory and uneven outcomes of advancing economic transformation on people's lives and the planet's ecosystem. Kulani has worked on policy design and implementation of inclusive trade facilitation, agro-industries and industrial park development for the likes of UNIDO, International Trade Centre, UK Foreign, Commonwealth & Development Office, the African Development Bank and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). She contributed to the LSE's African Trade Policy Programme's inaugural *How Africa Trades* book and led the research on Africa's trade relations with China and on informal cross-border trade during the COVID-19 pandemic. Kulani holds an M.Phil in Development Studies with Distinction from the University of Cambridge.
- 51 The United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS) identifies 45 LDCs globally. Most (33 countries) are in Africa. At the WTO there are 27 African LDC members: Angola, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros (latest addition, approved at the WTO's MC13), Democratic Republic of Congo, Djibouti, Gambia, Guinea, Guinea-Bissau, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Senegal, Sierra Leone, Tanzania, Togo, Uganda and Zambia.
- 52 The term "small, vulnerable economies" applies to members with economies that, in the period 1999 to 2004, had an average share of (a) world merchandise trade of no more than 0.16 per cent, (b) world trade in non-agricultural products of no more than 0.1 per cent, and (c) world trade in agricultural products of no more than 0.4 per cent. This category includes many African LDCs but also refers to small island states that have attained middle-income status (Barbados, Jamaica and Seychelles). Their shares of world trade will always remain small by virtue of the small size of their economies.
- 53 Bacchus, J. and Manak, I. (2021). *The Development Dimension: Special and Differential Treatment in Trade* (Abingdon: Routledge).
- 54 Ryder, H. (2024). It's time for African countries to shape the WTO, not just sit in it. *African Business*. <https://african.business/2024/01/trade-investment/its-time-for-african-countries-to-shape-the-wto-not-just-sit-in-it>
- 55 In 2022, 90 per cent of African LDCs (29 out of 32 countries) and 67 per cent (four out of six countries) of island LDCs were classified as commodity dependent. A country is considered commodity dependent when commodities account for at least 60 per cent of its merchandise export earnings. See UNCTAD (2022) 'Commodity dependence haunts least developed countries' for a summary on the macroeconomic challenges of uneven export specialization patterns <https://unctad.org/topic/least-developed-countries/chart-february-2022>
- 56 See WTO (2023) 'Market Access for Products and Services of Export Interest to Least Developed Countries' for updated disaggregated data on African LDCs' trade profiles. In terms of exports of services, LDCs in Africa accounted for more than half of the LDC Group's exports during 2018-2022, and saw a 22 per cent increase in 2022 to US\$23.9 billion. Over half of LDC services exports came from just five LDCs, three of which are African (Ethiopia, Tanzania and Uganda). Travel exports of African LDCs performed relatively well compared with those of Asian LDCs, being only 7 per cent below pre-COVID-19 levels. African LDCs' transport exports expanded by 23 per cent.
- 57 For more insights into Africa's trade profile covering goods, services and investment flows in international and continental trade, see: MacLeod, J. and Luke, D. (2023) 'Trade and investment flows and a perspective for analysing trade policy in Africa', in: Luke, D. (ed) *How Africa Trades*, London: LSE Press, pp. 1–21. <https://doi.org/10.31389/lsepress.hat.a> License: CC-BY-NC 4.0
- 58 Luke, D., Macleod, J. and Ogunkola, O. (2023). *LSE Firoz Lalji Institute for Africa White Paper on Industrialisation in Africa: the Art of Upgrading Industrial Policymaking Itself*, London: LSE Firoz Lalji Institute for Africa (<https://www.lse.ac.uk/africa/assets/Documents/White-Paper-on-Sustainable-Industrialisation-in-Africa.pdf>).
- 59 Notes: regional averages are calculated by the LSE African Trade Policy Centre on the bases only of countries for which consistent data are available, with small country-specific gaps smoothed out.
- 60 See Luke, D. and Macleod, J. (2023). *A New Trade Deal for Africa Please!* (Geneva: Friedrich Erbert Stiftung).
- 61 Luke, D. (2023). 'Conclusion: it's in the world's interest to give Africa a new trade deal', in: Luke, D. (ed) *How Africa Trades*, London: LSE Press, pp. 1–21. <https://doi.org/10.31389/lsepress.hat.a> License: CC-BY-NC 4.0
- 62 African Group submission on Policy Space for Industrial Development. A Case for Rebalancing Trade Rules to Promote Industrialisation and to Address Emerging Challenges such as Climate Change, Concentration of Production and Digital Industrialisation. WT/GC/W/868
- 63 WTO (2024). Least Developed Country Group Ministerial Declaration. Priorities at the World Trade Organization. WT/MIN(24)/2
- 64 African Group submission on Policy Space for Industrial Development. A Case for Rebalancing Trade Rules to Promote Industrialisation and to Address Emerging Challenges such as Climate Change, Concentration of Production and Digital Industrialisation. WT/GC/W/868
- 65 African Group submission on a Case for Rebalancing the ASCM – Policy Space to Promote Industrialisation in Developing Countries. WT/GC/W/880
- 66 African Group submission on The Role of Transfer of Technology in Resilience Building: Climate Change Mitigation and Adaptation. WT/GC/W/886
- 67 African Group submission on The Role of Transfer of Technology in Resilience Building: the TRIPS Agreement. WT/GC/W/884
- 68 African Group submission on The Role of Transfer of Technology in Resilience Building: Agriculture. WT/GC/W/885
- 69 African Group submission on The Role of Transfer of Technology in Resilience Building: Reinvigorating the Discussions in the WTO on Trade and Transfer of Technology. WT/GC/W/883
- 70 African Group submission on The Role of Transfer of Technology in Building Resilience: Trade Facilitation. WT/GC/W/887

Designed by JT Quirk.
Printed by the World Trade Organization.
© World Trade Organization, 2024.



World Trade Organization
Centre William Rappard
Rue de Lausanne, 154
1211 Geneva 2
Switzerland

+41 (0)22 739 5111
enquiries@wto.org
www.wto.org

